

Peter Gailhofer · David Krebs ·  
Alexander Proelss ·  
Kirsten Schmalenbach ·  
Roda Verheyen *Editors*

# Corporate Liability for Transboundary Environmental Harm

An International and Transnational  
Perspective

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 Springer

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# Preface

The content of this book was prepared between autumn 2018 and autumn 2021 in the course of an extensive research project commissioned by the German Environment Agency. The project was managed by the Öko-Institut in Berlin and implemented in collaboration with Geulen und Klinger Rechtsanwälte (Berlin), Rechtsanwälte Günther (Hamburg), Professor Dr. Kirsten Schmalenbach (University of Salzburg) and Professor Dr. Alexander Proelß (University of Hamburg).

The conception of the chapters and their content goes back, in large part, to the original design of the research project requested by the German Environment Agency. The authors are particularly indebted to the project supervisor there, Dr. Dana Ruddigkeit, whose selection and formulation of many research questions, both broad and specific, proved to be extremely clear-sighted and invaluable for the project as a whole. Indeed, the value of this contribution became increasingly obvious to the entire research team as we addressed the many legal developments that took place during the course of the project.

A number of meetings and discussions in the team preceded and accompanied the project's implementation and added significantly to the robustness of the final results. Further in this regard, the reviews of the commissioning institutions, the German Environment Agency and the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety also played an important role for the project teams' debates and final results. Expert reviews from a large number of colleagues from academia and practice who commented on and discussed individual aspects of project content during several expert workshops in April 2021, provided invaluable input, too. The authors owe a great debt of gratitude to all those who contributed to these workshops. The authors also would like to thank the anonymous reviewers who provided valuable advice in the run-up to publication.

Finally, the authors are deeply indebted to our colleagues in the back offices of the participating institutions, who supported the extensive revision of the final report for book publication: Inse Warich, Sara Wissmann, Frederik Seng and Ian Silver, who did the copy editing, have all added in some way to the work presented here, without their support this publication would not have been possible. Of course, a volume of

this size and complexity carries an inherent risk of erring in some manner despite the best efforts of all involved, however, the responsibility for any mistakes and errors lies with the editors and authors.

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# Abbreviations

AcP	Archiv für die civilistische Praxis
AJIL	American Journal of International Law
AJP/PJA	Aktuelle Juristische Praxis (AJP)/Pratique Juridique Actuelle (PJA)
AMG	Arzneimittelgesetz (German Medicines Act)
Annex VI	Liability Annex
Art(s).	Article(s)
ASIL	American Society of International Law
ASR	Articles of State Responsibility
ATCM	Antarctic Treaty Consultative Meetings
ATS	US Alien Tort Statute
AVR	Archiv des Völkerrechts
BAT	Best Available Technique
BattG	Batteriegesezt (German Battery Act)
BB	Betriebs-Berater
BBNJ	Biodiversity Beyond National Jurisdiction
BGB	Bürgerliches Gesetzbuch (German Civil Code)
BGBI.	Bundesgesetzblatt (German Federal Law Gazette)
BGH	Bundesgerichtshof (Federal Court of Justice)
BGHZ	Entscheidungen des Bundesgerichtshofes in Zivilsachen (Decisions of the Federal Court of Justice)
BImSchG	Bundes-Immissionsschutzgesetz (German Federal Immission Control Act)
BIT	Bilateral Investment Treaty
BMJV	Bundesministerium für Justiz und Verbraucherschutz (German Federal Ministry of Justice and Consumer Protection)
BMZ	Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung (German Federal Ministry for Economic Cooperation and Development)

BP	British Petroleum
BT-Drs.	Bundestagsdrucksache (Bundestag printed paper)
BV-E	Bundesverfassung der Schweizerischen Eidgenossenschaft-Entwurf (Federal Constitution of the Swiss Confederation-Draft)
BVerfGE	Entscheidungen des Bundesverfassungsgerichts (Decisions of the German Federal Constitutional Court)
BYIL	British Yearbook of International Law
C(O)P	Conference of the Parties
CAA	Clean Air Act
CAMLR Convention	Convention on the Conservation of Antarctic Marine Living Resources
CBD	Convention on Biological Diversity
CCAS	Convention for the Conservation of Antarctic Seals
CCF	Climate Compensation/Change Fund
CCS	Carbon capture and storage
CCT	Cirrus cloud thinning
CCUS	Carbon capture, utilisation and storage
CDR	Carbon dioxide removal
CDRMIP	The Carbon Dioxide Removal Model Intercomparison Project
CEN/CENELEC	Comité Européen de Normalisation (European Committee for Standardisation)/Comité Européen de Normalisation Electrotechnique (European Committee for Electrotechnical Standardisation)
CEO	Chief Executive Officer
CESCR	Committee on Economic, Social and Cultural Rights
Cf./cf.	<i>confer/conferatur</i> (compare)
Chapt.	Chapter
CIGI	Centre for International Governance Innovation
CIL	Customary International Law
CJEU	Court of Justice of the European Union
CLC Convention	International Convention on Civil Liability for Oil Pollution Damage
CLRTAP	Convention on Long-Range Transboundary Air Pollution
CMA	Conference of the Parties serving as the meeting of the Parties to the Paris Agreement
CMIP6	Coupled Model Intercomparison Project Phase 6
CoC	Code of Conduct
COPUOS	United Nations Committee on the Peaceful Use of Outer Space
CPA	German Climate Protection Act

CRAMRA	Convention on the Regulation of Antarctic Mineral Resource Activities
CRTD Convention	Convention on Civil Liability for Damage Caused by Road, Rail and Inland Navigation Vessels
CSR	Corporate social responsibility
DEPI	Division for Environmental Policy Implementation
DFG	Deutsche Forschungsgemeinschaft (German Research Foundation)
DIMR	German Institute for Human Rights (Deutsches Institut für Menschenrechte)
DIN	Deutsches Institut für Normung (German Institute for Standardisation)
Doc(s)	Document(s)
DSM	Deep seabed mining
DVBI	Deutsches Verwaltungsblatt
<i>e.g.</i>	<i>exempli gratia</i> (for example)
EAP	Environmental Action Programme (OECD)
EC	European Community
ECHR	European Convention on the Protection of Human Rights and Fundamental Freedoms
ECJ	European Court of Justice
ECtHR	European Court of Human Rights
Ed(s)	Editor(s)
EECCA	Eastern Europe, Caucasus and Central Asia
EEl	Economic Emission Intensity
EEZ	Exclusive Economic Zone
EHS	Environmental, Health and Safety
EIA(s)	Environmental Impact Assessment(s)
EITI	Extractive Industries Transparency Initiative
EJIL	European Journal of International Law
ELD	Environmental Liability Directive
ElektroG	Elektro- und Elektronikgerätegesetz (German Electrical and Electronic Equipment Act)
EMAS	Eco-management and audit scheme
ENMOD	United Nations Convention on the Prohibition of Military or Any Hostile Use of Environmental Modification Techniques
EP	European Parliament
EPA	Environmental Protection Agency
EPFL	École Polytechnique Fédérale de Lausanne (Swiss University)
ESA	European Space Agency
<i>et seq</i>	<i>et sequens, et sequentes</i> (and the following item[s])
ETS	(European) Emissions Trading System

EU	European Union
EuR	Europarecht
EurUP	Zeitschrift für Europäisches Umwelt- und Planungsrecht
EUTR	EU Timber Regulation
EuTRACE	The European Transdisciplinary Assessment of Climate Engineering
EWCA	England and Wales Court of Appeal
FAR	Fraction of Attributable Risk
FCC	Federal Constitutional Court (of Germany)
FLEGT	Forest Law Enforcement, Governance and Trade
GA	General Assembly (United Nations)
GAOR	General Assembly Official Records
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GCCF	Gulf Coast Claims Facility
GCM	Global climate model
GDP	Gross Domestic Product
GenTG	Gesetz zur Regelung der Gentechnik
GESAMP	Group of Experts on the Scientific Aspects of Marine Environmental Protection
GG	Grundgesetz (Basic Law, German Constitution)
GHGs	Greenhouse Gases
GOTS	Global Organic Textile Standard
GRI	Global Reporting Initiative
GVA	Gross Value Added
GWB	Gesetz gegen Wettbewerbsbeschränkungen (German Act against Restraints of Competition)
HNS Convention	Hazardous and Noxious Substances by Sea Convention
HRC	Human Rights Council
HRCComm	Human Rights Committee (United Nations)
HRDD	Human rights due diligence
HREDD	Human rights and environmental due diligence
<i>i.e.</i>	<i>id est</i> (that is)
IACtHR	Inter-American Court of Human Rights
IAEA	International Atomic Energy Agency
IBC Code	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
<i>ibid</i>	<i>ibidem</i> (in the same place)
ICCPR	International Covenant on Civil and Political Rights
ICESCR	International Covenant on Economic, Social and Cultural Rights
ICJ	International Court of Justice
ICLQ	International and Comparative Law Quarterly
ICRW	International Convention for the Regulation of Whaling

ICSID	International Centre for Settlement of Investment Disputes
ICTY	International Criminal Tribunal for the former Yugoslavia
IDI	Institut de Droit International
IEA	International Energy Agency
IEAs	International Environmental Agreements
IGC Code	International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk
IGP&I Clubs/P&I Clubs	International Group of Protection and Indemnity Clubs
IICA	Inter-American Institute for Cooperation on Agriculture
IISD	International Institute for Sustainable Development
ILA	International Law Association
ILC	International Law Commission
ILM	International Legal Materials
ILO	International Labour Organization
IMO	International Maritime Organization
Int'l. & Comp. L.J.	International and Comparative Law Journal
IOPC Funds	International Oil Pollution Compensation Funds
IPCC	Intergovernmental Panel on Climate Change
IPRG	Bundesgesetz über das Internationale Privatrecht (Swiss Federal Law on International Private Law)
IRGC	International Risk Governance Center
ISA/Authority	International Seabed Authority
ISO	International Organization for Standardization
ITLOS	International Tribunal for the Law of the Sea
IUU	Illegal, Unreported and Unregulated (fishing)
JARPA	The Japanese Whale Research Program under Special Permit in the Antarctic
JETL	Journal of European Tort Law
JGR	Journal of Geophysical Research
JORF	Journal officiel de la République Française (Official Journal of the French Republic)
JURI Committee	Committee on Legal Affairs of the European Parliament
KapMuG	Gesetz über Musterverfahren in kapitalmarktrechtlichen Streitigkeiten (German Act on Model Case Proceedings in Disputes under Capital Markets Law)
lit	<i>littera</i> (letter, subparagraph)
LkSG	German Supply Chain Act (Lieferkettensorgfaltspflichtengesetz)
LMO	Living modified organism
MCB	Marine cloud brightening
MCCA	Model Climate Compensation Act
MEA	Multilateral Environmental Agreements

MEP	Member of the European Parliament
MFN	Most-favoured nation
MN	Margin number
MNE	Multinational enterprise
MPEPIL	Max Planck Encyclopedia of Public International Law
MSB	Marine sky brightening
MüKo	Münchener Kommentar
NASA	National Aeronautics and Space Administration
NBER	National Bureau of Economic Research
NCCR	National Centres of Competence in Research
NCP	National Contact Point
NDCs	Nationally Determined Contributions
NEA	Nuclear Energy Agency
NEMA	National Environmental Management Act (South Africa)
NETs	Negative emissions technologies
NFRD	Non-Financial Reporting Directive
NGO(s)	Non-governmental organization(s)
NJGM	Non-judicial grievance mechanism
NJOZ	Neue Juristische Online-Zeitschrift
NJW	Neue Juristische Wochenschrift
No	Number
NPR-PPM	Non-product related PPM
NT	National treatment
NVwZ	Neue Zeitschrift für Verwaltungsrecht
OBE	Other business enterprises
OECD	Organisation for Economic Co-operation and Development
OEIGWG	Open Ended Intergovernmental Working Group
OHCHR	Office of the High Commissioner for Human Rights of the UN
OJ	Official Journal of the European Union
OPA	Oil Pollution Act
OR	Obligationenrecht (Swiss Code of Obligations)
para(s)	Paragraph(s)
PCA	Permanent Court of Arbitration
PCIJ	Permanent Court of International Justice
PEPAT/Protocol	Protocol on Environmental Protection to the Antarctic Treaty
PIC	Prior informed consent
POP	Persistent Organic Pollutants
PPM	Process and production method
PR-PPM	Product-related PPM
QIL	Questions of International Law

RDS	Royal Dutch Shell
RECIEL	Review of European, Comparative and International Environmental Law
Rep	Report(s)
RIAA	Reports of International Arbitral Awards
RNZ	Radio New Zealand
RRAP	Reef Restoration and Adaptation Program (Australia)
SAI	Stratospheric aerosol injection
SDC	Seabed Disputes Chamber
SDG(s)	Sustainable Development Goal(s)
SOE	State-owned enterprises
SPDC	Shell Petroleum Development Company
SPS	Sanitary and Phytosanitary
SR	Special Rapporteur
SRFC	Sub-Regional Fisheries Commission
SRM	Solar Radiation Management
Subchapt.	Subchapter
TBT	Technical Barriers to Trade
TNC	Transnational corporations
UBA	Umweltbundesamt
UCLA	University of California, Los Angeles
UK	United Kingdom (of Great Britain and Northern Ireland)
UKSC	United Kingdom Supreme Court
UmwHG	Umwelthaftungsgesetz (German Environmental Liability Act)
UmwRG	Umwelt-Rechtsbehelfsgesetz (German Environmental Appeals Act)
UN	United Nations
UNCLOS	United Nations Convention on the Law of the Sea
UNEA	United Nations Environment Assembly
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Program
UNFCCC	United Nations Framework Convention on Climate Change
UNGPs	UN Guiding Principles on Business and Human Rights
UNOOSA	United Nations Office for Outer Space Affairs
UNTS	United Nations Treaty Series
UNYB	Max Planck Yearbook of United Nations Law
UPR	Umwelt und Planungsrechts
URP	Umweltrecht in der Praxis
US(A)	United States (of America)
USC	United States Code
USchadG	German Environmental Damage Act
USSR	Union of Soviet Socialist Republics

UVPG	Gesetz über die Umweltverträglichkeitsprüfung
UWG	Gesetz gegen den unlauteren Wettbewerb (German Act against Unfair Competition)
VCLT	Vienna Convention on the Law of Treaties
VerfBlog	Verfassungsblog
VerpackG	Verpackungsgesetz (German Packaging Act)
Vol	Volume
VVDStRL	Veröffentlichungen der Vereinigung der Deutschen Staatsrechtslehrer
VwGO	Code of Administrative Court Procedure
Vzbv	Verbraucherzentrale Bundesverband
WEEE	Waste of Electrical and Electronic Equipment
WHG	Wasserhaushaltsgesetz
WHO	World Health Organization
WIM	Warsaw International Mechanism for Loss and Damage
WTO	World Trade Organization
WWF	World Wide Fund for Nature
XDC	X-Degree Compatibility Model
YBILC	Yearbook of the International Law Commission
ZaöRV	Zeitschrift für ausländisches öffentliches Recht und Völkerrecht
ZPO	Zivilprozessordnung (German Code of Civil Procedure)
ZUR	Zeitschrift für Umweltrecht



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**Part I**  
**International Perspectives**  
**of Corporate Environmental Liability**

# Chapter 1

## Introduction



**Peter Gailhofer, David Krebs, Alexander Proelss, Roda Verheyen,  
and Kirsten Schmalenbach**

To date, international and transboundary liability has been an underutilised tool for international environmental protection. This book seeks to address this shortcoming by exploring what is needed in terms of legislative action and by identifying options for judicial discretion. This has been done to provide a legal contribution that furthers the development of an effective international and transnational environmental liability law regime. To this end, the book takes a broad view of the law of corporate liability for transboundary environmental damage. **1**

This focus on the liability of private parties for transboundary damage is not entirely new. Environmental liability law has always had to deal with the environmental damage caused by private parties for the simple reason that they, rather than States, cause the vast majority of environmental damage. The transnational aspect of environmental damage has also become a perennial topic in discussions on environmental liability with the now acute awareness that emissions do not stop at borders and the fact that the degradation of existential ecosystems and ecological resources **2**

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necessarily affects all of humanity. Even though the problems are well-known, the questions raised in this book could not be more relevant as effective solutions have remained elusive.

- 3 The last few years, however, have witnessed an increased pace in the legal developments regarding environmental liability. Some of these developments and decisions have been surprising and many have been disruptive in some way. As such, the rapid evolution taking place in this legal sphere demonstrates the current need for the renewed and intensified focus on the law of international and transnational corporate liability for environmental damage presented here. Of note, there have been intensifying efforts in recent years to address environmental damage and rights violations that result from the global, or at least internationally interconnected, business activities of companies. Specific regulations in many States aim at addressing the consequences of economic globalisation by regulating matters that are more or less closely linked to the value chains of companies in industrialised countries (e.g. French Duty of Vigilance Act, German Supply Chain Due Diligence Act, EU Timber Regulation, Norwegian Transparency Act, Dutch Act against Child Labour). New standards, norms and regulations deal with transboundary environmental and human rights impacts that, due to the interconnectedness of the global economy, are more or less strongly related to domestic actions, being linked, for example, to management decisions of companies or the decisions of consumers. This is a strong indication that legal ideas about the scope of corporate responsibility for harm occurring in their value chains are changing. A growing number of private standards that seek to provide guidance on what this responsibility actually consists of, coupled with the trend of governmental emphasis on the importance of these standards, fit into this picture. Indeed, the density of norms and standards that are supposed to align the globally interconnected economy with sustainability and human rights is ever-increasing and has now moved beyond the means of traditional international law.
- 4 Recent court rulings also demonstrate a new legal awareness of global interdependencies regarding the environment and climate and a broad responsibility to avoid damaging either one. Important decisions of domestic, regional and international judicial bodies, such as the ‘Climate Ruling’ of the German Federal Constitutional Court, the Dutch *Urgenda* and *Shell* decisions as well as the Advisory Opinion of the Inter-American Court of Human Rights on the Environment and Human Rights, reflect a revised understanding of the relationship of environmental and climate problems to fundamental and human rights. These decisions emphasise the intergenerational dimensions of these rights and strengthen the legal significance of the precautionary principle. In doing so, they develop stricter obligations to protect Earth’s climate and environment that must be taken into account, particularly by parties with short-term economic interests. Furthermore, such decisions often lend new legal relevance to scientific findings on what must be done to meet these obligations and give those affected the opportunity to contest environmental damage and its consequences in court in an unprecedented way.
- 5 The chapters of this book assess, from different angles, how environmental liability law fits into this overall dynamic, elucidating how the specific instruments

of liability law further the purposes of international environmental law and contribute to advancing legal doctrine. *De lege lata*, this book analyses the conditions and limits in national and international liability law; *de lege ferenda*, it explores how domestic State regulation can contribute to leveraging the potential of liability law. More concretely, the present research examines whether current developments and recent case law have resulted in an observable emerging transnational standard of care. Such a standard may concretise obligations to avoid damage to existential environmental goods and corresponding rights which enable (potential) victims to make claims for mitigating action, restitution and/or compensation for the damage suffered.

Chapter 2 argues, from a rather general perspective, that the functions traditionally attributed to liability law seem particularly well suited for the task of concretising and implementing obligations to avoid environmental risks in transboundary constellations. This traditional approach focuses on an economic mechanism of liability that induces utility-maximising actors to calculate the risks of liability and thereby ‘internalise’ the detrimental external consequences of their behaviour. Whereas the economic deterrent effects bound to risk-prone practices may be relevant to transnational constellations characterised by a lack of binding standards and effective enforcement, the potential function of transboundary liability goes beyond just economic dynamics. Liability law should also be seen as an instrument of rights-based environmental protection. Disputes about rights violations arising from environmental damage have been rightly considered to work as catalysts for the development of environmental norms from the bottom up. Liability cases could thus trigger dynamics that strengthen the legal weight of individual rights and improve both climate and environmental protection. In addition, tortfeasors and injured parties argue before the courts about what specifically should be expected from companies to avoid violations of the law may serve as developmental points of reference for those designing environmental and climate standards and norms applicable to global value chains.

Chapter 3 examines liability at the level of public international law. It is a deplorable fact that all too often there is inadequate enforcement of international environmental laws that themselves already struggle to effectively address modern environmental challenges. The lack of incentives for environmental compliance only serves to heighten the need to promote the rule of law in environmental matters. This was emphasised by the UNEP in 2019 when it highlighted the value of the environmental rule of law as a concept that integrates critical environmental needs with the traditional components of the rule of law. The UNEP went on to note that this requires that environmental laws be consistent with human rights, fairly effectuated and evenly enforced. Accordingly, Chap. 3 addresses the question of whether, and if so to what extent, existing liability and responsibility rules in international environmental law contribute to the international environmental rule of law. It analyses the fragmented environmental liability landscape and places it within the wider rule-of-law context. It does so not only to highlight the shortcomings and gaps of the current liability regime but also to demonstrate what is needed for it to coalesce into a more

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meaningful building block that contributes to the international environmental rule of law.

- 8 The question of environmental rights and environmental obligations of private parties at the level of international law is discussed in Chap. 4. This chapter assesses recent efforts to introduce direct obligations on business in international law and looks at important developments concerning the relationship between environmental and human rights in international law. In this regard, the chapter particularly examines to what extent affected parties can assert that environmental damage also constitutes a violation of their human rights. The chapter then describes and illustrates current developments that support the idea of a growing legal link between the environment and human rights. It considers, *inter alia*, to what extent these developments regarding environmental human rights could also strengthen environmental norms, even if these do not yet directly impose obligations on private parties at the level of international law.
- 9 Chapter 5 takes the strengths and weaknesses identified in previous chapters as a starting point to detail how international instruments may help to better align national liability law with the various constellations of transboundary harm. As will be seen, international civil liability conventions offer distinct possibilities for this. The chapter compares the provisions of existing civil liability conventions and their implications and draws conclusions concerning conceivable obligations of States under customary international law to adapt their national liability systems.
- 10 Chapter 6 changes the perspective and discusses the potential of national tort law to deal with transboundary environmental damage. It examines the general prerequisites for bringing claims involving environmental damage that occurred abroad before national courts based on domestic law and, with a view to recent court decisions, discusses the substantive prerequisites for establishing transboundary and value chain-wide corporate liability on the grounds of national liability norms.
- 11 Chapter 7 addresses the question of whether and how environmental due diligence obligations in transnational value chains can be anchored in the laws of the home States of transnational corporations. It takes the internationally influential concept of human rights due diligence as a point of departure and seeks to explore to what extent it can be adopted for designing environmental due diligence obligations. The chapter also argues that enshrining an environmental due diligence obligation in home State regulation is a feasible option to enhance environmental protection in global value chains. To this end, however, the approaches developed and discussed for human-rights due diligence obligations can be transferred to the environmental field only after a certain amount of customisation. With regard to the potential enforcement mechanisms of an environmental due diligence obligation in home State law, the chapter focuses on civil liability. Finally, it explores the legal objections that may be triggered by the potentially extraterritorial character of such legislation; however, the chapter demonstrates that due diligence obligations enforced by means of civil liability appear to be rather immune to these legal objections.
- 12 Chapter 8 examines climate change litigation as a reference area for international environmental liability, focusing on cases with a horizontal character, i.e. involving

companies as defendants in a civil law context. Based on an analysis of U.S. and European cases, the chapter discusses neuralgic points of climate change liability. This analysis includes the issue of justiciability and the relationship between State duties to regulate emissions and the tort law duties of private entities. The analysis then turns to questions pertaining to standing and compensable damage as well as causation and attribution to individual emitters, showing that the associated legal and forensic problems strongly depend on the type of action and remedy sought, neither of which preempt or exclude liability. The chapter ends with the substantive obligations of companies, discussing an emerging duty of care requiring corporations to align their business models with the goals of the Paris Agreement as well as some *de lege ferenda* ideas linked to defining and enforcing this duty.

Chapter 9 assesses the legal regime governing liability for damage occurring from running or even simply deploying, large-scale geoengineering experiments. Following a brief introduction to the scientific background, various geoengineering techniques and their associated major environmental and other risks are detailed. The chapter then analyses the international legal rules and principles currently, or potentially, relevant in the context of large-scale geoengineering activities. It details the key regimes that may be called on to govern geoengineering endeavours, including the London Convention/London Protocol, the 1982 United Nations Convention on the Law of the Sea (UNCLOS), the outer space treaty system as well as customary international law rules associated with the prevention of harm from activities that may have significant and adverse impacts on the environment. Referring to liability regimes identified and examined in other chapters, the chapter highlights international responsibility and liability for damage caused by geoengineering activities. It includes an in-depth discussion of the challenges in attributing responsibility and liability associated with geoengineering before presenting what a potential geoengineering liability regime may feasibly contain. Finally, the chapter offers some recommendations and conclusions concerning the future development of existent and pertinent liability regimes.

Chapter 10 rounds out this book and takes stock of what was discussed in the previous chapters. Although it is certainly too early to describe in black and white terms the trends and trajectories of international and transboundary liability law, one thing is certain, there is a groundswell of change. Dogmatic paradigms about environmental rights and obligations are now being broken down at a surprising pace in the face of increasing evidence of the existential threats of environmental hazards. This growing awareness has seemingly triggered a sense of urgency in many quarters to find new legal approaches to resolving these issues and these approaches are now being actively explored. This book, of course, cannot conclusively describe and answer the myriad of complex questions raised by current developments, however, it serves to meaningfully contribute to a better understanding of the potential and limitations of environmental liability law to facilitate transboundary environmental protection.

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# Chapter 2

## Functions and Objectives of Corporate Liability for Transboundary Environmental Harm



Peter Gailhofer

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## 2.1 Introductory Remarks

The goal of this chapter is to understand the functions and objectives of environmental liability law. This task requires going beyond the traditional perspective of the judge or the lawyer to a certain extent, as these roles are usually concerned with the restitution of or compensation for environmental damage that has already occurred, a repressive perspective which is typically contrasted with the preventive

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function of environmental liability.<sup>1</sup> In line with the latter function, liability law can be considered as a regulatory approach to cope with environmental problems and thus as a complement or alternative to other instruments of international law which are designed to minimise or eliminate environmental risks.

2 To understand the extent to which liability law can be considered a meaningful policy alternative in this sense, it is useful at the outset of this chapter to recapitulate, first of all, what goals an instrument of international environmental law should strive to achieve to be considered functional. Secondly, such an understanding of the potential and limitations of liability law can be based on whether it can effectively achieve these goals. Against the background of a policy-oriented perspective on environmental liability, two questions arise in this regard: What are the factual obstacles and challenges related to the regulation of transboundary environmental problems that environmental liability has to address? And in what ways could environmental liability contribute to the enforcement of environmental standards and further evolution of international environmental law?

3 With this in mind, the present chapter aims to provide a description of the conceivable functions of trans- and international environmental liability law. It first sets out the central goals of international environmental law and then briefly discusses three ideal-typical ideas about how regulatory approaches to protect the environment may work internationally to trigger further evolution in environmental law. Building on this analysis, the properties and effects of liability law that may help to meet regulatory challenges and provide support for further legal development can be clarified.

## 2.2 Objectives and Strategies of Reform in General International Environmental Law and Governance

### 2.2.1 *Objectives of International Environmental Law*

#### **International Rights and Principles**

4 Environmental problems and their impacts are frequently not confined to the territory of the State of origin. International law addresses different constellations of such cross-border, or even global, impacts. First of all, environmentally detrimental behaviour often causes transboundary harm, meaning that the effects of an activity in one State cause damage on the territory of another. The protection of the environment in an individual State or the lack thereof, thus can have transboundary effects.<sup>2</sup> Second, environmental harm, irrespective of where it originates, can also affect areas beyond national jurisdiction—such as the high seas or Antarctica.<sup>3</sup> The concept of

<sup>1</sup>Cf. Wolfrum and Langenfeld (1998).

<sup>2</sup>Epiney (2017), p. 6.

<sup>3</sup>Cf. Dupuy and Viñuales (2015), p. 84; Bodansky et al. (2008), p. 11.

common areas legally addresses such territories as universally accessible spaces or resources that cannot be appropriated by single States.<sup>4</sup>

### The Prevention Principle

The obligation of States “to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or areas beyond the limits of national jurisdiction” forms an important principle of international law.<sup>5</sup>

Third, environmental damage can also have international relevance when the damage *and* its causes *prima facie* take place within the territory of a single State. Such damage frequently concerns goods, conditions, adverse effects or environmental resources which may be legally conceived as common concerns, such as biodiversity, plant genetic resources for food and agriculture and climate change, which are considered to affect the international community as a whole, even though the respective resources, goods or adverse effects themselves may be situated on the territory of a State. The idea of common concerns in international law is described as a normative concept to address collective action problems and compensate for lack of appropriate global institutions by expounding enhanced obligations of States to cooperate, but also the obligation to take action at home and the right to address particularly serious environmental problems such as climate change by measures having extraterritorial effect.<sup>6</sup>

The fourth and final point also reflects the universality of interests and obligations regarding the protection of environmental goods. Environmental problems frequently affect fundamental rights.<sup>7</sup> Pollution of air, soil or water affects the health of people, degradation of natural resources or the destruction of habitats may impair the basic needs of human beings. Many lawsuits and vivid legal discourses point to this close and potentially momentous relationship between human rights and the environment.<sup>8</sup>

<sup>4</sup>Modern environmental regimes, such as UNCLOS correlate the access and use of these commons with duties to ensure its protection. Cf. Dupuy and Viñuales (2015), p. 82.

<sup>5</sup>Principle 2 of the Rio Declaration on Environment and Development. Cf. Proelss (2017), pp. 75–84.

<sup>6</sup>Cottier et al. (2014).

<sup>7</sup>Human rights are *per definitionem* of international concern, even if they materialise locally. With respect to environmental common concerns, on the contrary, it remains unclear, to what extent individual States legally owe obligations to protect such resources *erga omnes*—that is, under customary international law and to the international community as a whole, Bodansky et al. (2008), p. 11.

<sup>8</sup>This issue will be further discussed in Sect. 4.3.

## 8 **The Bhopal Tragedy**

The Bhopal tragedy dramatically illustrates the existential implications of environmental hazards: In 1984, large amounts of the toxic gas methyl isocyanate leaked out of the American Union Carbide Corporation's chemical plant in the Indian town of Bhopal. The accident killed at least 3800 people immediately and caused significant morbidity and premature death for many thousands more in the years that followed. It still is a prominent reference point for arguments concerning the human rights implications of environmental damage.

## 9 **Environmental Rule of Law**

The implementation and enforcement of environmental laws and regulations too often fall short of what is required to effectively address environmental challenges.<sup>9</sup> Such problems are frequently associated with the globalised economy and its impacts on the environment. Although naturally, States may directly cause pollution and exhaust natural resources, most environmental problems result from activities which qualify as private rather than governmental.<sup>10</sup> Whereas it is true that “virtually all human activity [...] contribute[s] to environmental problems”,<sup>11</sup> economically oriented actors play a characteristic and important role as the ones most often causing these problems. Private enterprises intensively exploit natural resources, the mass-production of goods is increasingly leading to the depletion of resources and pollution on an unprecedented scale, environmental harm caused by waste takes on whole new dimensions when its management is driven by economic motives.<sup>12</sup> Such detrimental dynamics of economic activities are a consequence of what economists classify as market failures with respect to environmental goods and interests, for example so called negative externalities. An externality occurs when an economic transaction by some parties causes losses or gains to a third party which are not taken into account by the economic calculations of the acting parties. If the externality results in a loss of welfare, e.g. in damage to public goods, it is a negative externality.<sup>13</sup>

## 10 **The Polluter Pays Principle**

Environmental law attempts to deal with negative externalities by means of the polluter pays principle, which requires that the cost of environmentally

(continued)

<sup>9</sup>Cf. UNEP (2019), p. viii.

<sup>10</sup>Bodansky et al. (2008), p. 6.

<sup>11</sup>Bodansky et al. (2008), p. 7.

<sup>12</sup>Cf. Kampffmeyer et al. (2018), pp. 37–39.

<sup>13</sup>Daly and Farley (2011), pp. 165–192, p. 184; Endres (2013), p. 43.

detrimental behaviour not be borne by society or directly affected individuals uninvolved in the hazardous interactions but by the entity causing the damage. Legal instruments which implement this principle thus are meant to promote the internalisation of environmental costs: e.g. they impose the costs of measures necessary to address pollution caused by specific products to the company which produces these products. The company then is supposed to pass on these costs to the consumers which then, naturally, impacts demand for whatever the company offers in the market.<sup>14</sup>

The weight and importance of private actors as polluters cast light on a significant aspect of how environmental challenges transcend national borders. It is not only that the effects of privately generated environmental damage are not limited to the territory of the States in which the polluters operate. Rather, as a consequence of economic globalisation, major private actors have themselves become highly flexible and are able to evade the full force of both, environmental law and governance, which are still, in many ways, confined to the territory of the nation States. The reason is, that political and regulatory globalization have not kept up with economic globalization. International law—at least traditionally and continuously in the field of public international environmental law—governs inter-State relations and typically does not address private actors as legal subjects.<sup>15</sup> Even if relevant international rules exist, their effectiveness thus still hinges on the implementation and enforcement by States. However, many States seem to lack the political will, the technical capacity or the institutional structures and resources to ensure the effective implementation of environmental laws on their territory.<sup>16</sup>

As neither international institutions nor a coordinated implementation of rules by the States would guarantee homogeneous legal conditions for the global economy, the operations of global economic actors will continue to take place on an uneven regulatory playing field,<sup>17</sup> which is problematic for a number of reasons. The existence of a level playing field is, on the one hand, considered a matter of fairness in terms of economic competition as regulation may, at least in the short term, affect firms' competitiveness in negative ways.<sup>18</sup> Companies operating in accordance with high regulatory standards may, therefore, find themselves at a disadvantage when competing with enterprises that only have to comply with lower standards.

<sup>14</sup>Dupuy and Viñuales (2015), p. 82.

<sup>15</sup>Epiney (2017), p. 35. For a more detailed discussion see Sect. 4.2.

<sup>16</sup>Simons and Macklin (2014), pp. 7–8.

<sup>17</sup>Cf. Hudec (1996).

<sup>18</sup>Cf. Dechezleprêtre and Sato (2017).

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### 13 **Consequences of an Uneven Playing Field in a Globalised Circular Economy**

Challenges regarding the environmental regulation of transnational online trade illustrate the problematic implications of an uneven playing field.<sup>19</sup> According to German and European waste legislation, manufacturers have to comply with numerous obligations concerning issues such as the notification and registration of environmentally problematic packaging and the marketing of batteries (see Section 4 BattG, Section 6 ElektroG; Section 9 VerpackG). These requirements regarding registration and disclosure ensure that all manufacturers who sell their goods into the German market contribute to the costs for collection and disposal of WEEE,<sup>20</sup> discarded batteries and packaging waste. Manufacturers from third countries who directly sell their products cross-border via the internet frequently do not register. They thus can circumvent these obligations and shift the costs of dealing with waste from their products to the duly registered manufacturers. This leads to both uneven competition and also negatively affects the effectiveness and legitimacy of the legislation.

14 From the perspective of enterprises, on the other hand, the lack of a level playing field can also turn into an advantage, when they use the flexibilities of globalised markets. Transnational or multinational corporations can invest and set up subsidiaries where business conditions are economically beneficial for them. Enterprises looking for the cheapest option for production can outsource their production to third countries with low environmental standards or weak enforcement.<sup>21</sup> The flexibility and mobility of key economic actors may narrow down the States' regulatory leeway in different ways. The mobility of transnational enterprises for example is often diagnosed as leading to problematic competition between States as it is seen to induce a regulatory 'race to the bottom' because foreign direct investment is considered to be essential for many States. The possibility for enterprises to move their operations is suspected to exert pressure on governments to compete with each other by lowering their respective environmental standards to attract international business and capital.<sup>22</sup>

15 Due to the economic globalisation companies often do not need to be concerned about bearing the consequences of environmentally detrimental behaviour. As such,

<sup>19</sup>Cf. Hermann et al. (2020).

<sup>20</sup>WEEE is the non-official denomination of the European Directive 2002/96/EC and refers to "Waste of Electrical and Electronic Equipment".

<sup>21</sup>This phenomenon is described by the so-called 'pollution-haven theory', cf. Levinson and Taylor (2014).

<sup>22</sup>This may of course be different when various national governments engage in cooperation to coordinate their environmental policies and regulations. National policies can prevent the lowering of environmental standards by subjecting imports from emerging countries to regulation, cf. Urpelainen (2010).

globalisation has opened new doors for those seeking to exploit corporate impunity: Inadequate policies, standards and procedures of transnational companies in their relations with international suppliers and subsidiaries can contribute to environmental damage in countries where the impact of their operations is governed by weaker environmental regulations. Legal obstacles can make it difficult to attribute such violations to the parent company or buyer.<sup>23</sup> The consequence is that corporations may benefit from the operations of their third-country subsidiaries or contractors, while not being held directly responsible for any abuses committed in the course of their operations.<sup>24</sup>

### **Coping with Complex and Uncertain Environmental Risks**

Although the magnitude of pollution, climate change and other environmental threats to life and human well-being are increasingly well-known and accepted,<sup>25</sup> scientists cannot offer conclusive answers to many questions about the exact nature and forthcoming impacts of such problems.<sup>26</sup> Causes, consequences, solutions and costs related to environmental problems often cannot be unequivocally explained or predicted. At the same time, the technological, social and economic causes and contexts of environmental problems, as well as scientific knowledge about them, may change over time<sup>27</sup> as the problems and their related risks are dynamic. Decisions thus must be made in the face of uncertainty.<sup>28</sup>

The interdependencies of States related to common concerns and common areas described above exacerbate the complexity of environmental problems.<sup>29</sup> Common concerns can be affected when environmental damage is caused by multiple, cumulative actions or omissions, especially when activities in several States cause damage to the environment. An example of a complex case is the greenhouse effect, which results from the cumulative effect of ozone depletion, global air pollution, acid rain, deforestation and unsustainable land-use patterns.<sup>30</sup> The environmental problems caused in the context of the globalised economy and increasingly interconnected societies also add other dimensions of complexity to the challenges for environmental law and governance: For example, the transnational mobility of companies can result in spill-over effects such as so-called ‘carbon leakage’, which may occur if, for reasons of costs related to climate policies, businesses transfer production to other countries with laxer emission constraints. This can lead to an increase in their total

<sup>23</sup> See Chap. 6 ¶ 106 *et seq* (Sect. 6.8.3).

<sup>24</sup> Augenstein et al. (2010), p. 8.

<sup>25</sup> Percival (2010), p. 47.

<sup>26</sup> For a systematic approach to challenges of complexity and uncertainty of environmental challenges cf. Underdal (2010).

<sup>27</sup> Cf. Herbst (1996), pp. 25–26.

<sup>28</sup> Bodansky et al. (2008), p. 7.

<sup>29</sup> For examples on complex, i.e. “wicked” problems see Batie (2008); Kirschke and Newig (2017).

<sup>30</sup> Cottier et al. (2014), p. 19.

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emissions.<sup>31</sup> In general, the regulatory capacities of States may also be hampered by the high complexity of the social, technological and economic dynamics causing environmental damage: globalized economy, as well as science and technology and other spheres of society are highly differentiated and specialized. The creation of general environmental laws or standards which are sufficiently adapted to these varied technical, social, economic and regional specifics of governance problems therefore in itself is sometimes considered highly problematic.

## 18 **The Precautionary Principle**

The legal processing of environmental risks characterised by high uncertainty is one of the central objectives of environmental law. Prominently, according to the precautionary principle, appropriate measures to prevent environmental degradation need to be taken, even if there is a lack of full scientific certainty that serious or irreversible damage will occur. It may justify protective measures notwithstanding a lack of evidence of harm or straightforward causal relationships. In practice, it addresses decisions under uncertain conditions by waiving the requirement to prove causality between the behaviour and environmental damage.<sup>32</sup>

### 2.2.2 *Entry-Points for Legal Reform*

19 The interdependencies and common responsibilities with respect to environmental goods and interests illustrate the need for globally effective solutions which can process the transnational complexity of risks for these interests. This also holds with respect to the task to effectively regulating private activities: A legal policy that aims to preserve and protect (environmental) human rights and global commons has to find a means of requiring States to regulate or otherwise influence the behaviour of relevant non-State actors within their borders or it must find globally effective instruments to engage private actors more directly.<sup>33</sup> Despite a growing consciousness of these objectives, however, serious gaps in international law and governance persist. A huge and diverse body of scientific literature reflects on explanations for these shortcomings and tries to clarify the potential options for and barriers to effective environmental governance reform.<sup>34</sup> Such explications give rise to different arguments on causality about the sources of particular problems which, in turn, may suggest different political and legal strategies on how to resolve those problems

<sup>31</sup> Cf. details on the website of the European Commission on carbon leakage: [https://ec.europa.eu/clima/policies/ets/allowances/leakage\\_en](https://ec.europa.eu/clima/policies/ets/allowances/leakage_en), last accessed on 17 Mar 2022.

<sup>32</sup> Science for Environment Policy (2017).

<sup>33</sup> Cf. Bodansky et al. (2008), p. 7.

<sup>34</sup> Newell (2008), p. 508. From a perspective of international relations theory cf. Dyer (2017). Cf. Heyvaert (2018), p. 55.

in the service of the posited goals.<sup>35</sup> In the following, such strategic approaches will be briefly presented in order to be able to contextualise and assess the suitability of liability instruments within the debate on the proper regulation of transboundary environmental damage. It should be noted that these considerations outline ideal-typical approaches—this does not contradict the idea that regulators should use complementary combinations of instruments and actors, to build on the strengths of individual mechanisms, while compensating for their weaknesses.<sup>36</sup>

### **Incentives for States as Self-Interested Actors**

The first strategy focuses on States as the principal agents of effective regulation of the transnational economy and of addressing the complexities of environmental change<sup>37</sup> and the interdependencies with respect to global commons. Exponents of such approaches find the underlying reasons for the deficits and solutions in the behaviour of States as rational and utility-oriented actors. The argument goes that States, on the one hand should seek effective international cooperation in their own, rational interest: “Practically speaking, States’ interdependence in terms of both contributions and solutions would demand cooperation in addressing collective environmental concerns. Legally speaking, individual States lack rights that they could effectively invoke to demand protection of a commons located within other States. That’s why, traditionally, international environmental law has tended to consist of efforts to build multilateral, treaty-based regimes.”<sup>38</sup> Conversely, however, this rational incentive often does not work in practice because of the economic properties of many environmental goods as commons: Self-interested users often are found to use shared resources in ways that run contrary to the public interest. Theories that see States as utility-maximising agents explain the lack of collective action on the environment by drawing on, for example, game theoretical models such as the prisoner’s dilemma, where both sides benefit from cooperation, but each party has an incentive to defect. With respect to environmental problems, the gain from environmental cooperation is a public good and all States share in that gain irrespective of whether or not they participate in producing it.<sup>39</sup>

Such explications of the drivers and impediments of legal change make certain approaches to legal reform seem more workable than others. A strategy that builds on such economic theories of international law will need to centre on the question of how to motivate States, harnessing their utility-maximising attitude with a regime of ‘sticks and carrots’<sup>40</sup> to encourage them to act in ways that protect and enhance

<sup>35</sup> Slaughter (1995), p. 718.

<sup>36</sup> Cf. Gunningham and Sinclair (1998).

<sup>37</sup> Underdal (2010).

<sup>38</sup> Bodansky et al. (2008), p. 11.

<sup>39</sup> Bodansky et al. (2008), pp. 10 ff.

<sup>40</sup> Bodansky (2010).

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global commons.<sup>41</sup> Agreements that stipulate the payment of damages, the institutionalised posting of bonds,<sup>42</sup> the threat of import restrictions<sup>43</sup> or trade benefits<sup>44</sup> as incentives, hence try to make it in the “rational” interest of States to change their behaviour and protect the environment.<sup>45</sup>

### **Non-State Actors as Co-Regulators**

**22** An alternative strategy finds the levers for change in international law and governance not in the States as centres of regulatory power, but in regulatory activities “undertaken by subunits of a complex and decentralized system”.<sup>46</sup> Quite often, business enterprises are considered to constitute these subunits—global corporations are envisioned as the “providers of environmental regulations”.<sup>47</sup>

**23** This approach thus counts on the regulatory instruments that transnational companies have at their disposal as levers to manage or resolve environmental problems. It builds on a specific understanding of the function and the dynamics of international and transnational law: The regulatory weight of global firms is often seen as a consequence of the diminishing influence of States. Globalisation and the issues it brings, lie ever-increasingly beyond the bounds of immediate State control. An aspect of this loss of control scholars often emphasise is the complexity of environmental law and governance as a consequence of the evolution of highly differentiated and specialized social spheres, such as the global economy or technology.<sup>48</sup> The absence of effective international regulation and institutions which could satisfy the requirement for legal guidance for transnational companies, accordingly leads to the growing relevance of particular, e.g. economic, technological or scientific interests or “logics”. This growing systemic complexity of a fragmented global system is causing new normative complexity. Transnational norms and standards, such as ISO norms,<sup>49</sup> as well as standard contracts of global corporations or environmental certification schemes, such as forest certification,<sup>50</sup> are seen as private regulation inspired and made possible by the lack of international regulation.<sup>51</sup> Scholars also highlight the influence of non-State actors on formal laws and treaties, as legislation

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<sup>41</sup>Newell (2008), p. 508; Sykes (2004), p. 7, pp. 12–25.

<sup>42</sup>Sykes (2004), p. 21; Barrett (1997), p. 273.

<sup>43</sup>E.g., the EU has instituted a carding system via Regulation (EC) No. 1005/2008 with the goal of incentivising fish and fish products (fish) exporting countries to the Union to take action to reduce illegal, unreported and unregulated (IUU) fishing in their waters. Failure to curb IUU fishing will result in a ban in the export of fish to the EU via the issuance of a red card. Cf. Sumaila (2019).

<sup>44</sup>Cf. European Court of Auditors (2015).

<sup>45</sup>Barrett (2008).

<sup>46</sup>Cf. Underdal (2010).

<sup>47</sup>Cf. Orsini (2012), p. 961.

<sup>48</sup>Cf. Fischer-Lescano and Teubner (2004).

<sup>49</sup>Cf. Dilling and Markus (2016), p. 6.

<sup>50</sup>Meidinger (2003).

<sup>51</sup>Cf. Fischer-Lescano and Teubner (2004); Grabowski (2013); Gritsenko and Roe (2019).

and policies develop within multiple arenas and in an interplay of diverse actors of varying influence who pursue their own particular objectives and strategies.<sup>52</sup>

A common denominator of these explications is that they find a reason for regulatory challenges in international environmental law and governance in the decisive influence of sector-specific, most importantly economic interests or ‘logics’ on the norms and regimes which are relevant for the protection of environmental goods and interests. The norms and standards shaped or established by these private entities then reflect their specific economic interests, instead of a (global, environmental) common good, which traditionally is the focus of States and their authorities.<sup>53</sup> An important goal from an environmental policy perspective is to induce self-interested regulatory actors to ‘internalise’ such common objectives which may be considered as ‘external’ from their point of view. Such strategies, similarly to the State-centred approaches outlined above, thus concentrate on ways to oblige or motivate the specific actors who seem to possess the means to take action to do so in a manner that takes common interests into account.

Steering-problems of State-centred approaches to regulation caused by the rising complexity and growing weight of economic and other specialized actors lead to particular governance configurations. Legislators have turned towards decentralised,<sup>54</sup> or consensus-based<sup>55</sup> modes of environmental legal policy: For example, problems of technical, organisational and economic complexity are addressed by entrusting “the attainment of specific policy objectives set out in legislation to parties which are recognized in the field [...] [and by drawing] on the experience of the parties concerned”.<sup>56</sup> Such regulatory configurations exist in a great variety and range from genuine self-regulation to “mixed” systems of “quasi-or co-regulation”,<sup>57</sup> combining obligations underpinned by sanctions with broad leeway for the addressees of the rules regarding the modes of implementation.<sup>58</sup> These regulatory mechanisms can be considered to be decentralised rather than State-centred because they, at least to some degree, are meant to be implemented by the addressees of the provisions themselves as these are considered to be closest to the functions and factual conditions of the sectors and regional contexts being regulated.

### **Approaches Focused on Individual or Collective Rights and Access to Justice**

A third strategy to cope with the fundamental drivers and impediments of evolution in global law seeks to address legal innovation and reform in a manner that understands actors and institutions in a strikingly different way. It turns away from the idea of utility-maximising agents as the norm addressees and exclusive

<sup>52</sup>Newell (2008), p. 522; Heyvaert (2018), p. 1.

<sup>53</sup>Cf. Renner (2011), pp. 87 ff.

<sup>54</sup>Or “polycentric”, cf. Heyvaert (2018), p. 197.

<sup>55</sup>Cf. Newell, p. 523.

<sup>56</sup>European Commission (2017), p. 109.

<sup>57</sup>Cf. Jentsch (2018), pp. 5–10.

<sup>58</sup>Cf. Elsholz (2017), p. 23. For a discussion of home State regulation of Environmental Human Rights Harms As Transnational Private Regulatory Governance, cf. Seck (2012).

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factors, such as economic rationale, as the drivers of change. This third type of approach views actors' conduct as being shaped not only by a utilitarian logic where actions are rationally chosen to maximise material interests but considers rationality to be heavily mediated by normative aspects, such as "a logic of appropriateness".<sup>59</sup> Such normative motives can be important determinants of social behaviour in many contexts. For that reason, the idea, for example, that environmental or human rights norms would be entirely inconsistent, e.g. with self-regulations of transnational corporations because of their predominant *economic* functions and objectives, would be too rigid.

- 27** This view has practical implications for policy strategies that focus on the reform of international environmental law. State-centred approaches building on such an alternative understanding may emphasise the role of norms and doctrines for how States choose to address their environmental problems and to act collectively.<sup>60</sup> For an effective reform of international environmental law, a lesson is that shared normative understandings must be gradually cultivated and deepened. This requires regimes to be designed in a way that they maximise the opportunities for normative interaction and pressure States to justify their conduct in light of applicable standards.<sup>61</sup>
- 28** Such strategies do not necessarily have to focus on States as agents of legal reform. Normative dynamics may be pushed forward "bottom-up" by transnational actors like NGOs or grass roots movements and international institutions which can influence State behaviour through rhetoric or other forms of lobbying, persuasion, and shaming.<sup>62</sup> At the same time, practices of "scandalization" are not necessarily directed at states as addressees, but can also put pressure on private actors to employ higher environmental or human rights-related standards.
- 29** Such normative developments have been prominently described with respect to the recognition of new international human rights norms that have their origins in 'bottom-up' discourses on social justice.<sup>63</sup> Comparable claims or instances of grass-roots 'scandal-mongering' about justice and rights are, however, increasingly also made with respect to environmental problems and their consequences for fundamental human needs and interests.<sup>64</sup> "Rights-based approaches to environmental protection"<sup>65</sup> are intended to utilise this potential as a means to make an impact on political institutions and to trigger public deliberation on environmental issues.
- 30** An obvious opportunity for normative deliberation and the bringing to bear of institutional and moral pressure on States and corporations is the assertion of a

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<sup>59</sup>Slaughter (2013), p. 4. Also cf. Bodansky et al. (2008), p. 12.; Mantilla (2009).

<sup>60</sup>Haas (2010).

<sup>61</sup>Bodansky et al. (2008), pp. 12 f.

<sup>62</sup>Slaughter (2013).

<sup>63</sup>Cf. Fischer-Lescano (2005).

<sup>64</sup>Cf. Sect. 4.3.

<sup>65</sup>Cf. Pathak (2014).

violation of rights or disputes via claims before a court. Access to justice of the victims of human rights violations, which are increasingly connected to environmental damage, can lead to an evolution of new norms, for example in the form of case law, regarding environmental rights and duties. Access to justice can, therefore, be seen as means to systematically enable a development “bottom up” of environmental norms.<sup>66</sup>

A rights-based approach thus is complementary to strategies that aim at (predominantly economic) incentives for “rational” actors to pursue objectives of a common good: Instead of incentivising powerful self-interested actors to internalise ‘external’ goals, “rights-based” strategies focus on empowering those, whose interests typically coincide with the goals of environmental protection. Relevant rights can be enforced via administrative law as well as via tort law and civil procedure and aim at the promotion of public interests by private parties in national civil courts, e.g. as instances of public interest litigation.<sup>67</sup>

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### 2.2.3 *Levels of Legal Reform: National or International Regulation?*

Strategic entry points for legal reform may be accessed by using both international and national instruments. Given the interdependence of the causes of and solutions to global environmental problems and the need for a ‘level playing field’,<sup>68</sup> it makes sense, that instruments that ensure the environmental accountability of enterprises are employed at the international level—either by integrating directly binding obligations for private actors into international public law or by coordinating national laws between States. Both of these perspectives regarding international public law will be further analysed in this book with respect to recent debates and developments.<sup>69</sup>

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Sometimes, however, national laws designed to have extraterritorial effects may constitute a plausible alternative or complement to such international strategies. For example, economic theories of international law promote the idea that unilateral measures, such as trade restrictions, can be used to deter the breach of international norms and could also be used as means to promote the effectiveness of environmental rules.<sup>70</sup> Concerning the interdependencies that arise due to dispersed or shared environmental effects, lawyers also discuss the use of extraterritorial

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<sup>66</sup>Cf. Percival (2010), p. 63.

<sup>67</sup>Giesen and Kristen (2014), p. 8: Public interest litigation in environmental matters is characterised by an attempt to influence governmental policies, their future oriented nature, the concern for interests broader than the private interests of the parties involved, their focus on idealistic interests and their orientation towards changing the societal status quo.

<sup>68</sup>¶ 12 *et seq.*

<sup>69</sup>Cf. Chaps. 3 and 4.

<sup>70</sup>Bodansky (2010), p. 234.

instruments, such as the exercise of jurisdiction for conduct on foreign territory, as rational incentives for political cooperation or the negotiation of international regimes.<sup>71</sup>

34 A decentralised rationale of co- or regulated self-regulation can be observed with respect to current legislation on compulsory environmental or human rights due diligence, which are designed to have extraterritorial effects: Businesses are being obliged to install supply chain due diligence policies, adopt risk management procedures and integrate auditing mechanisms with respect to the transboundary implications of their economic practices and to publicly report about these processes. Obligations of private actors may also constitute incentives to improve the States' regulatory cooperation, for example, if the access of goods from producing States to key markets is conditioned by compliance with environmental standards.

35 A rights-based strategy focusing on national courts or other institutions also can have extraterritorial implications. The decisions of domestic courts or institutions regarding subjective rights frequently decide on cases of transboundary damage and/or apply international norms within the framework of their national law. Domestic decisions can contribute to legal developments that transcend national jurisdictions. For example, national constitutional courts in their decisions often refer to the interpretations of rights and legal concepts by foreign constitutional or international courts.<sup>72</sup> National and international human rights courts may consciously work towards co-ordinating their approaches.<sup>73</sup> Such reciprocal effects between international and national norms will be further outlined below<sup>74</sup> and may be particularly relevant in cases concerning liability for transboundary environmental damage.

### 2.3 What Is Environmental Liability?

36 Before we deal with the question of if and based on what properties, transnational liability law may be suited as an instrument to harness the strategical entry-points outlined above, some basic clarifications of these properties are necessary. Liability, in the legal sense, is the obligation of a legal entity, such as a natural person, company or State, to provide compensation for damage caused by an action for which that legal entity is responsible.<sup>75</sup> In this broad understanding, liability law can, in principle, play a role in any of the regulatory approaches outlined above.

37 Beyond this very general characterisation, the concepts and preconditions of regimes in the system of transnational liability law vary widely as they consist of or are formed by different national, international and transnational legal systems

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<sup>71</sup>Trachtman (2008), p. 55.

<sup>72</sup>Waldron (2005): p. 129; also cf. Mahlmann (2011), p. 473; Fauchald and Nollkaemper (2012).

<sup>73</sup>Boyle (2012).

<sup>74</sup>¶ 66 *et seq.*

<sup>75</sup>Cf. IICA (2007), p. 7.

which may diverge even with regard to basic legal concepts and principles. An explanation of the overall function of liability should concentrate on certain similarities between the diverse systems and regimes while simultaneously establishing some preliminary distinctions. Keeping this in mind, some basic aspects with respect to an overall concept of liability law have to be clarified before its functionality can be explained.

### 2.3.1 *Strict vs. Fault-Based Liability*

The first, fundamental feature of liability regimes, which is important to understand their function, concerns the distinction between two different basic models that can be employed: According to the first model, namely strict liability, an entity's liability can result from the causation of damage as a consequence of behaviour, which is in and of itself not prohibited by law.<sup>76</sup> Under strict liability the party causing damage cannot defeat liability by either excuse or justification.<sup>77</sup> Strict liability thus does not presuppose faulty or illegal behaviour and is commonly stipulated for damage resulting from very hazardous activities. In contrast, according to the second general model—fault-based liability—the breach of norms is a precondition for liability. Liability norms thus determine the legal consequences of intentional or negligent infringement of primary norms, e.g. of environmental due diligence.<sup>78</sup> It therefore can be said that norms which establish fault-based liability can be characterized as secondary legal norms against “creating an unreasonable risk” of violating a primary legal norm.<sup>79</sup>

With respect to fault-based liability, the norms and standards which regulate prohibitions, requirements or permissions in relevant normative orders must be taken into account. In cases concerning environmental liability, the breach of a duty or standard of care often plays a decisive role.<sup>80</sup> Article 4:103 of the Principles of European Tort Law holds that such a duty to act “may exist if law so provides, or

<sup>76</sup>Cf. ILC General Commentary on Principle 1 of the Draft Principles on the Allocation of Loss in the Case of Transboundary Harm Arising out of Hazardous Activities, para 6. The Principles on Liability stated in the Draft Principles accordingly are concerned with primary rules. Also cf. Fitzmaurice (2001), pp. 233–244.

<sup>77</sup>Coleman (1992), p. 219.

<sup>78</sup>Fitzmaurice (2001), p. 224. Cf. ILC General Commentary on Principle 1 of the Draft Principles on the Allocation of Loss in the Case of Transboundary Harm Arising out of Hazardous Activities, para. 5. Our usage of the concepts ‘primary’ and ‘secondary’ norms coincides with the concepts of international law. However, this distinction also applies to torts laws: By secondary norms we mean to cover ‘remedial norms’, i.e. those legal rules, rights, duties, powers and liabilities which constitute the law’s response to the breach of a primary duty, see Penner and Quek (2016); Keating (2012).

<sup>79</sup>Simons (2002).

<sup>80</sup>Meyerholt (2010), p. 117, ¶ 66 *et seq.* and Sect. 6.8.

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if the actor creates or controls a dangerous situation, or when there is a special relationship between parties or when the seriousness of the harm on the one side and the ease of avoiding the damage on the other side point towards such a duty.”<sup>81</sup>

### 2.3.2 *Horizontal vs. Top-Down Approaches of Liability*

**40** Approaches explaining the function of liability law typically understand it to address horizontal relationships between the entity causing damage and the victim of the damage: State liability under Public International Law regulates the restitution or compensation of damage between States while civil liability typically provides for compensation or restitution of damage between private persons. In contrast to such a horizontal concept, lawyers sometimes also identify vertical or ‘top-down’ approaches of liability: So-called ‘administrative’ liability which is found, for example, in international environmental liability regimes, gives public authorities the competence to directly address polluters that are responsible for activities that pose a threat to the environment. This public authority may request the polluter to provide information on imminent threats to the environment, to take preventive action or to take remedial action if damage has already occurred.<sup>82</sup> While we will not preclude such top-down instruments from our analysis in the following chapters, it is important to keep in mind that many of the functions traditionally attributed to liability refer to a horizontal understanding and, in fact, explicate these functions as opposed to ‘top-down’ accounts of regulation. For the sake of having a clear understanding of liability and its particular functions, we differentiate in the following chapters, between (horizontal) liability regimes and administrative or State-centred, ‘top-down’ approaches to regulation.

### 2.3.3 *Liability Law as a Broad Concept and Multi-level Phenomenon*

**41** Environmental liability law, especially from a transnational perspective, is a multi-level phenomenon where norms form part of international, transnational and national legal regimes. To grasp the variety and diversity of the given regimes and to ensure the adaptability of its concepts to new developments, this book encompasses a broad understanding of international environmental liability law: It focuses the primary norms concerning the requirements and prohibitions to prevent or mitigate

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<sup>81</sup>The determination of the relevant standard of care is the part of a court’s judgment where soft law or self-regulation, particularly with respect to CSR and corporate due diligence, gain legal relevance as they inform the court about what can be considered to be acceptable corporate behaviour; cf. van Dam (2011), p. 237, p. 246 and ¶ 66 *et seq.*

<sup>82</sup>IICA (2007), pp. 9–10.

environmental damage as well as the secondary norms of the liability regimes considered, which provide for legal consequences in case of damage occurred.<sup>83</sup>

With respect to legal concepts and doctrine, the concepts of international liability law form a plausible starting point. International norms are the legal foundation of State liability, they can also form the legal grounds for national norms on civil liability. Concerning the addressees of environmental liability, the following chapters consider State liability as well as the liability of private actors but emphasise liability of companies and corporations. Given this focus on private actors, tort law rules and principles in national as well as international civil liability conventions<sup>84</sup> play a major role. We also consider alternatives for such tort law norms, such as administrative law instruments which stipulate liability for environmental damage occurred. The common element of the different bodies and levels of law observed is their potential focus on the global or transboundary consequences of pollution or environmental damage. This means that irrespective of the scope of application of a given regime of liability law which may be limited to the territory or the national legal subjects of a State, these laws aim at effects such as the prohibition of environmentally hazardous practices or the protection of globally relevant natural resources with an extraterritorial or global range.<sup>85</sup>

The law locates the functions and principles of diverse regimes of liability law in typical constellations: The liability of private actors is regulated by national laws<sup>86</sup> and aims at the compensation or restitution for damage caused by private actors by means of direct legal action of the persons affected before national courts.<sup>87</sup> International liability law<sup>88</sup> traditionally addresses only States; private actors are addressed indirectly, as States can be responsible for damage caused by private operators under their jurisdiction. International private liability conventions<sup>89</sup> oblige States to create private liability norms for damage under their jurisdiction. Whereas international liability determines 'strict' obligations to compensate for damage caused by the legal behaviour of the States,<sup>90</sup> national civil liability laws can stipulate rules for strict liability as well as rules of fault-based liability.

These typical configurations (Table 2.1 below) however are subject to dynamic change. For example, Sect. 4.2.3 of this book deals with recent initiatives designed to

<sup>83</sup> Chapter 3 ¶ 3 *et seq* (Sect. 3.2).

<sup>84</sup> Chapter 5.

<sup>85</sup> Such a regulation of matters related to factual environmental effects on foreign territory is permitted by international public law according to the principles of personality and territoriality, i.e. if obligations of national legal persons (e.g. corporations) are stipulated, or if activities (or major effects) on the territory of the regulating State are addressed, cf. PCIJ (1927); see. Krajewski (2018), p. 113.

<sup>86</sup> Cf. Chapter 6.

<sup>87</sup> Meyerholt (2010), p. 112.

<sup>88</sup> Cf. Chap. 3.

<sup>89</sup> Cf. Chap. 5.

<sup>90</sup> Cf. ILC General Commentary on Principle 1 of the Draft Principles on the Allocation of Loss in the Case of Transboundary Harm Arising out of Hazardous Activities, para. 5. The law of State responsibility deals with the consequences of breaches of primary international environmental law, cf. Schmalenbach (2017), p. 216, p. 237.

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**Table 2.1** Levels, regimes and addressees of environmental liability law

Transnational sources of environmental liability	Primary norms (Duties to act or to refrain)	Addressees of primary norms	Secondary norms (e.g. regarding compensation)	Addressees of secondary norms
International Law	International Agreements, Customary International Law International (strict) State Liability International Civil Liability Conventions OECD-/ UNEP-/ WHO- Standards and Concepts	States Direct international human rights obligations for transnational corporations and other enterprises?	International Law on State Responsibility International Conflict of Laws, Procedural Rules National tort law: international rules or standards concerning private actors as an objective level of 'due' care in liability cases before national civil courts	States States (Implementation of liability of private actors in national laws) Private actors?
National/Supranational Law	National Environmental Law/Standards; National Strict Liability Regimes, (e.g. German UmwHG)	Private Actors, Public Actors	Tort law Criminal liability; administrative liability	Private actors, State (public liability)
Private (Transnational) Norms	'Multi-Stakeholder Initiatives', Industry Standards: E.g. Global Reporting Initiative (GRI), ISO 14000/ 26000; Global Organic Textile Standard (GOTS)	Private Actors: Corporations and Enterprises.	National Tort law: Private rules or standards as an objective level of 'due' care in liability cases before national courts.	– Private actors: Corporations and Enterprises.
'Mixed Regimes'	National/ Supranational Laws which integrate private rules and standards. E.g. value chain legislation: EU Timber Regulation, EU Conflict	Private Actors: Corporations and other business enterprises	Mixed regimes may explicitly integrate liability norms (cf. French law on the duty of vigilance). National laws of delict/tort: Primary norms or standards of 'mixed regimes' help national courts to determine the	– Private actors: Corporations and enterprises.

(continued)

**Table 2.1** (continued)

Transnational sources of environmental liability	Primary norms (Duties to act or to refrain)	Addressees of primary norms	Secondary norms (e.g. regarding compensation)	Addressees of secondary norms
	Mineral Regulation.		objective level of 'due' care in liability cases.	

Source: author

introduce direct obligations for private transnational corporations under international law, which could also imply rules regarding corporate liability. It also has to be taken into account, that transnational private regimes, such as certification schemes or technical standards which create primary norms addressing private actors on the international level, may become legally relevant when national courts determine an objective standard of care in liability cases.<sup>91</sup>

## 2.4 Functionality of Liability Law: Decentralised, Rights-based Internalisation of Negative Externalities

According to our outline of the strategic 'entry-points', the suitability of a legal instrument required to cope with the global challenges of environmental law and politics may be evaluated using a few key criteria: Firstly, whether they are suitable to incentivise States to deepen their cooperation to implement and enforce environmental laws. Secondly, whether they are likely to succeed in influencing companies to prevent environmental damage. In this regard, one way to approach this is to effectively induce influential non-State actors to orientate their (self-)regulatory capacities towards the goals of environmental policy. The third and final key criterion is whether the legal instruments used can empower agents, who autonomously pursue environmental objectives (for example, because these agents are affected by environmental problems), in dynamics of norm-production 'bottom up'.

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The effects and functionality of liability law are traditionally analysed with respect to private perpetrators of damage. Given that the main focus of this book is on business enterprises, this focus on liability law as an essentially 'private' mechanism<sup>92</sup> seems appropriate—the question, if the relevant functions are valid and

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<sup>91</sup> Cf. Glinski (2018), pp. 75–95 and ¶ 66 *et seq.*

<sup>92</sup> Shavell (1983), p. 1.

relevant for State-centred approaches will be taken into consideration whenever it arises.

### 2.4.1 *The Economic Functionality of Liability Law*

#### **Liability Law as a Decentralised Strategy of Environmental Regulation**

47 A regulatory strategy counting on environmental liability may be seen as a decentralised approach to solve environmental problems in various respects.

48 First, liability is seen to establish autonomous incentives for potential tortfeasors to prevent environmental damage: From a legal perspective, the primary function of delict and torts law is often seen in the compensation for losses that already have occurred.<sup>93</sup> Economic theories of law, in contrast, emphasise the preventive function of liability. Liability accordingly is intended to provide incentives for potentially liable parties to avoid creating risks for others and society. From this viewpoint, liability can be considered as a strategy of internalisation: Ideally, environmental liability law would induce economic actors to calculate the external environmental consequences of their behaviour as an internal cost related to their activities, in effect, treating it as another production cost.<sup>94</sup> This internalisation is supposed to result in a deterrent effect with respect to the hazardous behaviour of self-interested ‘rational’ actors; rules, which stipulate the compensation for damage, are considered to deter unjustified harmful conduct.<sup>95</sup> Where companies anticipate the possibility of a liability case being brought against them, this may encourage more environmentally responsible investments.<sup>96</sup> As indicated above, there are good reasons to criticise a narrow focus on ‘rational’ actors as the behaviour of human agents is not exclusively determined by cost-benefit analyses. Nevertheless, within the context of the global economic system, the idea that the vast majority of enterprises will at least predominantly base their actions on calculations of the premise of gain versus loss is very much plausible.

#### 49 **The Cascading Effects of Environmental Liability**

In the context of recent liability cases such as *Lliuya v RWE*,<sup>97</sup> cascading economic consequences might be observed: Claims for damages resulting from losses to property against CO<sup>2</sup> emitters not only can lead to increased

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<sup>93</sup>Wurmnest (2003), p. 94 ff.

<sup>94</sup>Endres (2013), p. 80.

<sup>95</sup>Posner and Landes (1980), p. 854.

<sup>96</sup>Cf. Newell (2001), p. 91.

<sup>97</sup>Essen District Court *Lliuya ./. RWE*, Judgment of 15 Dec 2016, 2 O 285/15, Appeal Case 5 U 17/15, Hamm State Appellate Court (ongoing), also see Chap. 8.

liability risks, because in principle, emitters will have to expect high numbers of such claims given the dispersed and diverse nature of damage caused by climate change.<sup>98</sup> Importantly, these claims also affect obligations according to corporate law. Government officials, corporate lawyers and insurance companies intensely discuss obligations regarding transparency and disclosure regarding the financial risks resulting from climate change, in particular as a consequence of climate-change-related litigation. The infringement of such obligations can, for example, also lead to new cases of shareholder litigation.<sup>99</sup> Transparency and disclosure obligations can also have an impact on the decisions of financiers regarding investments that are CO<sup>2</sup>-emission intensive because they elucidate such liability risks.

The deterrent effect of liability pursues the same objective as the prevention principle and is in line with the rationale of the polluter pays principle in environmental law, which rests upon the assumption that polluters, when they are allowed to pass on the costs of environmentally detrimental behaviour to others and therefore keep these costs out of their calculations, have little incentive to avoid hazardous behaviour.<sup>100</sup>

Second, liability is considered to be able to cope with dispersed information and thereby to process complexity: As highlighted above, the complexity related to environmental problems and the difficulties to determine responsibilities, causal factors and effects of environmental damage are important features of global environmental law and governance.<sup>101</sup> The availability of information about risks regarding damage and appropriate precautionary measures necessarily varies between actors. Economic theories of (liability-) law<sup>102</sup> propose criteria for “rational choices” between regulatory instruments of which differences in knowledge or ‘information asymmetries’,<sup>103</sup> about risky activities between public authorities and private parties are considered to be major determinants of the “desirability of liability [versus state-centred] regulation”.<sup>104</sup> Under certain circumstances, e.g. when there is a lack of information about the contributions of various polluters, about the intensity of risky activities, the probability of damage occurring or the magnitude of damage should it occur, the internalisation of external effects by means of State-centred regulation may fail.<sup>105</sup> The chances to find an optimal standard to cope with environmental risks then may be better when the case is subject to a liability regime,

<sup>98</sup>Cf. Rumpf (2019).

<sup>99</sup>Cf. Munich Re (2010), p. 17; also Chap. 8.

<sup>100</sup>Proelss (2017), p. 96.

<sup>101</sup>Cf. Posner and Landes (1980), p. 865.

<sup>102</sup>Cf. Feess and Seeliger (2013), p. 155.

<sup>103</sup>Faure (2001), p. 129.

<sup>104</sup>Shavell (1983), p. 1.

<sup>105</sup>Cf. Wagner (1990), p. 49.

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as it incentivises the would-be injurer to use his own, potentially superior information to take all efficient precautionary measures to reduce risks.<sup>106</sup>

52 Third, environmental liability may be seen to establish a decentralised mechanism of enforcement of standards: Liability law can also be considered to take the rationale of regulatory decentralisation<sup>107</sup> one step further as it concedes the enforcement of relevant obligations to affected parties who can take legal action against infringements of their rights before courts. The over-exploitation of common environmental goods is frequently attributed to the fact that a large proportion of the resulting damage to the rights and entitlements of individuals or the public remains uncompensated.<sup>108</sup> State-centred practices of control and enforcement of public environmental law are traditionally criticised for not being able to ensure that infringements are sanctioned effectively and adequately.<sup>109</sup>

53 In certain cases, environmental liability is considered to be able to mitigate or resolve this situation due to its decentralised enforcement mechanisms. This is seen in the fact that aside from State-centred approaches to environmental law or concepts of ‘co-regulation’, liability law relies on enforcement by injured parties on-site who, in their own self-interest, will claim compensation for their losses. In addition, just like the injurer, victims may well be better informed than the relevant public authorities, about who is causing harm and its extent. For that reason, they are seen as appropriate enforcement agents, suggesting the suitability of liability for effective regulation.<sup>110</sup> Liability law may thus be seen to consistently retrace the transnational complexity of environmental risks or damage, not only because it counts on the decentralisation of implementation of environmental policies, but also by leaving enforcement to injured parties instead of State authorities that sometimes might have limited resources for control and regulatory oversight at their disposal.

### **Strict Liability, Fault-based Liability or State-centred Instruments? Functional Criteria of Choice**

54 Based on their model of utility-maximising economic actors, and mainly conditional upon the informational complexity of the cases to be regulated, advocates of an economic theory of law propose several determinants for ‘rational choices’ between regulatory options. Depending on these determinants, ‘top-down’ types of regulation, namely administrative regulation or environmental taxes, or one of the two basic models of liability that can be classed as either strict liability or fault-based liability,<sup>111</sup> are considered to be ‘socially desirable’.<sup>112</sup> As the environmental risks

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<sup>106</sup>Faure (2001), p. 139.

<sup>107</sup>Cf. ¶ 22 *et seq.*

<sup>108</sup>Wagner (1990), p. 50.

<sup>109</sup>Rehbinder (1976).

<sup>110</sup>Kaplow and Shavell (1999), p. 23; Wagner (1990), p. 49.

<sup>111</sup>¶ 38 *et seq.*

<sup>112</sup>Cf. Shavell (1983).

and regulatory problems discussed in the following Chapters are diverse and may call for well-adapted measures, it makes sense to keep some of these functional conditions in mind.

Allocation of information: As previously mentioned, liability law is considered a well-suited means of legal governance for environmental issues when information about regulatory problems and solutions are complex and dispersed. According to this rationale, ‘top-down’ or State-centred modes of regulation<sup>113</sup> have to be considered as the option of choice if the State,—e.g. due to publicly funded research—has superior information about the issues and circumstances likely to rise in certain activities. Setting environmental standards in regulation may then, according to advocates of an economic theory of law, be seen as means to pass on information about the environmental technology required. Hence, there are undeniable ‘economies of scale’ advantages in statutory standards, e.g. regulation in public environmental law.<sup>114</sup>

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The allocation and availability of information also provide, according to economic theorists, arguments for the desirability of rules of strict liability instead of fault-based liability: Under the approach of strict liability—i.e. if injurers have to pay for damage caused regardless of whether there was a breach of standards and regardless of their fault—actors disposing of superior information can be motivated to better assess the true costs of reducing risk and the true benefits in terms of expected savings from the anticipated reduction in damage caused.<sup>115</sup> Strict liability thus is supposed to strengthen incentives to invest in damage prevention rather than dispute the existence of fault after damage has occurred.<sup>116</sup>

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If liability is established using a fault-based liability regime whereby injurers are held responsible for harm only if their level of care falls short of a standard of ‘due care’, the situation becomes more demanding: those causing injury would, in principle, be led to exercise the appropriate level of care under the condition that the courts in cases involving damage can acquire sufficient information by learning about the relevant incident, to be able to determine the adequate level of due care, and the parties anticipate this.<sup>117</sup> On the one hand, these premises emphasise the functional role of legal and factual conditions for the effective pursuit of claims, particularly regarding rules of evidence. On the other hand, it indicates that fault-based liability may lead to appropriate results only in contexts where rules and standards regarding the level of due care are discernible for a court as any determination of fault presupposes the existence of rules that have been violated.<sup>118</sup>

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<sup>113</sup>Such as public environmental law or environmental taxes.

<sup>114</sup>For all cf. Faure (2001), p. 132.

<sup>115</sup>Cf. Shavell (1983), p. 5.

<sup>116</sup>Cf. Albers (2015), p. 245.

<sup>117</sup>Shavell (1983), p. 5.

<sup>118</sup>Cf. Wolfrum et al. (2005), p. 505.



- 58** The chance that injurers may not face the threat of lawsuits for harm done: Obstacles to effective access to justice clearly imply that liability may not result in the desired incentives to reduce risk.<sup>119</sup> If lawsuits to compensate damages have little chance of success, liability loses its deterrent effect. State-centred regulation may be better-suited to ensure standards of care. Impediments to the effective pursuit of liability claims prominently will concern legal conditions of such claims. Economic theories of law thus frame the legal conditions of liability claims as aspects of the deterrent effect of liability law: First of all, fundamental obstacles to effective internalisation of negative externalities by means of environmental liability may arise, if environmental damage cannot be apprehended as a violation of rights protected by tort law. Environmental damage may impair public goods and then does not, or at least not directly or traceably affect individual interests and goods such as the health or the property of a person.<sup>120</sup>
- 59** Second, it may be difficult to prove that an activity or omission of a defendant has caused environmental damage in a complex chain of events. This question is a crucial issue in many of the cases relevant for this book: It may be hard to prove causation associated with environmental damage that evolves as an effect of the cumulative actions of many contributing polluters or as a consequence of a complicated interplay of natural events potentially triggered or worsened by certain activities.<sup>121</sup> In such cases, administrative instruments may be better-suited deal with environmental damage.<sup>122</sup>
- 60** Scholars looking at the preconditions of functional liability law highlight further reasons which may inhibit liability suits being brought: Injurers may escape liability when harm is thinly spread among a number of victims and there is insufficient incentive for each individual to bring a suit.<sup>123</sup> Furthermore, time-lags between human action and environmental damage may be very long;<sup>124</sup> in such cases, much of the necessary evidence may be either lost or unobtainable or the injurer could have gone out of business.<sup>125</sup>
- 61** With respect to lawsuits between private actors, questions about the forum, i.e. jurisdiction of national courts, and conflict of laws are of crucial relevance for the effectiveness of environmental liability. National or supranational rules regarding the authority of national courts to decide about transboundary or global effects of the activities of corporations, their suppliers or subsidiaries, determine if a lawsuit

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<sup>119</sup>Shavell (1983), p. 9.

<sup>120</sup>Cf. Section 823 para. 1, para. 2 of the German Civil Code (BGB), Section 1 of the German law on environmental liability, UHG.

<sup>121</sup>Meyerholt (2010), p. 117; cf. Chaps. 6 and 8.

<sup>122</sup>Rules or case law which ease or reverse the burden of proof of the victim in certain cases can resolve some of these issues. Meyerholt (2010), p. 120 ff.

<sup>123</sup>Faure (2001), pp. 130–131.

<sup>124</sup>Cf. Underdal (2010).

<sup>125</sup>Faure (2001), pp. 130–131.

can be successfully realised.<sup>126</sup> The same is true for conflict of laws which stipulates the applicability of national law for legal disputes: The environmental regulations in the home State of a corporation may be more demanding than the corresponding rules abroad. If the weaker rules available are used to determine the liability for environmental damage, the chances that corporations escape meaningful liability for environmental harm done are high.

The magnitude of hazards: If compensation for damage that could potentially arise from a given activity is so high that it would exceed the wealth of the individual operator, rules stipulating strict liability are, in principle,<sup>127</sup> considered not to incentivise operators sufficiently to limit the risks of the activities they engage in. The reason is that the costs of due care are directly related to the magnitude of the expected damage. If the expected damage is much greater than the individual wealth of the operator, the operator supposedly will only take the care necessary to avoid risks equal to his wealth, which can be lower than the care required to minimise the risk.

This situation is considered to be different for fault-based liability: Under a regime of fault-based liability, taking due care means an operator can avoid having to pay compensation to a victim. An operator will still have an incentive to take the care required by the legal system as long as the costs of taking care are less than the operator's wealth.<sup>128</sup> Assuming that the State has sufficient information about the risks, State-centred instruments, if effectively enforced, may be able to solve this problem and induce the potential injurer to comply with the regulatory standard, irrespective of his wealth.<sup>129</sup>

Regulation of legal activities (e.g. emissions): According to economic models of 'rational' incentives for action, State-centred regulation as well as fault-based liability can be suboptimal modes of regulatory action if the goal is the reduction of legal but hazardous activities. For example, obligations to install smoke scrubbers in a factory will not reduce its level of emissions. As a result, prohibitive or prescriptive rules may not create incentives to moderate the level of activity sufficiently. In contrast, under a strict liability regime or the introduction of environmental taxes, operators pay for harm done, which is more likely to lead to them moderating their level of activity.<sup>130</sup> This traditional assessment of course may change, if valid standards prescribe a specific mitigation pathway for hazardous activities, as has been assumed with regard to obligations to reduce CO2 emissions.

<sup>126</sup>Cf. van Dam (2011), p. 229.

<sup>127</sup>Provisions regarding mandatory insurance can somehow mitigate this disadvantage, as costs for premiums may be lowered when risks are adequately addressed. Hence, in such cases, specific incentives to decrease risks might arise.

<sup>128</sup>For all cf. Polinsky and Shavell (2007), p. 169; Faure (2001), p. 141.

<sup>129</sup>Faure (2001), p. 130.

<sup>130</sup>Shavell (1983), p. 24.

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Courts could then draw upon such standards as primary norms to determine a standard of care.<sup>131</sup>

65 Cost efficiency: Finally, liability regimes seem to have an advantage concerning the costs of effective regulation: Contrary to the costs related to operating ‘top-down’ regimes, especially regarding subsequent control and enforcement by public authorities, the administrative costs of the court system are only incurred if damage has actually occurred. A main advantage of tort law is seen to be that many accidents that would otherwise happen are prevented because of the deterrent effect of functional liability standards. In cases involving safety regulations, the costs of passing the regulation and of constantly enforcing it are always there, whether there are accidents or not.<sup>132</sup>

#### 2.4.2 *Transnational Focus of Liability Law*

66 Fault-based liability assumes fault or negligence if, despite the predictability and avoidability of damage, no appropriate precautionary measures were taken. To determine the appropriate level of care, civil courts refer to objective standards, such as ‘reasonable care’ (“im Verkehr erforderliche Sorgfalt”) in German delict, or ‘the reasonable man’ in British common law.<sup>133</sup> Given this kind of reconstruction of an objective standard of care by the courts, norms from various sources can serve as primary norms which determine the relevant obligations to prevent risks or to omit hazardous behaviour.<sup>134</sup> State legislation, social norms of different origin, such as entrepreneurial self-regulation, industry standards or best practices, thereby may be applied to define fault and, in turn, are ‘translated’ into binding due diligence norms.<sup>135</sup>

67 While this adaptability of liability law towards primary norms of different origin will be analysed in more detail in the course of this book, at first glance it seems to hold some potential. First of all, it indicates that strategies of ‘top-down’ regulation and ‘decentralised’ liability law are not mutually exclusive but can complement and mutually reinforce each other. A judge deciding on liability arising from environmental damage may accept a finding of negligence as soon as a public regulatory standard has been breached. Hence, public law not only passes on information to the parties regarding the efficient standard of care but also provides information to any judge who has to evaluate the behaviour of the injurer in a liability case.<sup>136</sup> Second,

<sup>131</sup> As happened in the case of District Court of The Hague *Milieudéfensie v Shell* (2021) C/09/571932 / HA ZA 19-379.

<sup>132</sup> Faure (2001), p. 131.

<sup>133</sup> Glinski (2018), p. 77; pp. 75–96.

<sup>134</sup> ¶ 41 *et seq.*

<sup>135</sup> Glinski (2018), p. 92.

<sup>136</sup> Faure (2001), pp. 130–131.

liability cases and the relevant case law can, as Faure notes with respect to the legal situation in European States, provide for a kind of ‘fine-tuning’ of rather abstract and general State-centred regulations. This is particularly relevant with respect to permits or licences which lay down the conditions under which potentially detrimental or hazardous behaviour is allowed. Following such a regulatory standard does not necessarily exclude a finding of liability. The basic idea is that an administrative authority when granting a licence and setting permit conditions, cannot take into account the possible harm the licenced activity may cause to all possible third parties. Under such conditions, liability is supposed to give the potential injurer incentives to take all the necessary precautions, even if this requires more than just following the minimum required to obtain a licence.<sup>137</sup> Third, the relationship between primary norms as well as standards and secondary liability norms is of particular interest when the necessity of globally effective measures is taken into account. The interdependency of primary norms, which define environmental standards and the secondary norms, which determine the liability of actors who infringe those standards illustrates that national jurisdiction or legislation do not necessarily conflict with a policy aimed at globally harmonising standards: Judgements of national courts and evolving case law concerning the liability of international corporations may refer to international standards, to soft law or private self-regulation, all of which define the technical or scientific state-of-the-art of certain operations. As Glinski sets out, such norms and standards may then lead to an evolution of national tort law when civil courts have to determine the obligations of transnationally active companies and corporations. At the same time, the national doctrines of tort law have to further specify, what such non-binding rules imply for legal obligations and thereby may contribute to a further development of transnational or international norms, e.g. concerning businesses’ due diligence.<sup>138</sup> The evolution of more ambitious standards in any of these kinds of ordering may thus have a positive effect on what can be expected from corporations as regards their diligent behaviour in transnational business operations.<sup>139</sup> By increasing the practical relevance of such transnational standards, liability law might contribute to the emergence of a level playing field.

### ***2.4.3 Liability Law as a Rights-based Approach to Environmental Law***

The overlapping and complementary relationship between liability, as an element of the tort or delict law in national civil or common law systems, and human rights have

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<sup>137</sup> Faure (2001), pp. 130–131.

<sup>138</sup> Glinski (2018), pp. 90–95.

<sup>139</sup> Cf. van Dam (2011), p. 238.

long been highlighted by legal scholars.<sup>140</sup> Tort law has been identified as the most important private law enforcer of human rights and contributor to the privatisation of constitutional law: While it is still questionable whether corporations have obligations based on international human rights law, it is beyond doubt that in tort or delict law they are obliged not to infringe citizens' rights to life, physical integrity, health, property, freedom and exercise of other rights.<sup>141</sup> Equivalent ties on the level of national civil law refer to a violation of tort rights brought about by environmental damage. The parallels between human rights and tort rights and their interrelation with the environment will be of further interest in later chapters.<sup>142</sup>

- 69 A rights-based perspective on environmental liability not only focuses the role of victims of damage as enforcement agents of environmental standards. Liability law may, rather, be a particularly effective manifestation of a normative strategy of 'bottom-up' legal innovation, as outlined above.<sup>143</sup> On the one hand, this productive potential is a consequence of legal mechanisms of norm-concretisation and precedent. Particularly the close connection to human rights, on the other hand, may increase this potential of liability as a driver of normative development of effective environmental regulation. For example, regional and domestic 'environmental rights' claims have served the purpose of pushing forward doctrinal discourses about when environmental harm constitutes a human rights issue.<sup>144</sup> More concretely, liability claims regarding human rights obligations of transnational companies can trigger debates about adequate standards of care, e.g. for suppliers or subsidiaries and lead to new, more demanding precedents. Given such practical developments, legal action of individuals or groups because of rights violations as consequences of environmental damage are seen as catalysts of development for environmental norms from the 'bottom up'.<sup>145</sup> The implementation of norms to improve access to justice for victims of environmental damage can trigger such dynamics of legal innovation.

- 70 In the *Vedanta* case, 2000 farmers from Zambia alleged personal injury and environmental damage caused by discharges from a copper mine into waterways they use for drinking, bathing and agriculture. A UK High Court decision, which was recently upheld by the Supreme Court,<sup>146</sup> allowed the farmers to sue the British parent company of the Zambian mine operator and

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<sup>140</sup> van Dam (2011), p. 254.

<sup>141</sup> van Dam (2011), pp. 243, 254.

<sup>142</sup> Chapters 4 and 6.

<sup>143</sup> ¶ 26 *et seq.*

<sup>144</sup> Osofsky (2010), p. 209.

<sup>145</sup> Percival (2010), p. 62.

<sup>146</sup> See UK Supreme Court *Vedanta Resources PLC and another (Appellants) v Lungowe and others (Respondents)* Judgement of 10 April 2019, UKSC 20, [2017] Appeal Case EWCA Civ

thereby recognised that companies potentially hold a duty of care to third parties whose rights have been infringed by a subsidiary. An already existing rule under common law that companies, under certain conditions, have due diligence obligations vis-à-vis employees of a subsidiary was thereby extended. The precedent is understood to form a model for future cases in which individuals' rights are affected by the actions of a subsidiary. While the extent to which a parent will owe a duty of care will depend on the facts of each particular case, this model of liability can potentially extend beyond the corporate group and into the supply chain.<sup>147</sup>

In addition to such legal dynamics, rights-based legal action is seen to exert normative pressure for the innovation and implementation of environmental norms and standards. Legal disputes about the individual consequences of environmental damage are prominent forums for normative conflict and public discourse about an appropriate distribution of the private gains and the individual or social costs arising from the exploitation of environmental goods. Lawsuits regarding infringements of 'tort/delict rights', especially in cases dealing with transboundary damage, demonstrate the global dimensions and the interdependences related to environmental damage and its effects.<sup>148</sup> Such conflicts, which are frequently labelled as seeking 'environmental justice',<sup>149</sup> are increasingly pushed into the public's line of sight as NGOs and multinational corporations fight battles over environmental liability 'in the court of the public opinion'.<sup>150</sup>

A focus on liability according to a rights-based approach thereby might correspond to employing a strategy that aims to effectively implement environmental standards by transnational enterprises as Co-Regulators.<sup>151</sup> In contrast to the economic strategies highlighted above,<sup>152</sup> rights-based strategies offer an alternative approach of internalisation: Litigation strategies based on liability claims that arise as a consequence of environmental damage and the violation of human rights form the basis for additional, normative pressure seeking to alter injurers' practice as part of more comprehensive (political) strategies pointed at shareholders or the public.<sup>153</sup> This pressure exerted by liability cases can also lead to the reform of State-centred regulation: for example, scholars have described how the Bhopal incident has prompted action not only by corporations but also by governments. The latter

1528, on appeal from: [2017] EWCA Civ 1528, available at <https://www.supremecourt.uk/cases/docs/uksc-2017-0185-judgment.pdf>, last accessed 23 March 2022.

<sup>147</sup> Cf. Smit and Holly (2017).

<sup>148</sup> Cf. WBGU (2018), p. 18.

<sup>149</sup> Osofsky (2010), pp. 189–210.

<sup>150</sup> Percival (2010), p. 62.

<sup>151</sup> ¶ 22 *et seq.*

<sup>152</sup> ¶ 24.

<sup>153</sup> Osofsky (2010), p. 209.

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accordingly have responded by promulgating new environmental legislation or by making existing legislation more stringent.<sup>154</sup> Even when cases are not successful in securing compensation for the victims of corporate negligence, the act of bringing cases against corporations can still produce positive reform.<sup>155</sup>

## 2.5 Conclusion

73 This chapter was intended to examine theoretical perspectives on how the functioning of corporate liability regimes for environmental damage could, under certain conditions, contribute to the solution of transboundary environmental problems.

74 This potential appears to be considerable. Environmental liability regimes can help to achieve the objectives of international environmental laws, i.e. to prevent transboundary environmental harm and damage to global commons, as well as environment-related human rights violations, to hold polluters accountable for the environmental costs of their behaviour and contribute to the emergence of global environmental standards.

75 Effective liability regimes can result in an internalisation of the negative externalities that follow from transnational economic activities and thus provide economic incentives for potential polluters to avoid risks to the legal interests concerned. This internalising effect has obvious advantages, particularly in transnational contexts, as it could perform a gap-filling function where there is a lack of effective and sufficiently concrete environmental standards. This becomes evident when environmental problems arise as a result of complex effects and interactions and under regionally and sectorally diverse conditions, when international instruments remain insufficient to address such problems and State authorities can not effectively provide comprehensive control and enforcement of environmental law.

76 In addition to this economic function, however, another normative function of environmental liability should be highlighted: Liability cases deal with rights violations, damage and costs caused by globalised modes of business and consumption as well as their effects on the environment and climate. The issue of whether and in what way environmental damage is compensated as well as which actors are responsible for prevention and compensation in global value chains concerns fundamental principles of global justice. In the deliberations between plaintiffs, defendants and courts in liability cases, standards are negotiated which concretise these general principles with regard to environmental risks and make them manageable in practice.

77 The examination of the theoretical potentials of transnational environmental liability is not to suggest that environmental liability would already meet such potential *de lege lata*. Even theoretically a variety of conditions for fulfilling these

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<sup>154</sup>Cf. Sripada (1989), p. 550; Newell (2001).

<sup>155</sup>Newell (2001), p. 86.

functions have to be met and in many constellations, other regulatory instruments may be better suited to protect the environment than environmental liability regulation. The following chapters further explore these preconditions on different legal levels and with reference to practically important fields of environmental liability—namely supply chain regulation, climate change litigation and geoengineering.

Specifically in these practical fields, dynamic and sometimes spectacular legal developments in recent times show that it is worthwhile, both from a legal and a policy perspective, to take a closer look at corporate liability for transboundary environmental harm.

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# Chapter 3

## States Responsibility and Liability for Transboundary Environmental Harm



Kirsten Schmalenbach

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### 3.1 Introductory Remarks

As discussed in Chapter 2 (Chap. 2 ¶ 20 (Sect. 2.2.2)), one strategy to address environmental degradation caused by transnational human activities is to focus on States as the principal actors and law-makers on the international plane. In order to address environmental challenges, States have by and large three avenues for

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regulatory management at their disposal: the first one is domestic legislation on pollution control and conservation within the boundaries of jurisdictional limits set by international law (Chap. 7); the second avenue is action through regional organisations of economic integration which have the power of supranational law-making, although these also have to observe the same jurisdictional limits in relation to the international community; and the third avenue is traditional international law-making, the method on which this Chapter focuses.

- 2 As far as international law is concerned, States can explicitly agree or tacitly acquiesce to an extensive variety of international approaches to prevent and address transboundary environmental harm. Within the framework of recognised sources of international law, States may impose not only on themselves, as international persons, but also on domestic public and private actors, international environmental obligations of conduct and result. Any breach of these legal obligations then triggers consequences for the duty holder to make reparations for the environmental harm caused (§ 64 *et seq.*). In addition to this, States may agree on their own duty or, as the case may be, on the duty of domestic public and private actors to provide financial compensation for transnational environmental damage solely because the damage occurred and was caused by certain activities or omissions of a given duty holder (§ 68 *et seq.*). The obligations of States of origin to compensate an environmentally affected State for transboundary environmental harm emanating from the former's territory necessarily and exclusively arises from international law as the sovereign equality of States prevents domestic law from regulating inter-State relations. In contrast, the obligation to compensate owed by domestic public and private actors which have caused transboundary harm can either be directly established by international rules or these rules impose on States the duty to implement corresponding liability rules in their domestic legal orders (Chap. 5, § 7 *et seq.* (Sect. 5.2)).

### 3.2 Conceptual Distinction Between State Responsibility and State Liability

- 3 The above categorisation differs between the duty to make financial compensations because of a breach of international environmental rules and the duty to compensate because of the occurrence of transboundary environmental damage. Colloquially, both categories can be referred to as environmental liability, however, international legal usage of the term 'liability' has developed its own distinct meaning, primarily on account of the International Law Commission (ILC).
- 4 The ILC introduced the conceptual distinction between State responsibility and State liability in its early reports on the law of State responsibility, specifically in a report entitled "International Liability for the Injurious Consequences of Acts not

Prohibited by International Law”<sup>1</sup> While the responsibility concept enshrined in the 2001 Articles on State Responsibility (ASR) refers to the legal consequences of a wrongful act attributable to a State, the ILC utilised the term ‘liability’ to denote the State’s obligation to provide reparation for damage that arises from lawful activities. Even though it is safe to say that academia has gradually espoused the ILC’s approach,<sup>2</sup> it still faces some valid criticism.<sup>3</sup> Most importantly, the ILC’s narrow definition of State liability was driven by the Commission’s own conceptual needs and deliberately set aside other international and domestic usages of the term. Taking Article 139(2) UNCLOS as an example, the provision stipulates that damage caused by a failure of a State party to carry out its responsibilities under this part shall entail liability ( Chap. 13).<sup>4</sup> Another example is the usage of the term liability in civil liability conventions, where it refers to obligations in private law, such as operators’ liability under national law for any damage they cause in other States (Chaps. 6 and 7). Most notably, in domestic law, the term liability is often regarded as an equivalent of the term responsibility.<sup>5</sup>

Drawing a conceptual distinction between responsibility and liability is not only open to challenge with respect to general usage, it also conveys the impression there is a clear dividing line between State responsibility and State liability, however, any such line can be easily blurred, as is exemplified by the *Trail Smelter case*.

#### ***Trail Smelter Case (the United States v Canada)***

The 1941 Trail Smelter Award<sup>6</sup> is a landmark decision that highlighted for the first time the limits of State sovereign rights to allow its territory to be used for any form of environmentally significant activities with cross-border impacts. The origins of Trail Smelter date back to the late nineteenth century when a Canada-based corporation began operating a smelter plant that emitted

(continued)

<sup>1</sup>Report of the International Law Commission on the Work of its Thirty-Seventh Session, UN Doc A/40/10 (1985), para. 108-163; Draft Articles on International Liability for Injurious Consequences Arising out of Acts not Prohibited by International Law, UN Doc A/CN.4/423 (1989).

<sup>2</sup>But see Orrego Vicuña, Eighth Commission of the Institute de Droit International, 1997, Resolution on Responsibility and Liability under International Law for Environmental Damage, Article 4 “Responsibility for Harm Alone”, available at [https://www.idi-iil.org/app/uploads/2017/06/1997\\_str\\_03\\_en.pdf](https://www.idi-iil.org/app/uploads/2017/06/1997_str_03_en.pdf), last accessed 25 April 2022.

<sup>3</sup>de la Fayette (1997), p. 322.

<sup>4</sup>Accordingly, the Seabed Dispute Chamber of ITLOS, in its Advisory Opinion, ITLOS *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Reports 2011, 10, para. 178, speaks of liability under customary international law within the meaning reflected in Article 2 ASR.

<sup>5</sup>*Preliminary Report of SR Quentin-Baxter on international liability for injurious consequences arising out of acts not prohibited by international law*, 28 July 1980, UN Doc A/CN.4/334, para. 12.

<sup>6</sup>PCA *Trail Smelter Case* (United States v Canada) (1941) 3 RIAA 1905.

hazardous fumes (sulphur dioxide) that caused damage to plant life, forest trees, soil and crop yields across the border in Washington State in the United States (US). In 1935, the US and Canada agreed on establishing an arbitral tribunal which, in its first decision (1938) decided that harm had occurred between 1932 and 1937 and ordered the payment of US\$78,000 as the “complete and final indemnity and compensation for all damage which occurred between such dates”. The Tribunal’s second decision (1941) was concerned with the final three questions presented by the 1935 agreement between the US and Canada, namely, the latter’s responsibility for as well as appropriate mitigation and indemnification of future harm. The Tribunal landmark conclusion with respect to future harm stated that: “(U)nder the principles of international law (. . .) no State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or the properties or persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence”.<sup>7</sup>

- 7 The Trail Smelter Award’s legacy has been the subject of a wealth of academic writing<sup>8</sup> and had a handful of subsequent manifestations, most notably in Principle 21 of the 1972 Stockholm Declaration and Principle 2 of the 1992 Rio Declaration.<sup>9</sup> Irrespective of these modern manifestations, there is still some academic debate about the proper understanding of the Trail Smelter Award, particularly whether it addresses Canada’s international liability or its international responsibility.<sup>10</sup> The core of the original dispute lies in the fact that the smelter’s activity, processing of lead and zinc ore, did not violate international law. Consequently, the issue of Canada’s responsibility or liability depends on the point of reference for the legal assessment: If a primary rule of customary environmental law obliges States to prevent or mitigate transboundary industrial emissions occurring within their territory (duty to prevent), Canada is responsible for infringing this obligation and accordingly has to make reparations to the USA whose territory is significantly affected. However, if the focus is on the smelting activity, which is not prohibited under international law, Canada would only be liable for the significant

<sup>7</sup>PCA *Trail Smelter Case* (United States v Canada) (1941) 3 RIAA 1905.

<sup>8</sup>See e.g. Bratspies and Miller (2006), Craik (2004), pp. 139–164, Read (1963), Mickelson (1993).

<sup>9</sup>Report of the Stockholm Conference UN Doc A/CONF.48/14, at 7, reprinted in *International Legal Materials* (1972) 1420; Rio Declaration on Environment and Development, UN Doc A/CONF.151/26 (Vol. 1), reprinted in *International Legal Materials* (1992), p. 874.

<sup>10</sup>See e.g., Brownlie (1983), p. 50: State Responsibility—including the *Trail Smelter Case*—is concerned with categories of lawful activities (i.e. smelting) which have caused harm; see also Ellis (2006), p. 56.

environmental damage on US territory.<sup>11</sup> The existence of such liability would stem from a primary rule of international law, namely the duty to pay damages, that stipulates the polluter-pays principle whereby the one who creates the risk to others has to bear the costs (¶ 38 *et seq*; Chap. 5).<sup>12</sup> In contrast, a State's responsibility for any breach of the primary environmental duty to prevent significant transboundary harm from happening falls within the category of secondary rules of international law.

Although the Trail Smelter Arbitration Panel decided on the dispute well before the ILC introduced its conceptual distinction between State responsibility and State liability, the wording of the 1941 award points towards Canada's responsibility for transboundary environmental harm. This responsibility was triggered by the violation of Canada's primary obligations under international law to both not cause transboundary harm and to take measures to prevent actors under its jurisdiction from doing so ("no State has the right to use or permit to use its territory. . .").<sup>13</sup> The damages that Canada had to pay to the United States were therefore the consequence of Canada's international responsibility because it breached its duty to prevent the harmful activities of the privately-owned smelter.<sup>14</sup> In the 7th recital of its 2006 draft principles on the allocation of loss, the ILC explicitly acknowledges that States bear responsibility when infringing their obligations under international law to prevent harmful activities and reserves the liability for transboundary harm to all cases that do not involve State responsibility.<sup>15</sup>

It is beyond the scope of this book to thoroughly examine the terminological confusion and disputes involving the terms liability and responsibility,<sup>16</sup> especially since the underlying conceptual decision of the ILC is not mandatory as illustrated by the language of international treaties and ICJ jurisprudence.<sup>17</sup> Undeniably, State responsibility and State liability are closely related and even intrinsically interconnected.<sup>18</sup> Given this book's focus on corporate liability, it utilises the term liability to denote any duty to pay monetary compensation for damage (Chap. 2 ¶ 36 *et seq* (Sect. 2.3)). The legal prerequisites of this obligation do not stem from the term liability but from the applicable legal instrument. In conformity with international usage, State responsibility is reserved exclusively for the purpose of denoting

<sup>11</sup>Liability was the initial approach of the ILC to transboundary environmental harm, see Boyle (2010), p. 96, see ILC Draft principles on the allocation of loss in the case of transboundary harm arising out of hazardous activities, YBILC 2006 II/2.

<sup>12</sup>de la Fayette (1997), p. 325.

<sup>13</sup>Drumbl (2006), p. 86.

<sup>14</sup>PCA *Trail Smelter Case* (United States v Canada) (1941) 3 RIAA 1905.

<sup>15</sup>ILC Draft principles on the allocation of loss in the case of transboundary harm arising out of hazardous activities, with commentaries (2006). YBILC Vol. II, Part Two, UN Doc A/61/10, at 61.

<sup>16</sup>Crawford (2013), p. 63.

<sup>17</sup>See e.g., ICJ Fisheries Jurisdiction (Federal Republic of Germany v Iceland) Merits, Judgment, ICJ Reports 1974, 175, 208: ". . . the Court was merely asked to indicate the unlawful character of the acts and to take note of the consequential liability of Iceland to make reparation."

<sup>18</sup>Sucharitkul (1996).

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the legal consequences of an internationally wrongful act that consists, *inter alia*, of States' obligation to redress any damage incurred (Article 36 ASR). Consequently, this study refers to State liability only when discussing the legal obligation to pay damages that do not fall within the scope of Article 36 ASR (§ 44 *et seq.*).

### 3.3 Potential Sources of International Environmental Liability

- 10 It is a truism that international environmental law, including its liability and compensation rules, stems from the same legal sources as other areas of international law.<sup>19</sup> It is equally true that a mere reference to the traditional legal sources mentioned in Article 38(1) ICJ Statute provides an incomplete picture of the relevant legal sources of international environmental law. While international environmental law is not unique in terms of the legal sources available to it, like other areas of international law, it has its own particularities concerning the function of certain sources and methods of identifying the law produced by them. As *Jutta Brunnée* observed: “(I)nternational environmental law is a relatively pragmatic discipline, focused on problem-solving, including through alternative standard-setting modes and compliance mechanisms”<sup>20</sup>. Notably, the legal relevance of nonbinding instruments is especially high in international environmental law;<sup>21</sup> their successful reconfirmation by international actors and authorities over time often significantly contributes to the formation and identification of international law stemming from traditional sources, which will be outlined below.

#### 3.3.1 Multilateral Environmental Agreements and Environmental Liability

- 11 As of February 2022, the International Environmental Agreements (IEAs) Database Project, developed and maintained by the University of Oregon, lists 1414 Multilateral Environmental Agreements (MEAs).<sup>22</sup> MEA is the generic term for a treaty, convention, protocol or other binding instrument related to the environment and

<sup>19</sup>Birmie et al. (2009), p. 14.

<sup>20</sup>Brunnée (2017), p. 961.

<sup>21</sup>Friedrich (2013), pp. 143–170.

<sup>22</sup>International Environmental Agreements (IEAs) Database Project (2002–2020), available at <https://iea.uoregon.edu/iea-project-contents>, last accessed 25 April 2022.

concluded between more than two parties.<sup>23</sup> While there is a significant number of MEAs in force, only a small fraction of them address the question of liability for environmental damage.

### **Statistics: Multilateral Environmental Agreements with liability elements**

**State liability:** 2 MEAs, both in force

1. Convention on International Liability for Damage Caused by Space Objects<sup>24</sup>, in force, (Chap. 11);
2. arguably Article 7(2) 1997 UN Convention on the Law of the Non-navigational Uses of International Watercourses, in force, (§ 27).

**State liability** that is triggered by a breach of an international obligation, i.e. state responsibility: 2 MEAs, both in force:

1. UNCLOS (Chap. 13);
2. Fish Stocks Agreement.

**Civil liability regimes:** 13 MEAs of which four are in force<sup>25</sup>, (Chap. 5) for details

1. Convention on Third Party Liability in the Field of Nuclear Energy;
2. Convention on the Liability of Operators of Nuclear Ships;
3. Vienna Convention on Civil Liability for Nuclear Damage;
4. International Convention on Civil Liability for Oil Pollution Damage, replaced by the 1992 Protocol;
5. Convention on Civil Liability for Oil Pollution Damage Resulting from Exploration for and Exploitation of Seabed Mineral Resources;
6. Convention on the Regulation of Antarctic Mineral Resource Activities;
7. Annex VI to the Protocol on Environmental Protection to the Antarctic Treaty;
8. Convention on Civil Liability for Damage Caused During Carriage of Dangerous Goods by Road, Rail and Inland Navigation Vessels;
9. Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment;

(continued)

<sup>23</sup>UNEP, Glossary of Terms for Negotiators of Multilateral Environmental Agreements, 2007, at 63.

<sup>24</sup>This is not an MEA *per se* but relates to the environment of private and public property damaged by a space object.

<sup>25</sup>In force for the States parties are the Convention on Third Party Liability in the Field of Nuclear Energy of 29th July 1960, the Vienna Convention on Civil Liability for Nuclear Damage, the International Convention on Civil Liability for Oil Pollution Damage and the International Convention on Civil Liability for Bunker Oil Pollution Damage.

10. Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea;
11. Protocol on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes and their Disposal to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal;
12. Convention on Civil Liability for Bunker Oil Pollution Damage;
13. Protocol on Civil Liability and Compensation for Damage Caused by the Transboundary Effects of Industrial Accidents on Transboundary Waters.

**Administrative liability regime: 1 MEA**

1. Nagoya - Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety, in force, for details, (Chap. 14);

**Provisions in MEAs on the future development of administrative or civil liability rules in international law: 17 MEAs all but one<sup>26</sup> of which are in force, however, only one has led to the adoption of a Protocol<sup>27</sup>:**

1. Article 235(3) UNLCOS;
2. Article X Convention on the Prevention of Marine Pollution by Dumping of Waste and Other Matters;
3. Article 15 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter;
4. Article 14 Convention on Biological Diversity;
5. Article 27 Cartagena Protocol on Biosafety to the Convention on Biological Diversity (implemented);
6. Article 25 Convention on the Protection of the Marine Environment of the Baltic Sea Area;
7. Article 16 Convention for the Protection of the Mediterranean Sea Against Pollution;
8. Article XIII Kuwait Regional Convention for Cooperation on the Protection of the Marine Environment from Pollution;
9. Article XIII Regional Convention for the Conservation of the Red Sea and Gulf of Aden Environment;
10. Article 14 Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region;

(continued)

<sup>26</sup>Not in force: The Convention for Cooperation in the Protection and Sustainable Development of the Marine and Coastal Environment of the Northeast Pacific.

<sup>27</sup>Article 27 Cartagena Protocol on Biosafety to the Convention on Biological Diversity was implemented through the Nagoya - Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety.

11. Article 15 Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region;
12. Article 15 Convention for Cooperation in the Protection and Development of the Marine and Coastal Environment of the West and Central African Region;
13. Article 20 Convention for The Protection of the Natural Resources and Environment of the South Pacific Region;
14. Article 29 Framework Convention for the Protection of the Marine Environment of the Caspian Sea;
15. Article XXIV African Convention on the Conservation of Nature and Natural Resources;
16. Article 13 Convention for Cooperation in the Protection and Sustainable Development of the Marine and Coastal Environment of the Northeast Pacific (not in force);
17. Article 12 Convention to Ban the Importation into the Forum Island Countries of Hazardous and Radioactive Wastes and to Control the Transboundary Movement and Management of Hazardous Wastes within the South Pacific Region.

**Provisions in MEAs on national rules addressing damage:** 4 MEAs, all of which are in force:

1. Article 235(2) UNCLOS;
2. Article 12 Nagoya – Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety;
3. Article XVI Convention on the Protection of the Black Sea Against Pollution;
4. Article 11 Convention for the Protection of the Marine Environment and Coastal Area of the Southeast Pacific

**Exclusion of liability:** arguably 2 MEAs, both of which are in force:

1. para 51 of Decision 1/CP.21 adopting the Paris Agreement (Chap. 16);
2. footnote to Article 8(f) Convention on Long-Range Transboundary Air Pollution.

The above table shows that many MEAs introducing liability rules are not yet in force or that their provisions on the development of an international liability regime remain unimplemented. Taken in isolation, these observations have legal significance for each treaty regime, its effectiveness to prevent environmental degradation and the cost allocation in cases of environmental damage. However, when considered in the broader context, the number of MEAs with liability provisions, the total number of signatory States and, ultimately, the willingness of States to ratify these

MEAs are of importance to the overall picture of environmental liability rules which includes those of a customary law nature.

### 3.3.2 *Customary International Law and Environmental Liability*

- 14 Being a legal source independent of conventional law, customary international law has the potential to bridge geographic and thematic gaps in existent and future MEAs. ILC Special Rapporteur *Michael Wood* wrote in the commentary to the draft conclusions on the identification of customary international law: “(T)reaties that are not yet in force or which have not yet attained widespread participation may also be influential in certain circumstances, particularly where they were adopted without opposition or by an overwhelming majority of States.”<sup>28</sup> The observation that broad participation in the adoption of a treaty text (Article 9 VCLT) can contribute to the identification of customary international law as was supported by the ICJ in *Continental Shelf*. In this case, the ICJ considered UNCLOS a reflection of customary international law given that it was adopted by 117 States even though it had not yet entered into force, something which only occurred in 1994, some nine years after the *Continental Shelf* judgment.<sup>29</sup> However, this case is rather special as the ICJ could rely on centuries of practice in the use of the high seas. In addition, the role of unratified treaties for customary international law is only one aspect of many that have to be taken into consideration when identifying the rules of customary international law.

#### **Identification of Rules of Customary International Law**

- 15 The search for rules of customary international law is often characterised by a desire to find a specific international rule to address what is perceived as a critical gap in the law. Accordingly, much has been written about methodological sound approaches to establishing what is customary international law, including the ILC in its 2018 draft conclusion on the identification of customary law.<sup>30</sup> A starting point for all such approaches is Article 38(1)(b) ICJ Statute which takes “international custom, as evidence of a general practice accepted as law”. However, this does not specify what counts as evidence for practice and *opinio iuris*, what a viable ratio between the two elements should be, how consistent incidents of practice have to be and how rapidly they may lead to legal development. From a methodological point

<sup>28</sup>ILC Draft Conclusions on the Identification of Customary International Law, 2018, Conclusion 11, para. 3, YBILC 2018 Vol II Part 2, UN Doc A/74/10 at 144.

<sup>29</sup>ICJ *Continental Shelf* (Libyan Arab Jamahiriya v Malta) [1985] ICJ Rep 13, para. 27.

<sup>30</sup>ILC Draft conclusions on Identification of Customary International Law, YBILC 2018 Vol II Part 2, UN Doc A/74/10.

of view,<sup>31</sup> the question is then whether or not the identification of customary international law requires inductive reasoning, i.e. empirically established instances of State practice and legal conviction (*opinio iuris*) over time which, when taken as a whole, create customary international law. Alternatively, customary international law could allow for deductive reasoning, the starting point of which is a general and abstract principle from which rules of customary international law are deduced.<sup>32</sup> This value-based approach puts UN General Assembly resolutions and other non-binding instruments with a certain amount of authority ('soft law') at the centre of their identification process. Even if the ICJ itself does not always work with methodical transparency, there is no denying that the Court predominantly follows the inductive approach to customary international law which emphasises the international law-making process, with State practice and *opinio iuris* related thereto.<sup>33</sup> That said, in *North Sea Continental Shelf* the ICJ hinted at the possibility that the strength of either State practice or *opinio iuris* may make up for the weakness of the other.<sup>34</sup> Nevertheless, the ICJ considers the lack of sufficient State practice or conflicting State practice as detrimental to "the authority of a general rule of international law."<sup>35</sup> Despite the ICJ's obvious methodological preference, there are instances of the Court using deductive reasoning to identify a rule of customary law based on logical and functional imperatives, most notably in the *Arrest Warrant* case.<sup>36</sup>

The traditional inductive approach to customary international law does not render acts of international organisations, the existence of adopted but unratified treaties and universal declarations as irrelevant. They are commonly discussed as evidence of *opinio iuris*, the psychological element of the two components forming customary

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<sup>31</sup> See Schwarzenberger (1947), pp. 539 *et seq*; Sauer (1963), pp. 121 *et seq*; Bos (1984), pp. 218 *et seq*; Kirchner (1992), pp. 215 *et seq*.

<sup>32</sup> Schüle (1959), p. 146.

<sup>33</sup> For a summary of the relevant ICJ jurisprudence see ICL Draft conclusions on identification of customary international law, 2018, YBILC 2018, Viol II part 2.

<sup>34</sup> ICJ *North Sea Continental Shelf Cases* (Federal Republic of Germany v Denmark, Federal Republic of Germany v the Netherlands) [1969] ICJ Rep 3, para. 74: "Although the passage of only a short period of time is not necessarily, or of itself, a bar to the formation of a new rule of customary international law on the basis of what was originally a purely conventional rule, an indispensable requirement would be that within the period in question, short though it might be, State practice, including that of States whose interests are specially affected, should have been both extensive and virtually uniform in the sense of the provision invoked."

<sup>35</sup> ICJ *Fisheries Case (United Kingdom v Norway)* [1951] ICJ Rep 131. However, in the *Nicaragua Case* the court backpedaled from this position stating that it is deemed "sufficient that the conduct of states should, in general, be consistent with such rules and that instances of state conduct inconsistent with a given rule should generally have been treated as breaches of that rule, not as indications of the recognition of a new rule." See ICJ *Military and Paramilitary Activities in and against Nicaragua* (Nicaragua v US) [1986] ICJ Rep 14, para. 98.

<sup>36</sup> ICJ *Arrest Warrant of 11 April 2000* (Democratic Republic of the Congo v Belgium) [2002] ICJ Rep 3, para. 54; see Talmon (2015), p. 418.

international law.<sup>37</sup> This has been widely discussed and accepted, including the ICJ,<sup>38</sup> with respect to General Assembly Resolutions and final documents adopted at large-scale UN conferences, most notably the 1972 Stockholm Declaration and the 1992 Rio Declaration. However, soft law instruments reflecting progressive *opinio iuris* will easily be outweighed by conservative, or even regressive, State practice as the ICJ noted in the *Nuclear Weapon Case*:

The emergence, as *lex lata*, of a customary rule specifically prohibiting the use of nuclear weapons as such is hampered by the continuing tensions between the nascent *opinio iuris* on the one hand, and the still strong adherence to the practice of deterrence on the other.<sup>39</sup>

17 This traditional understanding of customary law is often accused of not adequately responding to pressing global challenges.<sup>40</sup> Consequently, there is broad and, at times, inventive academic debate on how the process of forming customary international law can be accelerated, simplified and altered to meet the needs of specialised branches of international law such as environmental law or human rights law.<sup>41</sup> One proposed method is to merge the two elements into one category by considering occurrences such as the verbal claims of relevant entities as both *opinio iuris* and State practice.<sup>42</sup> The International Law Association argued in 2000 that resolutions of intergovernmental organisations are a form of State practice, viewing them as “a series of verbal acts by the individual member States participating in that organ.”<sup>43</sup> The ILC concurred in its commentary on draft conclusion 6 of its 2018 draft conclusions on the identification of customary law. In para 2 draft conclusion 6 itemises these different forms of practice by stating:

Forms of State practice include, but are not limited to: diplomatic acts and correspondence; conduct in connection with resolutions adopted by an international organization or at an intergovernmental conference; conduct in connection with treaties; executive conduct, including operational conduct ‘on the ground’; legislative and administrative acts; and decisions of national courts.<sup>44</sup>

<sup>37</sup> Friedrich (2013), p. 145.

<sup>38</sup> ICJ *Military and Paramilitary Activities in and against Nicaragua* (Nicaragua v US) [1986] ICJ Rep 14, para. 188.

<sup>39</sup> ICJ *Legality of the Threat or Use of Nuclear Weapons* [1996] ICJ Rep 226, para. 73.

<sup>40</sup> de Visscher (1956), p. 472: “It cannot be denied that the traditional development of custom is ill suited to the present pace of international relations”; Kolb (2003), p. 128: “...the time has come to put à plat the theory of custom and to articulate different types (and thus elements) of it in relation to different subject matters and areas.”

<sup>41</sup> See e.g., D’Amato (1998); Charlesworth (1998).

<sup>42</sup> Akehurst (1974), p. 10.

<sup>43</sup> International Law Association, London Conference (2000), Committee on Formation of Customary (General) International Law, Final Report of the Committee, Statement of Principles Applicable to the Formation of General Customary International Law, Section 11 at 19.

<sup>44</sup> ICL Draft Conclusions on Identification of Customary international Law with Commentaries, 2018, YBILC 2018, Vol II Part 2, UN Doc A/73/10 at p. 133.

According to the ILC commentary, the phrase “conduct in connection with resolutions adopted by an international organization” includes acts by States related to the negotiation, adoption and implementation of resolutions, decisions and other acts adopted within international organisations. This observation is of special importance in areas of international law which are distinguished by highly active specialised organisations, as typical in the area of international environmental law. However, the ILC emphasised<sup>45</sup> that no form of practice has *a priori* primacy over another in the identification of customary international law, which makes the identification process a holistic endeavour.

The non-exclusive list provided by draft conclusion 6 para 2 supports a generous understanding of State practice. In addition, it is to a certain extent an invitation to see both State practice and *opinio juris* in even a single, legally non-binding resolution of an international organisation that enjoyed wide support from member States. The same argument can be made when State representatives adopt a treaty text at an international conference. Voting in favour of a resolution, or failing to object, can be seen as a form of evidence that States accept the resolution’s content as reflecting law (*opinio iuris*, cf. para 2 of draft conclusion 10). However, this interpretation of approval ignores the fact that States are well aware of which forums and what language indicate the non-binding status of a document. With regard to the adoption of a treaty text to consider a positive vote, or the failure to object, an incident of both State practice and *opinio iuris* disregards the legal significance of acts such as parliamentary approvals, formal ratifications and reservations in the later stages of the treaty-making process. Therefore, the ILC considered it necessary to make a clear negative statement with regard to the impact of legally non-binding resolutions, namely that they cannot in and of themselves create a rule of customary international law.<sup>46</sup> That said, even if non-binding instruments or treaties that did not attract sufficient ratifications (so-called ‘failed treaties’) do not form customary international law in and of themselves, they are not without legal significance: the possibility remains that the legal and policy approaches expressed in these instruments will shape the future practice of States when the growing need for urgent action in areas such as environmental law necessitates the use of on-hand solutions.

### **No-Harm Rule and Environmental Liability**

Despite the accelerated push for environmental action seen thus far in the twenty-first century, the main pillar of customary environmental law, the no-harm rule, dates to a bygone era. Having its origin in the 1941 *Trail Smelter* award (¶ 6), the undisputed and fundamental rule imposes primary environmental obligations on States that are the source of significant environmental harm. The violation of the no-harm rule triggers the international responsibility of the harming State, including its duty to provide monetary compensation for the transboundary harm caused

<sup>45</sup>ICL Draft Conclusions on Identification of Customary International Law with Commentaries, 2018, YBILC 2018, Vol II Part 2, UN Doc A/73/10 at p. 133 para. 1.

<sup>46</sup>Draft Conclusions on Identification of Customary International Law with Commentaries, 2018, YBILC 2018, Vol II Part 2, UN Doc A/73/10, Resolution 12 para. 1.

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(Article 36 ASR). In keeping with the conceptual distinction introduced by the ILC, the no-harm rule is a primary environmental obligation and, as such, cannot be classed as a rule on State liability (¶ 3 *et seq*).

**21** The 1941 Trail Smelter Award highlighted the two facets of the no-harm rule it put in place, namely that States have a ‘negative obligation’ to refrain from actively causing significant harm to the environment of another State and their ‘positive obligation’ to prevent other, usually private actors<sup>47</sup> under their jurisdiction, from doing so.<sup>48</sup> However, the award’s distinction between a State’s obligation “not to cause harm”, conceived as an absolute prohibition, and its duty “to prevent harm” caused by others, which is a due diligence obligation, has become blurred in the ICJ’s jurisprudence. The Advisory Opinion entitled *Legality of the Threat or Use of Nuclear Weapons* illustrates the ICJ’s approach to avoid conceptually distinguishing between polluting actors and rather include both public and private sources of pollution under the prevention principle. In contemplating the use of nuclear weapons by States, the Court observed: “The existence of the general obligation of States to ensure that activities within their jurisdiction and control respect the environment of other States or areas beyond national control is now part of the corpus of international law relating to the environment.”<sup>49</sup> This comprehensive prevention approach, which has since been adopted by other international tribunals<sup>50</sup> and the ILC Draft Articles on Prevention,<sup>51</sup> has consequences for State obligations concerning their own environmentally harmful activities: each State’s obligations under the prevention principle are those of conduct not of result, even if the State itself is the polluter. In other words, in a case involving transboundary environmental damage caused by a State’s activities, that State may escape its international responsibility if it can demonstrate that State authorities have complied with all due-diligence obligations required under international law when permitting such activities.

**22** Today it is widely recognised as a customary international rule that States are duty-bound to prevent, reduce and control the risk of environmental harm to other States and, according to the ICJ,<sup>52</sup> to areas beyond State jurisdiction (global commons).<sup>53</sup> These preventive obligations require States to act with due diligence, which

<sup>47</sup>In addition to private actors, this ‘positive obligation’ to prevent transboundary harm would extend to curtailing the activities of foreign states that have, for example, armed forces present in the state’s territory or international organisations operating within that state (e.g. the UN).

<sup>48</sup>Cf. *PCA South China Sea Arbitration* (Philippines v China) (2016) 33 RIAA 1, para. 941.

<sup>49</sup>*ICJ Legality of the Threat or Use of Nuclear Weapons* [1996] ICJ Rep 226, para. 29.

<sup>50</sup>*PCA Arbitration regarding the Iron Rhine (‘Ijzeren Rijn’) Railway* (Belgium v Netherlands) (2007) 27 RIAA 35, para. 222.

<sup>51</sup>ILC Draft Articles on Prevention of transboundary Harm from Hazardous Activities, 2001.

<sup>52</sup>*ICJ Legality of the Threat or Use of Nuclear Weapons* [1996] ICJ Rep 226, para. 29.

<sup>53</sup>Birmie et al. (2009), pp. 143–152.

means that they have to take the appropriate amount of care to avoid and, if necessary, address transboundary harm through necessary action. The ICJ does not treat due diligence as a one-size-fits-all standard under international law but requires the application of a subject-matter specific due diligence standard.<sup>54</sup> Consequently, one has to consult the environment-centred ICJ cases to obtain insights into the understanding of the international standard of care required under the duty to prevent environmental damage. In *Pulp Mills*, the ICJ noted that particular care is required when implementing obligations in the field of environmental protection due to the irreversibility of some environmental harm, i.e. the due diligence standard becomes more demanding in correlation to the expected permanence of the harm.<sup>55</sup> Then again, a State is required to use ‘all means at its disposal’ to prevent environmental harm, which underlines that the standard of care is context-specific for both the environmental risk entailed and the actual capacities of the State concerned.

A State’s obligation to prevent transboundary pollution consists of two subcomponents, namely procedural obligations and substantive obligations. A State’s procedural obligations involve risk management before any potentially harmful activities start. In *Certain Activities and Construction of a Road*, the ICJ observed: “(T)o fulfil its obligation to exercise due diligence in preventing significant transboundary environmental harm, a State must, before embarking on an activity having the potential adversely to affect the environment of another State, ascertain if there is a risk of significant transboundary harm, which would trigger the requirement to carry out an environmental impact assessment.”<sup>56</sup> An environmental impact assessment (EIA) includes a description of possible damage containment measures,<sup>57</sup> the implementation of which then falls within the categories of the States’ substantive obligations.

A State’s substantive obligations require enacting appropriate damage prevention and containment measures, such as taking needed regulatory and administrative steps<sup>58</sup> which, when exercised, exonerate it from international responsibility even if the measures diligently taken were not successful (obligation of conduct).<sup>59</sup> Which measures are appropriate will depend on several factors and may vary. In contrast, procedural obligations are quite specific about what is required for ‘appropriate’ risk

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<sup>54</sup>MacDonald (2019), p. 1045.

<sup>55</sup>ICJ *Pulp Mills on the River Uruguay* (Argentina v Uruguay) [2010] ICJ Rep 14, para. 185–187.

<sup>56</sup>ICJ *Certain Activities Carried Out by Nicaragua in the Border Area* (Costa Rica v Nicaragua) and *Construction of a Road in Costa Rica along the San Juan River* (Nicaragua v Costa Rica) [2015] ICJ Rep 665, para. 104.

<sup>57</sup>Cf. Annex II of the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo, 1991).

<sup>58</sup>ICJ *Pulp Mills on the River Uruguay* (Argentina v Uruguay) [2010] ICJ Rep 14, para. 101; ICJ *Certain Activities Carried Out by Nicaragua in the Border Area* (Costa Rica v Nicaragua) and *Construction of a Road in Costa Rica along the San Juan River* (Nicaragua v Costa Rica) [2015] ICJ Rep 665, para. 115.

<sup>59</sup>Mayer (2018), p. 132.

management. Domestically this includes the diligent execution of preliminary risk assessment and, if required due to the identified risk, an EIA. Internationally, procedural obligation after a risk has been identified includes providing notification to as well as consultations and negotiations with any potentially affected States.<sup>60</sup> If States fail to take these steps, they are internationally responsible for the violation of their procedural obligations irrespective of whether any transboundary harm has occurred.<sup>61</sup> Accordingly, procedural obligations are obligations of result with respect to the required actions but are still classed as obligations of conduct with respect to the transboundary environmental harm. If the latter occurs even though a State has taken all the appropriate procedural and substantive measures, that State is not internationally responsible for any resultant transboundary harm and thus does not have to compensate those affected for environmental damage.

25 The point of discussion then is whether it falls within the scope of the customary no-harm rule that States have domestic laws in place that will enable claimants situated in an affected State to take action seeking damages against public or private polluters in cases of transboundary environmental harm. The assumption of such a duty is not completely far-fetched, especially as liability rules can have preventive effects (Chap. 2). This is further highlighted by the Institut de Droit International's 1997 resolution on responsibility and liability under international law for environmental damage which states in its preamble: "Realizing that both responsibility and liability have in addition to the traditional role of ensuring restoration and compensation that of enhancing prevention of environmental damage."<sup>62</sup> Based on these preventive traits, it could be argued that the availability of national liability provisions and their cross-border accessibility is a part of the substantive limb of States' preventive due-diligence obligations, alongside their duty to enforce their administrative damage containment measures.<sup>63</sup>

26 The ICJ is not driven by such utilitarian considerations when fleshing out the different aspects of the customary no-harm rule. In *Pulp Mills*, the ICJ observed with regard to EIAs that they are:

<sup>60</sup>Duvic-Paoli (2018), p. 168.

<sup>61</sup>Indicated by ICJ *Pulp Mills on the River Uruguay* (Argentina v Uruguay) [2010] ICJ Rep 14, para. 204: Am EIA "may" be considered to be a requirement under general international law and, in this case, is separate from due diligence as is indicated by the word "moreover"; differentiation is not as clear as in ICJ *Certain Activities Carried Out by Nicaragua in the Border Area* (Costa Rica v Nicaragua) and *Construction of a Road in Costa Rica along the San Juan River* (Nicaragua v Costa Rica) [2015] ICJ Rep 665, para. 104; on this issue see Brunnée (2021), p. 275.

<sup>62</sup>Institut de Droit International, Responsibility and Liability under International Law for Environmental Damage, 4. September 1997 (IDI Resolution), available at [https://www.idi-iil.org/app/uploads/2017/06/1997\\_str\\_03\\_en.pdf](https://www.idi-iil.org/app/uploads/2017/06/1997_str_03_en.pdf), last accessed 25 April 2022; see on the details of the IDI Resolution (Sect. 5.6).

<sup>63</sup>Given that national liability rules do not inform about a state's decision to authorise any given project as planned, the extension of such liability rules' scope to include transboundary environmental harm cannot mean they are then classed as procedural obligations under the no-harm rule.

a practice, which in recent years has gained so much acceptance among States that it may now be considered a requirement under general international law to undertake an environmental impact assessment where there is a risk that the proposed industrial activity may have a significant adverse impact in a transboundary context, in particular, on a shared resource.<sup>64</sup>

To date, there is no comparable international judicial ruling on domestic liability legislation as a part of States' due-diligence obligations. In contrast to the detailed procedural obligations identified by the ICJ, no substantive core obligations under the no-harm rule have yet been authoritatively identified. However, this does not call into question the existence of these core obligations, including States' duty to have not only administrative control mechanisms but also civil liability rules in place.

In keeping with the methods for the identification of customary rules (¶ 15 *et seq*), liability legislation can only be regarded as a core obligation under the no-harm rule if it can be established that States accept liability and compensation as an indispensable element of prevention. However, this is difficult to substantiate as Article 7(2) of the 1997 UN Convention on the Law of the Non-navigational Uses of International Watercourses exemplifies.<sup>65</sup> Whereas para. 1 of the provision captures the essence of the no-harm rule, para. 2 turns to the question of compensation in cases where States diligently tried to prevent harm but failed to achieve the desired result. Only the occurrence of significant harm triggers a conditioned obligation to "discuss" compensation at the intergovernmental level "where appropriate", which may well result in a no-compensation outcome.

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**1997 UN Convention on the Law of the Non-navigational Uses of International Watercourses, in Force Since 2014 with 37 States Parties**

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Article 7(1) Watercourse States shall, in utilizing an international watercourse in their territories, take all appropriate measures to prevent the causing of significant harm to other watercourse States.

(2) Where significant harm nevertheless is caused to another watercourse State, the States whose use causes such harm shall, in the absence of agreement to such use, take all appropriate measures, having due regard for the provisions of articles 5 and 6, in consultation with the affected State, to eliminate or mitigate such harm and, where appropriate, to discuss the question of compensation.

Civil liability conventions also do not demonstrate that States consider liability provisions a necessary component of their preventive due-diligence obligations. Such conventions stipulate an operator's strict liability in cases involving environmentally ultra-hazardous activities (Sect. 5.3) which, in short, requires neither intention nor negligence to incur liability. Given that such an operator cannot escape

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<sup>64</sup>ICJ *Pulp Mills on the River Uruguay* (Argentina v Uruguay) [2010] ICJ Rep 14, para. 204.

<sup>65</sup>Convention on the Law of the Non-navigational Uses of International Watercourses, 1997 UNTS 77.

liability, even if all the precautionary and protective measures required by law were in place and, on top of that, was insured for damage caused, civil liability conventions are less linked to prevention than to the polluter-pays principle (§ 38 *et seq.*). This is succinctly highlighted by the preamble of the Lugarno Convention which States in its 6<sup>th</sup> recital: “Having regard to the desirability of providing for strict liability in this field taking into account the ‘polluter pays’ principle”.<sup>66</sup>

30 Even though it has not yet been established that environmental liability is a necessary part of due diligence under the no-harm rule, customary international law may come to recognise a separate and independent legal obligation for States to provide for liability in cases of transnational environmental harm, a possibility which will be discussed below (§ 38 *et seq.*).

### 3.3.3 *General Principles of International Law and Environmental Liability*

31 One prominent feature of international environmental law is the pivotal role of environmental principles, which has heavily proliferated over the last 50 years.<sup>67</sup> The main characteristics required of environmentally-centred legal principles are that they are general, essential and fundamental and when used by way of deductive reasoning, seemingly carry environmental values and progressiveness into the international legal system. Given customary international law lacks responsiveness to pressing and rapidly evolving environmental problems because States prioritise short-term economic factors above all else, the reliance on environmental principles as a driving force to guide legal development does not come as a surprise. However, their normative weight has been disputed in individual cases, largely based on the given principle’s source, specific content and frequency of its reception.

#### **Identification of General Principles of (International) Law**

32 General principles of law are only partially captured by Article 38(1)(c) ICJ Statute as this provision refers solely to general principles which can be identified in all major national legal systems and are then elevated to the international legal level. This method of identification distinguishes them from general principles of international law. Despite certain terminological ambiguities in academic writing, the latter are foundational principles formed within the international legal order as they are widely acknowledged in treaties, customary international law and, as the case may be, soft law instruments.<sup>68</sup> Despite the difference in provenance, namely

<sup>66</sup>Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment, ILM 32 (1993) 1228 (not in force).

<sup>67</sup>Starting with the United Nations Conference in the Environment, held in Stockholm in 1972; cf Martin (2018), pp. 13 *et seq.*

<sup>68</sup>ILC SR Marcelo Vázquez-Bermúdez, Second Report on General Principles of Law, 9 April 2020, paras. 118 to 221, UN Doc A/CN.4/741 (not mentioning soft law documents).

domestic law and international law, the line between the two categories of principles easily blurs as the two legal spheres are not hermetically separated but in constant transposition. By way of example, the polluter-pays principle started as an economic principle in place in several major market economies,<sup>69</sup> its value was subsequently recognised and the principle was moulded into various other national and European Union laws. Subsequently, it attained the status of a principle of international environmental law used in numerous international documents (e.g. Principle 16 of the 1992 Rio Convention) and conventions (e.g. Article 3(1) of the 1996 London Protocol to the Convention on the Prevention of Marine Pollution by the Dumping of wastes and other matters).

The above shows that principles, in order to be legally relevant in the international sphere, require broad recognition by States or other international actors with law-making capacity, domestically and on the international plane. The importance of a principle's recognition as a legal principle was reemphasised by the *Iron Rhine* arbitration award.

33

***Iron Rhine (“Ijzeren Rijn”) Railway Case (Belgium v the Netherlands)***

The 2005 *Iron Rhine* award<sup>70</sup> concerned a dispute between The Kingdom of Belgium and The Kingdom of the Netherlands over the reactivation of the Iron Rhine railway (Ijzeren Rijn) to link the Belgian port of Antwerp and the German city of Mönchengladbach via the Dutch provinces of Noord-Brabant and Limburg. The railway began operating in 1879 but saw reduced use in the twentieth century which resulted in some sections being closed and freight trains forced to use other routes. The reactivation of the Iron Rhine railway was not contested between the parties but they differed over the entitlement of Belgium to establish the plan for its reactivation and the entitlement of the Netherlands to insist on conditions specified under Dutch law for such a reactivation. The Tribunal ruled, *inter alia*, that Belgium had an obligation to fund the environmental element of the overall costs of the reactivation. The importance of the award for international environmental law lies in the Tribunal's approach to the environmental aspects within the broader sustainable development principle: “Environmental law and the law on development stand not as alternatives but as mutually reinforcing, integral concepts, which require that where development may cause significant harm to the environment there is a duty to prevent, or at least mitigate such harm. This duty, in the opinion of the Tribunal, has now become a principle of general international law.”<sup>71</sup>

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<sup>69</sup>OECD, *The Polluter Pays Principle*, Paris 1992, OCDE/GD(92)81.

<sup>70</sup>PCA *Arbitration regarding the Iron Rhine (‘Ijzeren Rijn’) Railway* (Belgium v Netherlands) (2007) 27 RIAA 35.

<sup>71</sup>PCA *Arbitration regarding the Iron Rhine (‘Ijzeren Rijn’) Railway* (Belgium v Netherlands) (2007) 27 RIAA 35, para. 59.



**Fig. 3.1** Identification of principles of general environmental law by the Iron Rhine Award

35 In order to verify the existence of an international legal duty to prevent significant environmental harm within the territory where the development project is situated (Fig. 3.1), the Arbitral Tribunal in the 2005 *Iron Rhine* award first referred to the 1972 Stockholm Conference on the Environment.<sup>72</sup> This event was considered as the starting point of a ‘trend’ in international and European law to integrate environmental measures in the design of economic development activities. Instead of identifying the relevant pieces of legislation, the Tribunal decided to point at Principle 4 of the 1992 Rio Declaration, which the tribunal viewed as capturing the said legislative trend. Principle 4 emphasises that “environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it.” Labelled as an ‘emerging principle’ in the year 1992, the Tribunal considered it to be a ‘principle of general international law’ in 2005 with reference to

<sup>72</sup>PCA Arbitration regarding the *Iron Rhine* (‘Ijzeren Rijn’) Railway (Belgium v Netherlands) (2007) 27 RIAA 35, para. 59.

the ICJ's *Gabčíkovo-Nagymaros* case,<sup>73</sup> where the Court spoke of 'new norms' and 'new standards' which States have to take into consideration when realising infrastructure projects.<sup>74</sup>

By considering 'new rules and standards' to which the ICJ vaguely refers as manifestations of the 'principle of general international law', the *Iron Rhine* award provides a telling example for the tendency to blur the lines between principles and rules as well as principles of general international law and customary international law to suit the needs of judicial reasoning.<sup>75</sup> Indeed, principles of general international law taking the form of rules are associated with a process of considerable methodological simplification, which makes them so compelling when compared to customary international law. The high level of abstraction, which is generally considered a characteristic of general principles of law (such as "good faith"),<sup>76</sup> had already been abandoned by the time the principles were enshrined in the 1992 Rio Declaration. The concise language of many Rio principles foresees the most important function of general principles of international environmental law, namely to initiate and facilitate the emergence of international rules on the basis of which legal environmental obligations can be determined without the need to identify corresponding State practice and *opinio iuris*.<sup>77</sup>

Whether or not a principle of general international law evolve into a rule depends on many factors, not only as to the principle's language in terms of the level of abstraction but also as to its function (e.g. driving legal development or providing

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<sup>73</sup>ICJ *Gabčíkovo-Nagymaros* (Hungary v Slovakia) [1997] ICJ Rep 7, para. 140.

<sup>74</sup>The Tribunal took note of the debate on the differences between principles and rules but refused to enter into the controversy of the PCA *Arbitration regarding the Iron Rhine* ('Ijzeren Rijn') Railway (Belgium v Netherlands) (2007) 27 RIAA 35, para. 58-60. However, it is noteworthy that the Tribunal rather considered the 'environmental norms' as relevant in the context of Article 31(3) (c) of the Vienna Convention on the Law of Treaties ("any relevant rules of international law applicable in the relations between the parties").

<sup>75</sup>It is worth noting that the Tribunal is not entirely consistent in its argument that an emerging principle has crystallised into a new rule in para. 59. This is evident from the fact it used a different method in para. 223; after referring in para. 222 to the traditional no-harm rule and the principle of prevention, both of which address transboundary environmental harm, the reasoning continued in para. 223 that: „The Tribunal is of the view that, *by analogy*, where a state exercises a right under international law within the territory of another state, considerations of environmental protection also apply.“ (emphasis here).

<sup>76</sup>ICJ *International Status of South West Africa* (separate opinion *McNair*) [1950] ICJ Rep 146, 148.

<sup>77</sup>Martin (2018), p. 19.



political orientation).<sup>78</sup> Principle 2 of the 1992 Rio Declaration phrased the principle of prevention in distinct normative language (“State have . . . the responsibility to ensure, that”), whereas when elucidating the polluter-pays principle, Principle 16 gives political guidance at best (“National authorities should endeavour to promote the internalization of environmental cost. . . , taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment.”). The choice of language in 1992 has had an enduring impact as it still resonates today when the polluter-pays principle is invoked by States and discussed in academic writing.

### **Polluter-Pays Principle and Environmental Liability**

38 Since its introduction by the OECD in 1972, the polluter-pays principle (Chap. 2 ¶ 10 (Sect. 2.2.1)) has left its marks on innumerable international, European and domestic environmental instruments and laws.<sup>79</sup> What was originally perceived as a political instrument for the allocation of costs for pollution prevention and pollution control developed into an all-encompassing principle designed to shift the cost burden for environmental damage to the polluter (Fig. 3.2).<sup>80</sup> This secures the legal principle’s place in the environmental-liability context, as illustrated by Directive 2004/35/EC on environmental liability, which provides in Art 1 that: “The purpose of this Directive is to establish a framework of environmental liability based on the ‘polluter-pays’ principle, to prevent and remedy environmental damage.”<sup>81</sup> While it is clear that environmental liability is one way to implement the polluter-pays principle’s approach to cost allocation, the question remains whether the principle prescribes the polluter’s liability for any environmental damage caused.

<sup>78</sup>Martin (2018), pp. 16–17; See on the various utilisations of „principles“ in international jurisprudence, SR Marcelo Vázquez-Bermúdez (ILC), First Report on General Principles of Law, 4 April 2019, UN Doc A/CN.4/732.

<sup>79</sup>OECD, Recommendation of the Council Concerning International Economic Aspects of Environmental Policies, C(72)128, para. 4: “The principle to be used for allocating costs of pollution prevention and control measures to encourage rational use of scarce environmental resources and to avoid distortions in international trade and investment is the so-called “Polluter-Pays Principle”; available at <https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0102>, last accessed 25 April 2022.

<sup>80</sup>Schwartz (2018), p. 262.

<sup>81</sup>PCA *Arbitration regarding the Iron Rhine (‘Ijzeren Rijn’) Railway* (Belgium v Netherlands) (2007) 27 RIAA 35, para. 59.



**Fig. 3.2** Expansion of the polluter-pays principle, Sources: European Court of Auditors (European Court of Auditors, *The Polluter Pays Principle: Inconsistent Application across EU Environmental Policies and Action*, Special Report 2021, at 7, available at: [https://www.eca.europa.eu/Lists/ECADocuments/SR21\\_12/SR\\_polluter\\_pays\\_principle\\_EN.pdf](https://www.eca.europa.eu/Lists/ECADocuments/SR21_12/SR_polluter_pays_principle_EN.pdf), last accessed 25 April 2022.)

Despite the omnipresent invocation of the polluter-pays principle in international, regional and national instruments, the principle’s legal implications are far from clear.<sup>82</sup> The arbitral tribunal in the 2004 *Rhine Chlorides* case supports this view by observing that “(the polluter-pays) principle features in several international instruments, bilateral as well as multilateral, and that it operates at various levels of effectiveness. Without denying its importance in treaty law, the Tribunal does not view this principle as being a part of general international law.”<sup>83</sup> On this basis, the tribunal refused to consider the principle under Article 31(3)(c) VCLT, which allows for the systemic interpretation of a treaty by taking into account “any relevant rules of international rules of international law applicable between the parties”. Although,

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<sup>82</sup>Boyle (1991); de Sadeleer (2005), pp. 21–33; Sands and Peel (2018), pp. 240–244; Kravchenko et al. (2012), p. 53 “perhaps emerged as a customary rule of international law”.

<sup>83</sup>This case concerned the Auditing of Accounts between the Kingdom of the Netherlands and the French Republic Pursuant to the Additional Protocol of 25 September 1991 to the Convention of the Protection of the Rhine against Pollution by Chlorides of 3 December 1976, *PCA Audit of Accounts Between the Netherlands and France in Application of the Protocol of 25 September 1991 Additional to the Convention for the Protection of the Rhine from Pollution by Chlorides of 3 December 1976* (Netherlands v France) (2004) 25 RIAA 267, para. 103 (unofficial English translation of the Award).

it is worth noting that the arbitral tribunal in the 2005 *Iron Rhine case* considered the principle of prevention as falling within the ambit of Article 31(3)(c) VCLT (¶ 33 *et seq.*).<sup>84</sup>

40 Given that the polluter-pay principle serves as a label, rationale and guiding principle for a vast variety of instruments concerned with the allocation of environmental costs, it appears to lack the necessary legal precision to support an obligation for States to implement a specific cost-allocation model. By way of example, one can ask the question of who can be classed as a ‘polluter’? Is it only those who directly cause the environmental damage or does it also include those who contributed indirectly, such as consumers? The answer here is not obvious from the principle itself but is determined by the relevant rules which give expression to the polluter-pays principle in one way or another.<sup>85</sup> In addition, there is more than one environmental liability model available for States to choose from (Chap. 5) with some of the better-known being centred on:

- civil liability (the horizontal legal relationship between a polluter and an injured party);
- administrative liability (the vertical legal relationship between State authorities and a polluter);
- governmental liability (the vertical legal relationship between a State and an injured party), with the possibility for the State to take, if appropriate, recourse against the polluter.

41 The variety of legal options under the conceptual umbrella of the polluter-pays principle does not diminish its legal status and value as a general principle of international environmental law<sup>86</sup> which, according to ICJ Judge *Cançado Trindade*, justify, inspire, inform and conform to the legal system’s rules.<sup>87</sup> In addition, the polluter-pays principle is one of many widely-recognised principles of international environmental law, all of which are interrelated and complementary as they mutually reinforce their legal and conceptual clout.

42 An integrated approach to international environmental principles brings the polluter-pays principle within the scope of the prevention principle the ultimate goal of which is the avoidance of environmental harm.<sup>88</sup> From this perspective, it can be argued that the polluter-pays principle’s aim is not only to remedy environmental damage and internalise environmental costs but also to contribute to harm avoidance. The consequence of this understanding is that the polluter-pays principle

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<sup>84</sup>PCA *Arbitration regarding the Iron Rhine (‘Ijzeren Rijn’) Railway* (Belgium v Netherlands) (2007) 27 RIAA 35.

<sup>85</sup>Schwartz (2010), p. 247; van Calster and Reins (2013), para. 1.55.

<sup>86</sup>See e.g., the 1990 International Convention on Oil Pollution, Preparedness, Response and Cooperation, which states in its preamble (7<sup>th</sup> recital): “Taking into account of the ‘polluter pays’ principle as a general principle of international environmental law”, 1891 UNTS 78.

<sup>87</sup>ICJ *Pulp Mills on the River Uruguay* (Argentina v Uruguay) (separate opinion Cançado Trindade) [2010] ICJ Rep 135, para. 201.

<sup>88</sup>Duvic-Paoli (2018), p. 167.

does not support environmental liability models that effectively shield the actual polluter from recourse and responsibility.<sup>89</sup>

From this, it follows that it only requires a small step to establish an ‘emerging principle’ that combines the polluter and preventive principles into the following new rule: The polluters’ ultimate<sup>90</sup> responsibility and liability shall not be excluded invariably, indiscriminately<sup>91</sup> and arbitrarily<sup>92</sup>.

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### 3.4 State Responsibility for Transboundary Environmental Harm

The violation of both a duty under either a bilateral or multilateral environmental agreement (¶ 12) or rules of general international law (¶ 14 *et seq*) by a State entails its international responsibility vis-à-vis the injured State (Article 1 ASR) or, depending on the specific rule infringed, vis-à-vis any other State representing a collective legal interest (Article 48 ASR). As a legal consequence, the responsible State is obliged to make reparations (Article 34 ASR) with a monetary payment (compensation) being only one of many means of providing reparation for injury. However, compensation is often provided in practice to offset the environmental damage because restitution in kind is not possible (cf. Article 36 ASR).<sup>93</sup>

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In the context of this book’s overall topic, namely corporate liability for transnational environmental liability, two ASR issues are of particular interest which will be considered in more detail below. First, under what legal conditions is corporate conduct attributable to a State so that the State is responsible for any transnational environmental damage caused by a given corporation (¶ 46 *et seq*)? Second, are the customary rule on compensation (Art 36 ASR) suitable to provide adequate compensation for damage to the environment (¶ 64 *et seq*)?

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<sup>89</sup>This approach allows mandatory insurance for environmentally-hazardous activities (Chap. 5 ¶ 13 (Sect. 5.2)) or state liability (Chap. 11), since effective financial compensation is covered by the polluter-pays principle. In this regard, the principle has to balance compensation and prevention, as the former can be undermined by the polluter’s bankruptcy (see the 2000 *Baia Mare Cyanide Spill* case, (Chap. 5 ¶ 5 (Sect. 5.1)).

<sup>90</sup>The phrase ‘ultimate responsibility and liability’ allows for cost recovery and recourse.

<sup>91</sup>E.g., if national law and practice releases domestic public and private polluters *per se* from responsibility and liability.

<sup>92</sup>E.g., if national law and practice releases domestic public and private polluters of an economic sector, such as the car industry, from liability without objective reason.

<sup>93</sup>ICJ *Certain Activities Carried Out by Nicaragua in the Border Area* (Costa Rica v Nicaragua) [2018] ICJ Rep 15, para. 31.

### 3.4.1 Responsibility for Public Activities and Omissions

46 The 1941 Trail Smelter Award carefully noted that “no State has the right to use (. . .) its territory” and thereby addressed public activities. Any State, acting through its organs (Article 4 ASR), can directly cause damage to the environment of the neighbouring State by engaging in a variety of activities, such as weapons tests or public infrastructure projects.<sup>94</sup> By way of example, in the 2015 *Certain Activities and Construction of a Road* case, the ICJ had to assess Nicaragua’s and Costa Rica’s environmental duties linked to Nicaragua’s dredging activities and Costa Rica’s road construction.<sup>95</sup>

#### 47 Article 4(1) ASR: Conduct of Organs of a State

“The conduct of any State organ shall be considered an act of that State under international law, whether the organ exercises legislative, executive, judicial or any other functions, whatever position it holds in the organization of the State, and whatever its character as an organ of the central government or a territorial unit of the State.”

48 When acting in their official capacity, State organs represent the State irrespective of whether the act is of a sovereign or commercial legal nature.<sup>96</sup> Proceeding from the preventive obligations under the no-harm rule that applies to both public and private harmful activities (¶ 21), one may conclude that it does not matter whether a State is responsible for a failure to prevent harmful private activities or whether it is directly responsible for an environmentally harmful outcome arising from its public activities due to attribution. However, this conclusion would be premature because, with regard to private activities, customary international law acknowledges that a State has limited knowledge of what happens on its territory in the private economic sphere (e.g. the illegal use of CVC-11 gas in Eastern China<sup>97</sup>).<sup>98</sup> Obviously, if the harmful activities are attributable to the State it is not accepted under the rules of State responsibility for the State to exonerate itself by claiming it had no control over or knowledge of the activities. This fact, however, does not turn the State’s obligation under the no-harm rule into an obligation of result in the sense that the occurrence of significant transboundary harm caused by State organs necessarily triggers the

<sup>94</sup>PCA *Trail Smelter Case* (United States v Canada) (1941) 3 RIAA 1905, *see also*: PCA *Lac Lanoux Arbitration* (France v Spain) (1957) 12 RIAA 281.

<sup>95</sup>ICJ *Certain Activities Carried Out by Nicaragua in the Border Area* (Costa Rica v Nicaragua) and *Construction of a Road in Costa Rica along the San Juan River* (Nicaragua v Costa Rica) [2015] ICJ Rep 665, para. 100 and 177.

<sup>96</sup>ILC, Draft Articles on Responsibility of States for Internationally Wrongful Acts, with commentaries, YBILC 2001 Vol. II Part 2, UN Doc A/56/10, Article 4 ASR para. 6.

<sup>97</sup>Montzka et al. (2018), p. 413.

<sup>98</sup>Seršić (2016), p. 163.

State's responsibility. Rather, the State's obligation remains a due diligence obligation of conduct because the State does not necessarily have full control over transboundary environmental impacts when implementing governmental projects. Nevertheless, a State has considerably more courses of action available to prevent transboundary environmental damage when such damage is of its own making.

### 3.4.2 *Environmentally Harmful Activities of State-Owned Corporations*

The flexible standard of care in international environmental law draws attention to State-owned enterprises (SOEs) and State-controlled entrepreneurial activities. In many industrialised States (OECD States), private producers and private consumers cause the vast majority of environmental damage with SOEs playing a relatively minor role as there are so few of them.<sup>99</sup> By way of contrast, in emerging economies such as China, India and Brazil, as well as post-transition economies such as Russia, Hungary and the Baltic States, governments are still significant shareholders in many large companies carrying out important domestic activities, for example, in the mining and energy sectors as well as in telecommunications, banking and transport.<sup>100</sup> When this is the case the State has, in one way or another, influence on the decisions and activities of the SOE.

Generally speaking, the ILC commentaries on the ASR's rules of attribution are of little help as far as the acts of SOEs are concerned. In the context of Article 4 ASR, which deals with the conduct of the organs of a State, the commentaries do not address the question of whether SOEs can be considered as State organs. Even the commentary to Article 8 ASR, dealing with the private conduct directed or controlled by a State, avoids explicitly mentioning SOEs. In contrast, the ILC commentary to Article 5 ASR does provide some insight into this matter, as seen in the box below.

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<sup>99</sup> See the definition of an SOE in OECD, OECD Guidelines on Corporate Governance of State-Owned Enterprises, 2015, <https://doi.org/10.1787/9789264244160-en>, last accessed 25 April 2022: "A state-owned enterprise is any corporate entity recognised by national law as an enterprise and in which the central level of government exercises ownership and control."

<sup>100</sup> OECD, The Size and Sectoral distribution of State-Owned Enterprises, 2017, 8, <https://doi.org/10.1787/9789264280663-en>, last accessed 25 April 2022.

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**51 Article 5 ASR: Conduct of Persons or Entities Exercising Elements of Governmental Authority**

“The conduct of a person or entity which is not an organ of the State under article 4 but which is empowered by the law of that State to exercise elements of the governmental authority shall be considered an act of the State under international law, provided the person or entity is acting in that capacity in the particular instance.”

**52** According to the ILC commentary to Article 5 ASR, the fact that (1) a company is classified as public in the domestic legal system, (2) a State participates in a company’s raising of capital or (3) the State has ownership of company assets are not decisive criteria for attribution of the company’s conduct to the State under Article 5 ASR.<sup>101</sup> Rather, every company, be it State-owned or not, empowered by domestic law to exercise governmental authority falls within the scope of Article 5 ASR. To this end, domestic law has to clearly recognise certain activities of any company in question as having public purposes, in contrast to having private for-profit purposes, to attribute any acts undertaken in performing these functions to the State.<sup>102</sup> Having said that, Article 5 ASR does not rule out that under specific circumstances SOEs can be considered *de facto* organs which, according to the ICJ, fall under the scope of Article 4 ASR (see ¶ 47).<sup>103</sup> The ICJ considers any entity in a relationship of complete dependence on the State as a *de facto* organ, even if it does not enjoy organ status under domestic law.<sup>104</sup> If this complete dependence is established, the legal nature of the act, i.e. whether it was undertaken with governmental authority or as a commercial act, is of no consequence for attribution. In this respect, it is important not to paint all SOEs worldwide with the same brush but to have a closer look at the particulars and traditions of specific States. For example, the author *Ji Li* considers the relationship between the Chinese government and Chinese SOEs as quite different from that of their western counterparts.<sup>105</sup> In any case, special relevance in the context of Article-4 attribution is the dual function of SOEs’ executives as both State organs and chief executive officers (CEOs). In

<sup>101</sup> ILC, Draft Articles on Responsibility of States for Internationally Wrongful Acts, with commentaries, YBILC 2001 Vol. II Part 2, UN Doc A/56/10, Article 5 para. 3.

<sup>102</sup> Attribution of a state-owned corporation-act to a state according to Article 5 ASR is of special importance in international investment law, see *Emilio Agustín Maffezini v Spain* ARB/97/7, 13 November 2000, para. 77–83.

<sup>103</sup> ICJ *Application of the Convention on the Prevention and Punishment of the Crime of Genocide* (Bosnia and Herzegovina v Serbia and Montenegro) [2007] ICJ Rep 43, para. 392.

<sup>104</sup> ICJ *Application of the Convention on the Prevention and Punishment of the Crime of Genocide* (Bosnia and Herzegovina v Serbia and Montenegro) [2007] ICJ Rep 43, para. 397.

<sup>105</sup> Li (2015), p. 403.

addition, the State's authority to give comprehensive and binding instructions to an SOE's management is also of relevance.<sup>106</sup>

If the prerequisites of neither Article-4 nor Article-5 attribution are given, an SOE must be considered as a private actor. As a rule, any unlawful conduct of private individuals and companies within a State's territory does not lead to the international responsibility of the State for the private conduct unless the conduct is attributable to the State under the strict conditions of Article 8 ASR.<sup>107</sup>

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#### **Article 8 ASR: Conduct Directed or Controlled by a State**

"The conduct of a person or group of persons shall be considered an act of a State under international law if the person or group of persons is in fact acting on the instructions of, or under the direction or control of, that State in carrying out the conduct."

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Most importantly, it does not suffice for the purpose of attribution under Article 8 ASR that a private actor has committed an environmentally harmful act on a State's territory or that the State holds a certain percentage of ownership that goes hand in hand with structural control (voting rights) and oversight responsibilities. Unquestionably, a State's voting rights are important factors in the context of Article-8 attribution, together with the right to nominate and dismiss upper management, the right to give specific instructions and to exercise veto powers.<sup>108</sup> However, the ICJ made it plain that for Article-8 attribution it does not suffice that the State has overall control concerning the entity's activities; the State must have instructed or exercised effective control over the harmful act, for example, the introduction of toxins into the transboundary river. This degree of effective control exercised by State organs can be difficult to establish as far as the day-to-day business of an enterprise is concerned, even if it is State-owned. Most importantly, if the management of an SOE acts contrary to instructions issued by the company's oversight bodies in which the State is represented, the State can be deemed as having no effective control over the SOE's acts. As a result, these acts, e.g. clandestine toxic emissions, are not attributable to the State under Article 8 ASR.<sup>109</sup>

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<sup>106</sup>ICSID *Deutsche Bank v Sri Lanka* ARB/09/2, 31 October 2012, para. 405b.

<sup>107</sup>Contradictory in this respect, the PCA *Trail Smelter Case* (United States v Canada) (1941) 3 RIAA 1905, at 1965, 1966 "Dominion of Canada is responsible in international law for the conduct of the Trail Smelter."

<sup>108</sup>Dereje (2016), pp. 405–407.

<sup>109</sup>Note that *ultra vires* acts (Article 7 ASR) are attributable to the state but Article 7 does not apply to Article 8 ASR, meaning unauthorised private acts are not attributable due to the state's obvious lack of effective control over the conduct.



## Chernobyl

56 The Chernobyl nuclear disaster (1986) caused significant environmental damage as a result of nuclear fall-out in Sweden, Germany and the United Kingdom. Even though the Chernobyl Nuclear Power Station was a Soviet SOE, no injured State openly discussed the State responsibility of the Soviet Union based on legal attribution (Articles 4 to 8 ASR) when reserving their right to assert claims for damages against the Soviet Union. From the injured States' statements,<sup>110</sup> it can be concluded that they considered it a source of legal uncertainty that the Soviet Union was not a party to any international convention on the civil liability of operators.<sup>111</sup> Referring to the absence of treaty obligations as a basis of the Chernobyl Nuclear Power Station's operator liability, the Swedish government mentioned "customary international law principles", which probably refers to the no-harm rule and which may be invoked to support a claim against the Soviet Union.<sup>112</sup> Even if legal uncertainties shaped the opinions of the injured States at the time, the Chernobyl case can be used today as an example of the tendency of States to avoid bringing up the delicate issue of attribution as far as SOEs are concerned. More generally, the lack of meaningful international claim and compensation practice in the aftermath of Chernobyl is the reason why the case's significance for the international no-harm rule is rather limited. However, it is noteworthy that after 1986 States rushed to amend existing<sup>113</sup> and negotiate new nuclear civil liability conventions.<sup>114</sup> This illustrates that the international community of States favoured a path that involved the civil liability of SOEs to redress damage rather than pursuing State responsibility triggered by the attribution of the SOE's harmful acts.

<sup>110</sup> Reprinted in Sands and Peel (2018), p. 753 *et seq.*

<sup>111</sup> See Hansard, House of Commons 16 November 1987, Vol 122, Col 888 (Ms Michael Forsyth) available at <https://api.parliament.uk/historic-hansard/volumes/6C/index.html>, last accessed 25 April 2022.

<sup>112</sup> Correspondence between Sands and the Swedish Embassy in London, 10 December 1887, reprinted in Sands and Peel (2018), p. 753.

<sup>113</sup> In September 1986, less than six months after Chernobyl, experts from both the OECD/NEA and the IAEA concluded that a joint protocol uniting the Paris and Vienna Conventions would be the most practical and effective solution for closing existing nuclear-liability gaps. The result was the adoption, in September 1988, of the Joint Protocol Relating to the Application of the Vienna Convention and the Paris Convention (Joint Protocol).

<sup>114</sup> E.g., 1997 Protocol to Amend the Vienna Convention on Civil Liability for Nuclear Damage and the 1997 Convention on Supplementary Compensation for Nuclear Damage.

### 3.4.3 *Responsibility of the Home State for Corporate Activities Abroad*

The above considerations focused on the responsibility of a State of origin for transboundary environmental damage caused by a local public or private actor. Even though the legal conditions of the no-harm rule and the responsibility triggered by its violation are relatively clear-cut as far as the State of origin is concerned, they appear too narrow to effectively address environmental harm caused by transnationally operating companies. One aspect that appears unaddressed by the no-harm rule is the responsibility of the home State of a transnational corporation (TNC)<sup>115</sup> whose international subsidiaries operate in other States (so-called ‘host States’) and where they cause environmental damage. The transboundary aspect here is not the environmental damage but rather the managerial control of the parent company over its subsidiaries.

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#### **Texaco Oil Extraction**

That the issue of transboundary managerial control of the parent company needs addressing is exemplified by Texaco, a subsidiary of Chevron since 2001, whose oil extraction operations outside of its home State (the USA) between 1964 and 1992 led to serious crude oil contamination of the soil, water pollution, deforestation and soil erosion in Ecuador.<sup>116</sup> In 1995, Texaco reached a US\$40 million agreement with the Ecuadorian government for a remediation programme, however, environmentalists subsequently disputed the success of the clean-up efforts. So far, the USA’s sole contribution to the case is a US court ruling from 2011, according to which an Ecuadorian Lago Agrio judgment of 2001 requiring Chevron to pay US\$9.5 billion for the environmental damage is not enforceable in the US due to serious procedural defects (judicial corruption).<sup>117</sup>

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The academic debate about home-State responsibility for environmental damage in the host State is split along three legal avenues: the direct international responsibility of the parent company and/or subsidiary (Chap. 4), the liability of the parent company under the laws of the home State (Chap. 7) and the responsibility of the parent company’s home State, which is the focus of this Chapter. As discussed below (Chap. 7) a home State has the right to regulate the activities of its

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<sup>115</sup> A TNC is characterised by geographically dispersed units whereby its headquarters and subsidiaries are located in different countries, see Sageder and Feldbauer-Durstmüller (2019), pp. 1 *et seq.*

<sup>116</sup> Morgera (2009), p. 6.

<sup>117</sup> The US ruling has been echoed by the decision of an arbitral tribunal administered by the Permanent Court of Arbitration, PCA Case No 2009-23, Chevron v Ecuador, Second Partial Award on Track II of 30 August 2018, para 10.13.

corporations outside of its territory as long as the home State has some accepted basis for jurisdiction, such as the active personality principle linked to the corporation's nationality (Sect. 7.7). It is, however, a completely different matter whether home States are obliged under international law to diligently take appropriate measures to prevent TNCs from damaging their host State's environment either directly or through their subsidiaries.

## 60 **Canatuan Mining Project**

In 2004, a representative of a Philippine municipality visited Canada to raise concerns about alleged violations of environmental and human rights at the Canatuan mining project on the island of Mindanao. The mine operator was owned by Canadian mining company TVI Pacific.<sup>118</sup> In reaction to these complaints, the Parliamentary Subcommittee on Human Rights and International Development expressed concerns that Canada does not yet have laws to ensure that the activities of Canadian mining companies abroad conform to human rights standards. In its report to the Canadian Parliament, the Committee called for "clear legal norms" to ensure that Canadian corporations and residents were held accountable for environmental and human rights violations abroad.<sup>119</sup> In October 2005, the Canadian government rejected the Committee's recommendation to establish accountability rules. While the Government acknowledged that States are primarily responsible for the promotion and protection of human rights as well as the environment, it deemed that Canadian laws with extraterritorial application would conflict with the sovereignty of foreign States.<sup>120</sup>

61 Considering the reluctance of the overwhelming majority of home States to force their TNCs into compliance with environmental norms in their foreign operations, it is difficult to establish that there is State practice and *opinio iuris*. (§15 *et seq*) indicating the conviction of home States that they are legally obliged to regulate their TNCs' worldwide environmental conduct. This creates an obvious problem as such a conviction would be the basis of the home State's possible international duty to prevent harm caused by a TNC abroad. That said, there is no denying that the harm-prevention rule has the potential to evolve in this direction, as past developments of the traditional no-harm rule illustrate:<sup>121</sup> Whereas in 1941 the Trail Smelter award's focus was on reparation, Principle 21 of the 1972 Stockholm Declaration shifted the emphasis of the rule to States' positive duty to prevent. In addition, Principle 21 extended the no-harm rule to the global commons, which was declared a part

<sup>118</sup>The case is reported in Seck (2008), p. 180.

<sup>119</sup>House of Commons, Standing Comm. On Foreign Affairs & International Trade, 1st Sess, 38th Parl., 14th Report: Mining in Developing Countries 1 (2005) (Can) at 3.

<sup>120</sup>Seck (2008), p. 120.

<sup>121</sup>See Brent (2017), pp. 32–44.

of customary international law by the ICJ in the 1996 Nuclear Weapons Advisory Opinion.<sup>122</sup> Fourteen years later, the ICJ identified in the 2010 *Pulp Mills* case definite procedural obligations as part of the no-harm rule. All of this gives rise to legitimate expectations that the no-harm rule has not yet reached the end of its legal development. Most importantly, the nexus between human rights and a healthy environment may mean that customary environmental due-diligence obligations of a TNC home State may develop in the wake of extraterritorial human rights obligations (Chap. 10; Sect. 10.2).<sup>123</sup>

Having already moved ahead of general environmental law in this regard, human rights law cautiously embraces a duty of the home State to ensure that a parent company uses its corporate influence over its international subsidiaries to ensure that the latter respect human rights standards in host States. The Human Rights Committee in its recent General Comment No. 36 (2018) on Article 6, which deal with the right to life, elucidated that States parties to the ICCPR must “take appropriate legislative and other measures to ensure that all activities taking place in whole or in part within their territory and other places subject to their jurisdiction, but having a direct and reasonably foreseeable impact on the right to life of individuals outside their territory, including activities taken by corporate entities based in their territory or subject to their jurisdiction, are consistent with Article 6 (. . .).”<sup>124</sup> In communication No. 2285/2013 (*Yassin v Canada*) of 2017, the Human Rights Committee took a more cautious tone by observing that “human rights obligations of a State on its territory cannot be equated in all respects with its obligations outside its territory”. Nevertheless, the Committee pointed out that there are situations where a State party has an obligation to ensure that rights under the ICCPR are not impaired by extraterritorial activities conducted by enterprises under its jurisdiction, particularly in cases where violations of human rights are very serious.<sup>125</sup>

In the same General Comment No 36 (2018), the Committee underlined that the right to life has an environmental dimension, noting that environmental degradation and climate change constitute some of the most pressing and serious threats to the ability of present and future generations to enjoy the right to life. The Committee thus concluded that the obligations under international environmental law should conform to the content of Article 6 of the International Covenant on Civil and Political Rights (ICCPR).<sup>126</sup> When considering all of these elements of the Human Rights Committee’s interpretation of Article 6 ICCPR as a whole, the obligation of

<sup>122</sup> ICJ *Legality of the Threat or Use of Nuclear Weapons* [1996] ICJ Rep 226, para. 29.

<sup>123</sup> Viñuales (2016), p. 218.

<sup>124</sup> Human Rights Committee, General comment No. 36 (2018) on article 6 of the International Covenant on Civil and Political Rights, on the right to life—Doc. CCPR/C/GC/36, 2018, para. 22 (footnotes omitted).

<sup>125</sup> Human Rights Committee, Decision adopted by the Committee under article 5 (4) of the Optional Protocol, concerning communication No. 2285/2013, 26 October 2017, Doc. CCPR/C/120/D/2285/2013 para. 6.5.

<sup>126</sup> Human Rights Committee, General comment No. 36 (2018) on article 6 of the International Covenant on Civil and Political Rights, on the right to life—Doc. CCPR/C/GC/36, 2018, para. 62.

the home State to respect the environmental aspects of the right to life by regulating its TNC's transnational operations begins to take on a more substantive shape. Nevertheless, a word of caution is due: in contrast to human-rights courts, the Human Rights Committee lacks the legal power to authoritatively interpret the ICCPR as a 'living instrument'. Even though the international community, including the ICJ, ascribes great weight to the interpretations of the Committee,<sup>127</sup> progressive developments of obligations under the ICCPR require either the explicit or implicit acceptance of States parties over a certain period (cf. Article 31(3)(b) VCLT).<sup>128</sup> States parties have predominantly refrained from commenting on Draft Comment No. 36 before its adoption by the Human Rights Committee,<sup>129</sup> however, this silence does not necessarily mean that all States parties share the Committee's views. This is also evidenced by the heated debate involving the earlier Zero Draft on a "legally binding instrument to regulate (...) the activities of transnational corporations and other business enterprises", published by the UN Human Rights Council's intergovernmental working group on 16 July 2018.<sup>130</sup> Draft Article 9 of the Zero Draft stipulated home-State obligations comparable to those described in General Comment No 36 and had provoked harsh criticism by industrial States, most notably the European Union and its Member States (Chap. 4 ¶ 40 *et seq* (Sect. 4.2.3)).<sup>131</sup> Despite this dissent, the Human Rights Committee's extensive interpretation of the States parties' obligation vis-à-vis transnationally operating corporations is the first small step towards an internationally recognised responsibility for a home State if it fails to do all in its power (due diligence) to prevent its companies from causing environmental damage and human suffering in host States.

<sup>127</sup> ICJ *Ahmadou Sadio Diallo* (Republic of Guinea v Democratic Republic of the Congo) [2010] ICJ Rep 639, para. 66.

<sup>128</sup> ICJ *Application of the International Convention on the Elimination of All Forms of Racial Discrimination* (Qatar v United Arab Emirates), Judgment of 4 February 2021, para 101.

<sup>129</sup> But see Canada: "The Committee's interpretation of Article 6 attempts to expand the scope of the Covenant beyond the territory under the jurisdiction of the State. Such an interpretation would impinge on well-established principles of sovereignty. Canada requests that the General Comment reflect the exact language of Article 2(1) of the Covenant." USA: "Similarly, the United States does not agree with the Committee's assertions of the positive measures articulated in paragraphs 26" (in the adopted General Comment para. 22); The Netherlands: "Additionally, the text of paragraph 26 referring to corporate entities goes beyond the UN Guiding Principles on Human Rights and Business, which does not require States to regulate extraterritorial activities of businesses domiciled in their territory and/or jurisdiction." online available at <https://www.ohchr.org/EN/HRBodies/CCPR/Pages/GC36-Article6Righttolife.aspx>, last accessed 25 April 2022.

<sup>130</sup> Zero Draft of the legally binding instrument to regulate, in international human rights law, the activities of transnational corporations and other business enterprises, available at <https://www.ohchr.org/Documents/HRBodies/HRCouncil/WGTransCorp/Session3/DraftLBI.pdf>, last accessed 28 August 2022.

<sup>131</sup> Cf. Zamfir, European Parliament Research Service, Briefing: Towards a binding international treaty on business and human rights, November 2018, p. 10, 11, available at [http://www.europarl.europa.eu/RegData/etudes/BRIE/2018/630266/EPRS\\_BRI\(2018\)630266\\_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/BRIE/2018/630266/EPRS_BRI(2018)630266_EN.pdf), last accessed 25 April 2022.

### 3.4.4 *State Responsibility and Compensable Damage to the Environment: The ICJ Wetland Compensation Case*

In 2018, the ICJ had the opportunity to adjudicate for the first time in its existence on a claim for compensation for environmental damage (*Wetland Compensation Case*).<sup>132</sup> The case concerned compensation owed by Nicaragua to Costa Rica brought about by Nicaragua's excavation activities in a wetland border area protected under the Ramsar Convention. Highly anticipated by international environmentalists, the judgment is indicative of the general reluctance of the international judiciary to depart from an economy-centred view on redress for environmental harm. This general observation is valid irrespective of whether a State caused the environmental harm (*Wetland Compensation*) or a corporation (*Trail Smelter*).<sup>133</sup>

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The *Wetland Compensation* case illustrates the dilemma in which the ICJ finds itself: on the one hand, the Court acknowledged the value of an intact environment but, on the other hand, it struggled to properly quantify environmental damage due to its economy-centred value system. Having developed into an important international environmental court for inter-State disputes, the ICJ begins with a promising statement on the intrinsic value of the environment: "(...) it is consistent with the principles of international law governing the consequences of internationally wrongful acts, including the principle of full reparation, to hold that compensation is due for damage caused to the environment, in and of itself, in addition to expenses incurred by an injured State as a consequence of such damage."<sup>134</sup>

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With regard to the valuation of the lost or impaired environmental goods and services, the ICJ took the view that international law does not prescribe specific methods of valuation and thus opted for a holistic approach by considering the ecosystem as a whole rather than attributing monetary values to specific categories of environmental goods and services with different recovery periods.<sup>135</sup> Despite this auspicious point of departure, which may have an important impact on future environmental law cases before other international courts and tribunals, the ICJ judgment itself did not live up to the expectations of many. Besides stating the fact that the ecosystem should be treated as a whole, the Court abstained from outlining the parameters of any possible overall valuation. After discussing the methods proposed by Costa Rica as the applicant ('ecosystem approach') and

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<sup>132</sup>ICJ *Certain Activities Carried Out by Nicaragua in the Border Area* (Costa Rica v Nicaragua) [2018] ICJ Rep 15 (so-called Wetland Compensation Case).

<sup>133</sup>Kindji and Faure (2019), p. 7.

<sup>134</sup>ICJ *Certain Activities Carried Out by Nicaragua in the Border Area* (Costa Rica v Nicaragua) [2018] ICJ Rep 15, para. 41.

<sup>135</sup>ICJ *Certain Activities Carried Out by Nicaragua in the Border Area* (Costa Rica v Nicaragua) [2018] ICJ Rep 15, para. 78.

Nicaragua as the respondent (‘cost of replacement approach’), the Court ultimately settled on what it considered a “reasonable” amount of damages.<sup>136</sup> That said, the Court deemed that the removal of approximately 300 trees to be the most significant damage. In this respect, the ICJ awarded Costa Rica a moderate sum (US\$120,000) in direct relation to the costs and expenses incurred in preventing irreparable prejudice to the wetland which was degraded by Nicaragua’s excavation activities.<sup>137</sup> Most importantly, the Court did not make any equity considerations, such as the character of the affected terrain and the implications of deforestation for climate change.<sup>138</sup> In relation to this, Judge Bhandari’s criticism is hardly surprising when he noted in his separate opinion that “(o)nly if those causing harm to the environment are made to pay beyond the quantifiable damage can they be deterred from causing similar harm in the future.”<sup>139</sup>

67 Another prominent issue in environmental litigation, the causal nexus between damage and unlawful activity, was only shallowly addressed by the ICJ in the *Wetland Compensation case* and even then, it was provided without any legal guidelines of practical value apart from the observation that it is within the Court’s discretion to determine whether the causal nexus is sufficiently proven:

“In cases of alleged environmental damage, particular issues may arise with respect to the existence of damage and causation. The damage may be due to several concurrent causes, or the state of science regarding the causal link between the wrongful act and the damage may be uncertain. These are difficulties that must be addressed as and when they arise in light of the facts of the case at hand and the evidence presented to the Court. Ultimately, it is for the Court to decide whether there is a sufficient causal nexus between the wrongful act and the injury suffered.”<sup>140</sup>

In the given case, the Court had no problems establishing a causal link between the four categories of environmental goods and services for which Costa Rica claimed compensation (trees, other raw materials, gas regulation and air quality services, as well as biodiversity) and Nicaragua’s excavation activities in the area. It considered the impairment and loss without further ado a direct and certain consequence of the activities.<sup>141</sup> As such, the *Wetland Compensation case* can be regarded as an example for a rather conventional causal nexus determination and is therefore unrewarding for cases of cumulative damage or long-standing damage to the

<sup>136</sup>ICJ *Certain Activities Carried Out by Nicaragua in the Border Area* (Costa Rica v Nicaragua) [2018] ICJ Rep 15, para. 52 and 86.

<sup>137</sup>ICJ *Certain Activities Carried Out by Nicaragua in the Border Area* (Costa Rica v Nicaragua) [2018] ICJ Rep 15, para. 86.

<sup>138</sup>ICJ *Certain Activities Carried Out by Nicaragua in the Border Area* (dissenting opinion Dugard) (Costa Rica v Nicaragua) [2018] ICJ Rep 119, para. 7.

<sup>139</sup>ICJ *Certain Activities Carried Out by Nicaragua in the Border Area* (separate opinion Bhandari) (Costa Rica v Nicaragua) [2018] ICJ Rep 96, para. 19.

<sup>140</sup>ICJ *Certain Activities Carried Out by Nicaragua in the Border Area* (Costa Rica v Nicaragua) [2018] ICJ Rep 15, para. 34.

<sup>141</sup>ICJ *Certain Activities Carried Out by Nicaragua in the Border Area* (Costa Rica v Nicaragua) [2018] ICJ Rep 15, para. 75.



environment not attributable to a single entity or State but to a sector or types of hazardous and harmful activities that are at the core of an increasing number of environmental litigations.

### 3.5 State Liability for Transboundary Environmental Damage

As discussed above (¶ 3 *et seq*), the legal concept of State liability for environmental harm covers all the rules which are not concerned with the international wrongfulness of a State's action or inaction. Consequently, operationalising State liability requires a conventional or customary primary rule which can be used to oblige a State to pay damages for environmental harm. In the absence of any general treaty on State liability for environmental damage, customary international law remains the main option as a source a primary liability rule (¶ 14 *et seq*). Such a rule would not only require the supporting general practice of States, such as domestic jurisprudence, laws or international treaties to this effect, but also States' acceptance that these practices are required under international law (*opinio juris*).<sup>142</sup> At first glance, the Trail Smelter Award, considered to be a landmark decision of modern international environmental law<sup>143</sup>, seems to provide such a liability rule.<sup>144</sup> However, the wording of the 1941 award points towards Canada's responsibility for transboundary environmental harm rather than Canada's liability (¶ 7).<sup>145</sup> Similarly, international treaty practice does not support the existence of a customary rule of State liability for lawful acts that cause damage. If a plethora of liability instruments were in existence that amounted to sufficient State practice and *opinio juris*, an argument could be made for a rule under customary international law. However, among the 1414 currently active MEAs (¶ 11), only one imposes liability on States for damage caused by lawful activities under their jurisdiction or control, namely the Convention on International Liability for Damage Caused by Space Objects.<sup>146</sup> The Convention on the Law of the Non-navigational Uses of International Watercourses considers State liability an option if the State of origin and the affected State agree on it (Article 7 para 2; ¶ 28).<sup>147</sup> By way of comparison, 13 MEAs establish a regime that focuses

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<sup>142</sup> Article 38(1)(b) Statute of the International Court of Justice: "international custom, as evidence of general practice accepted as law".

<sup>143</sup> Schoenbaum (2006), p. 196.

<sup>144</sup> PCA *Trail Smelter Case* (United States v Canada) (1941) 3 RIAA 1905; amongst the wealth of academic writing see Bratspies and Miller (eds) (2006); Read (1963), p. 213; Mickelson (1993), p. 219.

<sup>145</sup> PCA *Trail Smelter Case* (United States v Canada) (1941) 3 RIAA 1905, 1965.

<sup>146</sup> Convention on International Liability for Damage Caused by Space Objects of 29 March 1972, entered into force 1 September 1972) 961 UNTS 13810.

<sup>147</sup> Convention on the Law of the Non-navigational Uses of International Watercourses of 21 May 1997, entered into force 17 August 2014, 2999 UNTS 77.



on the civil liability of private or public operators for ultra-hazardous activities, although only four of such agreements are in force (Chap. 5 ¶ 2 *et seq* (Sect. 5.1)).<sup>148</sup> At least when seated at the negotiating table, civil liability is a more palatable option for States than their own liability.

69 The Liability Convention for Damage Caused by Space Objects regulates the highly specialised area of outer space and is not predominantly environment orientated, which make the Convention *lex specialis* rather than evidence of a general rule. Article 7(2) of the 1997 Convention of the Non-navigational Uses of International Watercourses makes provision for compensation, even if the State using the watercourse complied with its preventive obligations pursuant to Article 7(1). However, the Convention only stipulates the duty to discuss State liability with the affected watercourse States after significant harm has occurred, which is exemplary for States' reluctance to commit in advance to their being liable. When negotiating the 2010 Nagoya-Kuala Lumpur Supplementary Protocol on Liability and Regress, the topic "State liability for transboundary damage caused by living modified organism" was quickly removed from the table due to a lack of support.<sup>149</sup> The same thing happened during the negotiations of a liability instrument implementing Art 16 of the 1976 Barcelona Convention for the Protection of Marine Environment and the Coastal Region of the Mediterranean:<sup>150</sup> Not only were the Contracting Parties unable to agree on a legally binding instrument and had to settle for guidelines (Chap. 5 ¶ 37 *et seq* (Sect. 5.4)), they were also unwilling to support any concept that includes residual State liability if, for example, the liable operator defaults.<sup>151</sup> Finally, the liability-hostile interpretative statements to environmental treaties such as the 2015 Paris Agreement (Chap. 16) and the 1979 Convention on Long-Range Transboundary Air Pollution v 1979 (footnote to Article 8) show that, at least in principle, States will not readily accept liability unless they can be made internationally responsible for unlawful acts or omissions.

70 The lack of conventional liability rules is not remedied by general principles of law. The polluter-pays principle does not support a primary rule of State liability for transboundary environmental damage. At best, the principle can justify operator liability under international law, irrespective of whether the operator is public or private (¶ 38 *et seq*). However, State liability and operator liability are two different liability concepts since only the former is triggered by the occurrence of transboundary environmental damage regardless of the operator to whom the damage is attributable.

71 The aspects discussed above, when considered as a whole, make it evident that customary international law does not currently provide any rule on State liability for

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<sup>148</sup>Daniel (2003).

<sup>149</sup>Lefebvre (2016), p. 80.

<sup>150</sup>The 1976 Barcelona Convention (1102 UNTS 44) was amended several times; what was originally Art 12 is now the 1995 amendment to Art 16.

<sup>151</sup>Guideline A para. 2, Doc UNEP(DEPI)/MED.IG,17/10 of 18 January 2008; 210; for details see Scovazzi (2009).

transboundary harm due to a lack of meaningful State practice and, most importantly, *opinio iuris* (¶ 16).

### 3.6 Conclusion

Much has been written about State responsibility for transboundary environmental harm, not only to make sense of the 1941 *Trail Smelter Award* in a modern context but also because of the growing number of ICJ judgments that shape the modern understanding of the no-harm rule and the preventive obligations of States attached to it. Despite a number of remaining legal uncertainties, among them the shape and form of possible substantive due-diligence obligations, the no-harm rule, or the harm-prevention rule as it is also referred to, is a beacon of hope for international environmental law. This cannot be said about the state of affairs surrounding States' potential liability for transboundary environmental harm. The notion that the State of origin could be primarily, residually and second-tier liable for transboundary environmental damage, irrespective of any wrongdoing or lack of diligence, has little to no governmental support in international negotiations. This is especially true for any commitment within multilateral environmental regimes which, from the perspective of States, would be incalculably expensive, and therefore intolerable, public-liability risks.

What is of particular interest in the context of this study are any obligations of States under customary international law and general principles of environmental law to provide for corporate liability for transboundary environmental damage. Therefore, the question arises whether States' own substantive due-diligence obligations under the no-harm rule could encompass a State's duty to ensure the liability of a corporation in cases where a risk of transboundary environmental harm materialises. Even though civil liability can rightly be considered an important part of any prevention strategy, a customary rule that links corporate liability provisions to States' substantive obligations under the no-harm rule does not exist yet. Another avenue of interest pursued by this Chapter is the use of general principles of international environmental law to establish a duty for States to provide for corporate environmental liability within their domestic legal systems. The polluter-pays principle appears to be ideally suited for this purpose, however, it is still essentially only a policy guideline that allows for many different legislative solutions to apply civil liability for any environmental harm done. That said, it can be argued that the combined principles of polluter-pays and prevention have the potential to restrict the legislative margins of policy choices when States shape their national liability regimes: the polluters' ultimate responsibility and liability for any significant environmental damage caused shall not be excluded invariably, indiscriminately and arbitrarily.

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# Chapter 4

## Liability of Private Actors in International Law



Peter Gailhofer and Cara-Sophie Scherf

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### 4.1 Introductory Remarks: Rights and Obligations in International Environmental Law and Legal Policy

This Chapter examines the legal status of private actors as potential duty-holders in international law and considers ideas and arguments brought forward to substantiate and further develop international environmental obligations for private actors. This task also requires to clarify whether and to what extent international human rights, **1**

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from which such corporate duties could arise, demand the protection of the environment.

- 2 Public international law in its traditional Westphalian<sup>1</sup> form considers States as the original legal subjects and concerns individuals indirectly by means of an intermediation of rights and obligations via States.<sup>2</sup> This narrow understanding of international legal subjectivity has, however, evolved in many nuanced ways over the centuries. While States still are considered to be the normal or ‘natural’ legal subjects of international law, other international actors and, in particular, individuals are now recognized as derivative, limited, passive or *sui generis* subjects of international law.<sup>3</sup> As such, individuals can now, under certain conditions, be subjected to obligations and/or enjoy rights in international law.
- 3 This is true, without reservation, for individuals as holders of human rights, which are the most important example of the partial international legal personality now assigned to private actors. In principle, this is the case also with respect to companies that, at least as far as they are established as legal persons under the national laws of one or more States, can rely on the legally recognized international rights that apply to those legal entities. Examples of such corporate rights are the right to property and protection against both expropriation and arbitrary treatment or procedural rights.<sup>4</sup> The partial international legal subjectivity of corporations is also debated with respect to international investment treaties.<sup>5</sup> The question of if and to what degree human rights not only protect ‘traditional’ rights but also fundamental needs and interests related to the environment, is, in contrast, still controversial.
- 4 As further discussed below, it is widely considered that international environmental law does not directly impose obligations on transnational corporations.<sup>6</sup> It thus predominantly is seen to impose duties on the States to curtail the harmful activities of corporations operating from their territory to protect the global environment and the environment in other States. This importantly entails the obligation to provide for local enforcement mechanisms in relation to corporate violations of environmental law, either through criminal or civil liability law.<sup>7</sup>
- 5 Just as it is the case regarding State liability,<sup>8</sup> legal obligations of private actors rather are recognised with respect to human rights law. The existence of international human rights obligations for transnational and multinational corporations, although certainly not yet commonly recognized, has been analysed and vividly discussed for

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<sup>1</sup>The notion of the Westphalian system of international law refers to the peace of Westphalia in 1648 and, for many international lawyers, serves as a synonym of the modern, secular international system dominated by sovereign and equal States, cf. Fassbender (2011).

<sup>2</sup>Cf. von Arnould (2016), p. 17.

<sup>3</sup>Peters (2016), p. 42.

<sup>4</sup>Cf. Nowrot (2012), p. 8.

<sup>5</sup>Cf. Nowrot (2012), p. 8.

<sup>6</sup>Augenstein et al. (2010), p. 9. Grosz (2017); Epiney (2017), p. 35.

<sup>7</sup>Augenstein et al. (2010), p. 11.

<sup>8</sup>Cf. Chap. 3.

the last 25 years.<sup>9</sup> Furthermore, increasing efforts have been made to formally establish new ‘horizontal’ instruments for the protection of human rights in international law, which are meant to directly oblige transnational corporations towards individuals or groups as rights-holders. This discussion predominantly related to human rights now is relevant for this study if, and to the extent that a legally relevant connection between human rights and the goods and interests protected by environmental law is recognised. In other words, these debates raise the question of whether companies can violate their alleged human rights obligations by causing environmental damage: how far do human rights obligations imply the protection of environmental interests? Rapidly growing jurisprudence, as well as theoretical and policy-related debates, discuss the nature and the scope of the link between human rights and the environment.

This Chapter will try to do justice to these two variables of a human-rights-based approach to environmental protection. The first Subchapter gives a brief overview of the key debates on direct obligations for private actors in international law and then moves on to recent initiatives to establish corporate human rights obligations. The second Subchapter examines the equally vivid debates and dynamics regarding the relevant substance of potential human rights-based environmental obligations.

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## 4.2 Private Actors as Duty Holders in International Law: Status Quo and Recent Initiatives

### 4.2.1 *Direct International Obligations of Private Actors de lege lata?*

For many years, scholars have examined a weakening of the existing classical State-centric approach in international law, which is seen to be moving away from the traditional view that, under human rights law, individuals hold rights while only States bear obligations.<sup>10</sup> According to some, the present state of international law governing corporate human rights practices suggests that core human rights obligations already apply to corporations.<sup>11</sup>

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These scholars base this assumption essentially on two general arguments. On the one hand, they argue, that the “grudging acceptance”,<sup>12</sup> that some fields of international law already govern the activities of private juridical persons, also supports more general, doctrinal conclusions regarding general legal obligations of private

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<sup>9</sup>Cf. Clapham (1993).

<sup>10</sup>de Brabandere (2009).

<sup>11</sup>Stephens (2002). Cf. Clapham (2019).

<sup>12</sup>Duigbo (2008), p. 227; Clapham (2019), p. 12.



actors. For these exemplary regimes of international law, authors refer to international criminal law but also to more recent developments, such as the General Comment prepared by the UN Committee on the Rights of the Child and the General Recommendation on gender-based violence against women adopted by the UN Committee on the Elimination of Discrimination against Women.<sup>13</sup> Other examples of mandatory norms addressing corporations include international contractual agreements between corporations with respect to the terms and conditions used by those enterprises which regulate their obligations regarding human rights.<sup>14</sup> In addition, ‘voluntary’ norms adopted by international and national governments, as well as by companies, are considered to actually include many binding rules of law because they incorporate human rights norms that are supposed to be, in fact, obligatory duties rather than voluntary undertakings.<sup>15</sup> Observers have also diagnosed a “clear trend in the declarative practice of States towards extending responsibility for respecting human rights to private companies involved in the provision of private services” concerning international investment law:<sup>16</sup> Current models of International Investment Treaties, such as the Indian Model Text for Bilateral Investment Treaties, allow for counterclaims brought by a State against an investor, for example, for a breach of the law relating to human rights. Investing enterprises could accordingly find themselves embroiled in an international arbitration proceeding for failing to respect human rights.<sup>17</sup> On the level of such bilateral international treaties, individual States may be seen to deal with the implementation of direct legal obligations for private actors.<sup>18</sup> Legal discourses on the more general implications of such developments may also lead to changes in international customary law, where contractual agreements do not stipulate explicit obligations of private actors.

## 9

***Urbaser S.A. et al. v Argentina***

In 2016, the investment arbitration tribunal in the case of *Urbaser S.A. et al. v Argentina* acknowledged the right of the host State to bring a counterclaim not anticipated by an investor and, what came to many as a surprise,<sup>19</sup> affirmed the existence of obligations for investors in an unprecedented fashion.<sup>20</sup> Although the relevant Bilateral Investment Treaty (BIT), the Spain-Argentina BIT, did not explicitly stipulate the possibility of counterclaims, the tribunal took a less than traditional approach by rejecting the view that BITs do not impose

(continued)

<sup>13</sup> Clapham (2019), p. 16.

<sup>14</sup> Clapham (2019), pp. 14, 16.

<sup>15</sup> Stephens (2002), p. 80.

<sup>16</sup> McIntyre (2011), p. 152.

<sup>17</sup> Clapham (2019), pp. 14, 16. Cf. Article 14.11(i), Article 12.1(v) of the Indian Model-BIT.

<sup>18</sup> Nowrot (2018), pp. 15–16.

<sup>19</sup> Cf. Nowrot (2018), p. 17.

<sup>20</sup> Crow and Lorenzoni Escobar (2018), p. 90.

obligations on investors<sup>21</sup> and found that no provision in the BIT allows an inference that the host State does not have rights [to be pursued by a counterclaim] under it.<sup>22</sup> In addition, the tribunal held that it had to ground its judgment in harmony with other rules of international law of which it is a part, including those relating to human rights.<sup>23</sup> Even more strikingly, and again contrary to the view of past tribunals which dismissed the international legal subjectivity of private investors, the *Urbaser* tribunal found that “if the BIT is not based on a corporation’s incapacity of holding rights under international law, it cannot be admitted that it would reject by necessity any idea that a foreign investor company could not be subject to international law obligations”. As investors are entitled to invoke rights resulting from the Spain-Argentina BIT’s, more concretely from its most favored nation clause, the investor could also be held to comply with obligations under international law. The Tribunal also derived the legal subjectivity of corporations drawing on CSR as a “standard of crucial importance”, which “includes commitments to comply with human rights in the framework of those entities’ operations conducted in countries other than the country of their seat or incorporation”. Given this recent development, the tribunal draws the conclusion that it “can no longer be admitted that companies operating internationally are immune from becoming subjects of international law”.<sup>24</sup>

A second, comparable argument claims that even agreements that explicitly address States and their duty to implement and enforce obligations of corporations do, in fact, also impose legal duties on enterprises. To make this point, scholars refer to agreements stipulating environmental obligations, e.g. the Convention on Transboundary Movements of Hazardous Wastes, which prohibits unauthorised movement of hazardous wastes undertaken by “any person”, or international civil liability conventions regarding environmental damage caused by enterprises.<sup>25</sup> According to these arguments, such treaties, although, their concepts may be “still very much influenced by the traditional paradigm of international law”, in fact demonstrate the willingness of States to impose responsibilities directly on corporations. The explicit wording of various international nuclear and environmental liability conventions, according to *Peters*, would allow for the assumption of direct

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<sup>21</sup> Crow and Lorenzoni Escobar (2018), p. 96.

<sup>22</sup> *Urbaser S.A. and Consorcio de Aguas Bilbao Bizkaia, Bilbao Biskaia Ur Partzuergoa v Argentine Republic ARB/07/26*, 8 December 2016, ¶ 1183. Counterclaims also could implicate financial liability, cf. Crow and Lorenzoni Escobar (2018), p. 117.

<sup>23</sup> *Urbaser S.A. and Consorcio de Aguas Bilbao Bizkaia, Bilbao Biskaia Ur Partzuergoa v Argentine Republic ARB/07/26*, 8 December 2016, 1200.

<sup>24</sup> *Urbaser S.A. and Consorcio de Aguas Bilbao Bizkaia, Bilbao Biskaia Ur Partzuergoa v Argentine Republic ARB/07/26*, 8 December 2016, 1195.

<sup>25</sup> Stephens (2002), p. 70.

international liability of private actors as these regimes directly, and with sufficient detail, address the obligations of private actors. The respective obligations would be appropriate for the direct application of local authorities and sufficiently clear and predictable for the obliged companies.<sup>26</sup> Suggesting, that international law does not impose responsibility on private entities, because enforcement can only be achieved by way of lawsuits in one or more States and which therefore excludes these regimes from the ambit of public international law, accordingly would confuse the existence of legal responsibility with the method of implementing and enforcing it.<sup>27</sup> The lack of international enforcement and the need for national action should thus not be mistaken for the absence of an international norm defining a binding standard.<sup>28</sup>

**11** Notwithstanding these arguments, the majority of authors writing on this subject cautiously maintain that corporations and other private actors, at least in principle, are not bound by obligations in international law. This holds with respect to the first argument of a generalisation of regime specific obligations of private actors. Accordingly, there is no necessary correlation between rights and duties under the doctrine of international legal subjectivity.<sup>29</sup> Even if legal subjectivity of private entities is acknowledged in specific contexts, subjects of law are not necessarily identical in their nature or in the extent of their rights.<sup>30</sup> With respect to the given legal situation, scholars thus oppose a generalisation of regime- or sector-specific developments. For example, they insist on a clear conceptual differentiation between individual and corporate liability and between criminal liability and ‘civil’ or ‘tortuous’ liability.<sup>31</sup> The intricacies of accepting corporations as duty-bearers of human rights obligations are accordingly quite distinct from those permeating the international criminal law debate.<sup>32</sup> The described dynamics thus may point to a gradual and selective change of the legal status of private actors. General obligations for private actors however have, at best, only embryonic support in customary international law.<sup>33</sup>

**12** The second argument aimed at providing a progressive interpretation of international regimes points to perspectives for the design of international treaties and even existing avenues for the implementation of the treaties by courts and institutions. For example, the evolution of (binding) primary norms in the practice of international treaty law may provide concepts and doctrinal levers to change national jurisprudence regarding secondary obligations of private actors.

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<sup>26</sup>Peters (2014), pp. 139–146.

<sup>27</sup>Ratner (2001), pp. 479–481.

<sup>28</sup>Stephens (2002), p. 70.

<sup>29</sup>Nowrot (2018), pp. 12–13; Crow and Lorenzoni Escobar (2018), p. 98.

<sup>30</sup>Crow and Lorenzoni Escobar (2018), p. 98.

<sup>31</sup>de Brabandere (2009), p. 207.

<sup>32</sup>van den Herik and Letnar Černič (2010).

<sup>33</sup>Cf. Kanalan and Eickenjäger (2016), p. 110; Nowrot (2018), pp. 10–11.

The situation *de lege lata*, however, does not allow the conclusion that such direct duties already would exist. International agreements have to be clearly distinguished with respect to the explicit scope and the addressees of their obligations. In the practice of international and national liability law, a concept of direct responsibilities based on international environmental treaties has not yet materialised. Just as is the case with most other international regimes, obligations under these regimes, at least according to the legal status quo, are predominantly seen to directly address only States and possibly constitute State duties to implement liability regimes. They accordingly use the ‘traditional’ method to harmonise international civil law.<sup>34</sup> Treaties that establish corporate liability for environmental damage according to the predominant theory and practice do not impose obligations directly on the corporations but obligations on States to take measures to ensure the liability of legal persons engaged in the prohibited activities. Direct obligations of corporations and other businesses therefore still must be considered as domestic rather than international.<sup>35</sup>

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#### ***4.2.2 Soft-Law and Private Standards as a Basis for Transnational Corporate Accountability***

While direct legal obligations of enterprises in international law are still an exception, numerous non-binding standards, initiatives and management systems exist with regard to responsible business conduct, ranging from overarching standards such as the OECD Guidelines for Multinational Enterprises<sup>36</sup> (OECD Guidelines) and the ISO 26000 Guidance on social responsibility to more specific sector-related initiatives such as the Extractive Industries Transparency Initiative (EITI) and the Fair Wear, Fair Trade and Fairmined Standards.

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Such transnational and international norms, despite their non-binding character, should be taken into account by the inquiry into the international environmental accountability of businesses as they are practically, legally and politically significant. In line with the approach of this Chapter, we focus on the significant non-binding human rights norms in international law and briefly look at environmental soft law and private regulation. We want to illustrate that in soft law, similar to international law, there is potential for environmental and human rights standards to mutually strengthen and support each other. By sketching out the relevance of these standards for the law of inter- and transnational environmental liability, these considerations form a starting point for the more specific explanations on the issue in the next Chapters.

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<sup>34</sup>E.g. Peters (2014), pp. 139–146.

<sup>35</sup>de Brabandere (2009), p. 206.

<sup>36</sup>OECD Guidelines for Multinational Enterprises, 2011 edition. Available at: <https://www.oecd.org/daf/inv/mne/48004323.pdf>, last accessed on 31 Aug 2022.

## Non-binding Human Rights Due Diligence as a Global Reference Point for Businesses' Transboundary Responsibilities

**16** The UN Guiding Principles on Business and Human Rights (UNGPs),<sup>37</sup> developed between 2005 and 2011 under the mandate of the then Special Representative of the UN Secretary-General for business and human rights John Ruggie and unanimously endorsed by the UN Human Rights Council in 2011, are currently seen as the global authoritative, albeit non-binding, standard on business and human rights. They set forth a number of principles that aim to prevent, address and remediate human rights abuses committed in the context of global business operations. More concretely, they foresee businesses self-regulating their business conduct by acting with (human rights) due diligence.

**17** The UNGPs have strongly influenced current debates and have informed both national strategies, business initiatives, other voluntary standards as well as binding regulations worldwide. For example, the OECD Guidelines and other relevant existing standards on responsible business conduct were amended by the addition of the concept of due diligence. New standards were also developed, including the OECD sectoral guidance on due diligence<sup>38</sup> or the OECD Due Diligence Guidance for Responsible Business Conduct<sup>39</sup> (OECD Guidance). An increasing number of due diligence regulations have been passed, such as the German Supply Chain Due Diligence Act (LkSG),<sup>40</sup> the French Duty of Vigilance Law,<sup>41</sup> the EU Timber Regulation,<sup>42</sup> the EU Conflict Minerals Regulation<sup>43</sup> and the California Transparency in the Supply Chains Act.<sup>44</sup> A European Directive on due diligence in supply chains is being drafted at the time of writing this Chapter. Notwithstanding relevant divergences, the concepts of the UNGPs form the relevant model for national due diligence regulations. Important issues regarding a regulatory implementation of the UNGPs will be further discussed in Chap. 7. Here, it is sufficient to sketch out some general aspects of the UNGP's concepts.

**18** Firstly, the UNGPs importantly emphasise that corporations have an autonomous responsibility to respect human rights. The UNGPs differentiate between three

<sup>37</sup> Available at: [https://www.ohchr.org/documents/publications/GuidingprinciplesBusinesshr\\_eN.pdf](https://www.ohchr.org/documents/publications/GuidingprinciplesBusinesshr_eN.pdf), last accessed on 31 Aug 2022.

<sup>38</sup> Available at: <https://mneguidelines.oecd.org/sectors/>, last accessed on 31 Aug 2022.

<sup>39</sup> Available at: <http://www.oecd.org/investment/due-diligence-guidance-for-responsible-business-conduct.htm>, last accessed on 31 Aug 2022.

<sup>40</sup> Gesetz über die unternehmerischen Sorgfaltspflichten in Lieferketten vom 16. Juli 2021.

<sup>41</sup> LOI n° 2017-399 du 27 mars 2017 relative au devoir de vigilance des sociétés mères et des entreprises donneuses d'ordre.

<sup>42</sup> Regulation (EU) No 995/2010 of the European Parliament and of the Council of 20 October 2010 laying down the obligations of operators who place timber and timber products on the market.

<sup>43</sup> Regulation (EU) 2017/821 of the European Parliament and of the Council of 17 May 2017 laying down supply chain due diligence obligations for Union importers of tin, tantalum and tungsten, their ores, and gold originating from conflict-affected and high-risk areas.

<sup>44</sup> California Transparency in the Supply Chains Act of 2010 (SB 657).

normative pillars: (1) the State’s duty under international law to protect human rights (“protect”), (2) the corporate responsibility to respect human rights (“respect”) and (3) granting victims of human rights violations access to judicial and extrajudicial complaints procedures and grievance mechanisms (“remedy”). Under the second pillar, businesses “[. . .] should avoid infringing on the human rights of others and should address adverse human rights impacts with which they are involved” (principle 11, UNGPs).

The concept of human rights due diligence forms the core of the second pillar in that it foresees that companies self-regulate their business conduct. The UNGPs clarify that this responsibility exists independently of a State’s duty to protect human rights as well as over and above national regulations pertaining to the same, constituting a global standard of expected conduct, cf. commentary to principle 11, UNGPs. This is highly relevant as it makes clear that it is not sufficient for companies to monitor developments and follow the measures that States take.<sup>45</sup>

Second, the UNGPs explicitly refer to existing international human rights treaties, specifying that businesses can have an impact on the entire spectrum of internationally recognised human rights. Their responsibility thus applies to all such rights (principle 12, UNGPs). While the UNGPs’ focus lies on human rights impacts, environmental and other types of harm have to be considered where they lead or may lead, to human rights abuses. Consequently, it is highlighted that businesses may not be able to discharge their responsibility to respect all internationally recognised human rights unless they integrate climate change considerations into their human rights due diligence processes.<sup>46</sup> However, the question of how this connection between the environment and human rights is concretely constituted has, so far, not been the subject of in-depth analysis in the context of the UNGPs.<sup>47</sup> The overarching discourse in international human rights law on this question, discussed in detail below, may be insightful also in the context of this Subchapter.

Thirdly, the UNGPs lay down both procedural and substantial requirements: The UNGPs, as well as the standards and regulations which build upon them (see above), foresee several steps or elements for businesses to identify, prevent, mitigate and account for how they address their adverse impacts on human rights. These are laid out in the standard’s so-called operational principles and encompass the duties for companies to (principles 16–22).

More concretely, companies are, first of all, expected to identify and assess their actual and potential human rights impacts. Such an assessment would typically include an analysis of the specific operating environment and the human rights

<sup>45</sup>District Court of The Hague *Milieudefensie v Shell* (2021) C/09/571932 / HA ZA 19-379, at 4.4.1.3.

<sup>46</sup>Cf. website on Climate change and the UNGPs <https://www.ohchr.org/EN/Issues/Business/Pages/Climate-Change-and-the-UNGPs.aspx>, last accessed 4 Apr 2022.

<sup>47</sup>The Working Group on Business and Human Rights has announced an information note on what all three pillars of the UNGPs entail for states and business enterprises in relation to climate change, see <https://www.ohchr.org/EN/Issues/Business/Pages/Climate-Change-and-the-UNGPs.aspx>, last accessed 4 Apr 2022.

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context, the people affected, the relevant human rights issues as well as how the company's activities relate to the latter. This type of assessment is considered crucial in that it informs all the subsequent steps of the due diligence process (principle 18). The assessment's findings should subsequently be integrated across internal functions and operations by assigning responsibility in the corporate organisation and allocating the budget and personnel required to enable effective action (principle 19). The company should also track its actions' effectiveness to verify if its policies are being adequately implemented and its measures effective in addressing adverse impacts, as well as for the overall purpose of continuous improvement. (principle 20). Lastly, businesses need to account for and communicate externally on how they address their human rights impacts towards (affected) internal and external stakeholders, such as employees, investors and business partners by implementing formal reporting procedures and the like (principle 21).

**23** While obligations to “identify, prevent, mitigate and account for ... adverse human rights impacts” refer to a concept of due diligence in a business practice sense as a “management process”,<sup>48</sup> the UNGPs also formulate a substantial standard. This means that they should avoid infringing on the human rights of others and should address adverse human rights impacts with which they are involved, principle 11. The UNGPs thus contain both procedural due diligence obligations (“due diligence as a process”) and a substantive standard of care, which requires a business to do what is necessary in individual cases to prevent concrete violations of human rights.<sup>49</sup>

**24** Fourth, the UNGPs clarify the comprehensive scope of due diligence: Current (non-binding) due diligence standards, such as the UNGPs, require companies, regardless of their size, sector, ownership or operational context, to address both the adverse effects caused by their own activities as well as those to which they contribute or to which they are directly linked to as a result of their business relationships. Activities are understood in this context as both actions and omissions, while business relationships include, but are not limited to, business partners and suppliers and apply to both non-State and State entities (principle 13, UNGPs). A company's responsibility, therefore, extends across its entire value chain.

**25** The fifth and final point to note is that the UNGPs' due diligence obligations vary depending on the risks present and the companies' leverage over them. While the UNGPs, in principle, concern all businesses, each business' duties will vary and depend on factors such as the company's size, its operational context, the severity and probability of the (potential) adverse impact and the company's level of involvement. For example, smaller businesses may have more informal structures and less financial means than larger companies and so their actions may differ (principle 17, UNGPs). It has been convincingly proposed that the UNGPs formulate two different standards: a stricter standard of avoiding its own impacts; and a ‘leveraged standard’ that seeks to prevent others' impacts. Guiding Principle

<sup>48</sup>ILA Study Group on Due Diligence in International Law (2016), pp. 29 et seq.

<sup>49</sup>Smit et al. (2020), p. 107; Gailhofer (2020).

13 clearly distinguishes between the responsibility of a business to avoid causing or contributing to its own negative human rights impacts (13(a)) and the responsibility to seek to prevent or mitigate impacts by third parties (13(b)). Companies that cause or may cause an adverse impact are expected to cease, prevent and remedy the same, whereas if they contribute or may contribute to an adverse impact they should cease or prevent their activities that result in the impact and mitigate as well as remedy the impact according to their contribution. Where companies are or may be directly linked to an impact, they are not expected to remedy the same, instead, they should address the impact by using their leverage on the entity concerned (principle 17, 19, UNGPs).<sup>50</sup>

The UNGPs also recognise that companies, especially if they have large numbers of entities in their value chains, are likely to be unable to address all their adverse impacts immediately and equally. They should therefore prioritise their efforts in relation to the severity and likelihood of the impact. When assessing an impact's severity, both its scale, scope and irremediability must be considered.<sup>51</sup> Determining the content and scope of a duty according to the seriousness of the imminent risks and rights violations, the likelihood of their occurrence and the company's options to mitigate or prevent them corresponds to widespread legal principles, e.g. in torts. In modern supply chain legislation, these principles are summarised under the concept of the appropriateness of the required measures, cf. sect. 3(2) German LkSG.<sup>52</sup>

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<sup>50</sup>Debevoise and Plimpton (2017) propose that the term “cause and contribute to both” relates to the probability of the impact (risk) and the company's effect on that risk, while “directly linked to” is centred on the benefit the company derives or may derive from the adverse impact. More specifically, an adverse impact is caused where the company's activities materially increase the risk of that specific impact and these activities would be sufficient to result in that impact in and of themselves. A company would, however, only contribute to an adverse impact where it materially increases the risk of that specific impact but its activities in and of themselves would not be sufficient to result in that impact. Lastly, a company would be directly linked to an impact where it has a relationship of mutual commercial benefit with the entity concerned, and that entity materially increases the risk of that specific impact. Directly then does not refer to the number of intermediaries between the company and the entity concerned but rather, as to whether the impact occurred as part of an activity that benefited the company.

<sup>51</sup>OHCHR (2012).

<sup>52</sup>The German Supply Chain Due Diligence Act (LkSG) also differentiates with regard to the measures to be taken by a company to prevent, halt or mitigate violations between breaches of duty committed in the company's own business area in Germany and those committed abroad, in the company's own business area or by controlled companies, or by other direct suppliers. In the case of a company's own business operations in Germany, the measures taken must lead to a cessation of the breach; in the case of a company's own business operations abroad or in the case of controlled companies, the remedy must still ‘generally’ lead to a cessation of the breach, Section 7(1) sentence 4 and Section 2(6) sentence 3 LkSG.



**27** *Milieudefensie v Shell: The UNGPs as a Guideline for a Climate-Related Standard of Care*

The legal significance and universal recognition of the UNGPs, as well as their potential relevance for cases of environmental liability are strikingly reflected by the judgment of the Hague district court in the case of *Milieudefensie v Shell*. In this ruling, the oil and gas company Shell, as a corporate group, was obliged to reduce its emissions across its entire value chain by 2030 and do so independently of any national regulations. This reduction obligation also applies to so-called ‘Scope 3 emissions’ which, for example, arise through the use of Shell’s products in cars and the like. Like the UNGPs, the court distinguished between different due diligence standards based on the company’s leverage: It ruled that the reduction obligation by 2030 represents a duty of result for Royal Dutch Shell itself and all its subsidiaries, including foreign subsidiaries. In contrast, a duty of conduct was assumed for ‘Scope 3 emissions’, i.e. for suppliers and emissions from the end product. In its ruling, the court had to interpret the unwritten standard of care in Dutch civil law and based this, among other things, on the UNGPs as an “authoritative and internationally endorsed ‘soft law’ instrument”. “For this reason, the UNGPs are suitable as a guideline in the interpretation of the unwritten standard of care. Due to the universally endorsed content of the UNGP, it is irrelevant whether or not [Shell] has committed itself to the UNGP.”<sup>53</sup>

**28** Another important standard in this context is set by the OECD Guidelines. While also legally non-binding, they form part of the OECD Declaration on International Investment and Multinational Enterprises which was first adopted by the governments of OECD member countries in 1976 together with the Guidelines. The OECD Guidelines address businesses that operate in a transnational context and set standards for responsible business conduct across a range of issues, including human rights, labour rights, taxation, corruption and the environment. Since their revision in 2011, they now also include the concept of due diligence and, more specifically, a chapter on human rights due diligence. Besides choosing a broader thematic scope, they equally require companies to address their entire value chain.

**29** Notably, the OECD Guidelines establish a unique non-judicial grievance mechanism (NJGM). Adherent governments are required to set up a National Contact Point (NCP) whose main role is to further the effectiveness of the Guidelines by undertaking promotional activities, handling inquiries, engaging in furthering discussions and contributing to the resolution of issues that arise in connection to the implementation or non-observance of the Guidelines in specific instances.<sup>54</sup>

<sup>53</sup>District Court of The Hague *Milieudefensie v Shell* (2021) C/09/571932 / HA ZA 19-379 (English version) at 4.4.11.

<sup>54</sup>OECD (2011), pp. 71ff.

NJGMs are considered to be a beneficial complement to judicial procedures. They may save time and costs on both sides and be more readily accessible for the person or group seeking a remedy. In addition, there can be positive effects inherent to the process, which is usually non-adversarial and instead relies on mediation, dialogue and relationship-building. Conflicts can, in theory, be addressed at an earlier stage to potentially prevent them or at least avoid escalation. Additionally, depending on the judicial system, the chances of the parties settling on an effective remedy may be higher. For one, legal proceedings can, under normal circumstances, last many years and fail to provide compensation or other forms of meaningful remedy in time, for example, when communities are evicted from their land. Cases involving communities or larger groups of individuals usually also require more complex solutions since interests, claims and grievances differ within the group or community itself. However, NJGMs have also been the subject of criticism, in particular with regard to their transparency, impartiality and effectiveness.<sup>55</sup>

Concerning the NCPs, it has been positively highlighted that some cases have been resolved in favour of the damaged parties or that a mediated agreement between both parties was agreed upon. As their institutional and financial backing also allows for continuous improvement the NCPs may, therefore, gain further relevance in future.<sup>56</sup> At the same time, they have been criticised over their alleged lack of impartiality, i.e. being somewhat pro-business and other issues involving case handling procedures, which renders them largely ineffective.<sup>57</sup> A report by OECD Watch found that “the NCP system continues to be largely inaccessible, unpredictable, and unable to facilitate effective access to meaningful remedy for victims of irresponsible business conduct. NCPs operate with highly variable organisational structures and rules of procedure and handle cases in very different ways, making it difficult for complainants to know what to expect.” More specifically, in 2018, only 9 percent of all cases filed reached an agreement, with a third being rejected immediately without any opportunity to go to the mediation stage. Only two cases filed by communities or NGOs resulted in some form of remedy for the complainants, however, even in these cases the remedy applied was far short of what was sought by the damaged parties. With regard to remedies applied, one case resulted in a mere acknowledgement of wrongdoing by the company involved, while in another case, the company concerned simply committed to improving their policies in the future. Both of these cases were handled by the Dutch NCP.<sup>58</sup>

<sup>55</sup> Miller-Dawkins et al. (2016).

<sup>56</sup> There is ample literature on the evaluation of the OECDs National Contact points. See for example: the Annual Reports on the OECD Guidelines for Multinational Enterprises, the National Contact Points Peer Reviews (<https://mneguidelines.oecd.org/ncppeerreviews.htm>, last accessed on 31 Aug 2022) or for a more critical perspective: <https://www.oecdwatch.org/>, last accessed 31 Aug 2022. A list of specific instances can be found at <http://mneguidelines.oecd.org/database/>, last accessed 31 Aug 2022.

<sup>57</sup> SOMO (2015). Miller-Dawkins et al. (2016).

<sup>58</sup> OECD Watch (2019).

32 The reasons for the NCPs ineffectiveness are attributed to, among other factors, their lack of regard for the OECD Guidelines for complaint-handling, an overly strict approach to admitting cases in the initial assessment state, delays resulting from poor case management, restrictive policies on transparency and confidentiality, an unwillingness by certain governments to sanction non-participation in the mediation process, and non-fulfilment of recommendations. The report urges to revise the OECD Guidelines, the procedural guidance and the rules governing the functioning of the NCPs. Governments adhering to the OECD Guidelines should, in turn, ensure an organisational set-up conducive to impartiality, provide sufficient resources, ensure accessibility (e.g. promotional activities), enhance predictability (e.g. clear timelines), protect complainants from threats and strengthen sanctioning for non-compliance by businesses, among other things.<sup>59</sup>

### **International Responsibilities of Private Actors in Soft Law and Private Standards: Potentials and Challenges of Voluntary Standards**

33 Non-binding norms and standards also play a major role for TNCs independently of their human rights obligations. A number of international environmental regimes, including the Sustainable Development Goals and the Paris Agreement on climate change, rely on soft law requiring voluntary action, wide-ranging provisions for participants and non-binding commitments, but do not include sanctioning mechanisms.<sup>60</sup> Soft treaties and other forms of soft law are praised to be more flexible and adaptable and to allow for greater and more diverse participation than ‘hard law’. In addition, soft law may avoid some of the obstacles that can prevent the adoption of binding treaties while leaving open, and even facilitating, the possibility that soft-law commitments may later become part of ‘hard’ treaties or customary international law.<sup>61</sup>

34 ‘Soft’ and ‘hard’ law instruments can both be rather abstract and, importantly, do not always ensure that monitoring, measuring, reporting and verifying of the implementation and compliance with the stipulated norms and standards is or has taken place. A great number of private norms and standards, such as industry initiatives or certification schemes are accordingly seen, in principle, to be able to help manage such governance gaps.<sup>62</sup> For example, it has been observed that capacity deficits on the part of the public sector have led to a ‘Cambrian explosion’ of transnational institutions, standards and programs focused purely on the mitigation of carbon emissions.<sup>63</sup> The increasing relevance of ‘soft’, often private norms and standards is not only true in the field of climate protection. A growing proportion of global production in agriculture, forestry, electronics and other industries, such as mining,<sup>64</sup>

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<sup>59</sup> OECD Watch (2019).

<sup>60</sup> Cf. Wanner (2021).

<sup>61</sup> Nadarajah (2020).

<sup>62</sup> GLOBE (2020), also see, Chap. 2 ¶ 22 *et seq* (Sect. 2.2.2).

<sup>63</sup> Cf. GLOBE (2020); Keohane and Victor (2011).

<sup>64</sup> Bodle et al. (2020).

comply with voluntary sustainability standards.<sup>65</sup> Such standards are used to govern risks in global supply chains and can play an important role in international business transactions and investment decisions.

Potentially, private norms and standards may complement, concretise and thereby support social and environmental norms or sustainability goals issued by governments and international organisations.<sup>66</sup> An approach to support and/or develop non-binding standards (of environmental) care may be regarded as promising given that it could help to cope with the great complexity of transnational environmental problems. Technical standards, regional or sector-specific standard-setting could, in principle, contribute to the evolution of norms that help manage this complexity. In addition, the fact that rules are not legally binding does not mean that they are legally irrelevant. As mentioned above, and as will be discussed in more detail in Chaps. 6 and 7, private standards and/or conformity assessments can play a role in defining and assessing legally binding environmental and human rights obligations of companies. They also can play such a role in individual cases, e.g. when private certificates are being used by authorities to prove relevant standards and facts when enforcing regulations. Where the liability of German companies for human rights violations in the supply chain is concerned, for example, private standards and certificates can substantiate the assumption of negligence in individual cases and/or be of importance in proving breaches of duty in civil proceedings.<sup>67</sup>

To fulfil such a role, however, a high degree of reliability of private standards and corresponding conformity assessment mechanisms must be established. Authorities and courts must therefore determine that standards are appropriate because they, for example, correspond to the state-of-the-art, and that conformity assessments are reliable. In many cases, private standards do not meet these requirements. Frequently, it may be difficult to establish a uniform normative benchmark against which the reliability and validity of industry standards, indicators or metrics for compliance with sustainability goals could be measured. Industry and sector-specific standards are often highly diverse and fragmented,<sup>68</sup> while private standards and conformity assessments are criticised for being under-ambitious, representing the lowest common denominator rather than seeking to apply demanding environmental standards. Furthermore, it has been noticed that the willingness to adopt a soft law instrument is high when the gap between the standards of the instrument and a company's current situation is minimised, resulting in the company having to make limited efforts and face reduced costs to fully comply with the standards.<sup>69</sup>

The deficits of private standards on the one hand, and their factual relevance for the governance of transnational enterprises on the other, substantiate the need to

<sup>65</sup>Bissinger et al. (2020), p. 36.

<sup>66</sup>Bissinger et al. (2020), p. 36.

<sup>67</sup>Cf. Gailhofer and Glinski (2021).

<sup>68</sup>Cf. GLOBE (2020).

<sup>69</sup>Bodle et al. (2020), p. 243.

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engage in regulatory intervention in this field. Consequently, for example, the European Commission has passed its Standardization Strategy in 2022, which aims at establishing and promoting international norms and standards, which not only deal with technical components but also integrate core EU democratic values and interests, as well as green and social principles. Given the potential relevance of private standards and conformity assessments to discharge a company's legal obligations, e.g. in liability cases before national courts, national regulation could also constitute a lever to improve the quality and effectiveness of such standards. This inevitably raises the question of how national legislation, which defines these obligations, could proactively exert influence by defining the features necessary to prevent liability.<sup>70</sup>

38 One option for both approaches, namely using national regulation as a lever to influence private standards and proactive regulation of the transnational structures and processes of transnational standardization, is the further integration and refinement of human rights and environmental due diligence. Previous research has shown that concepts and procedures of human rights due diligence are well-suited to integrating environmental requirements. Voluntary environmental management systems, such as ISO 14001, exhibit many parallels to the procedures envisaged by the UNGPs and require, for example, that companies consider environmental impacts over the entire life cycle of their products and services, and not just at their individual sites, in their environmental management. For this reason, it has been suggested that environmental management systems be integrated into due diligence processes. Such synergies could be strengthened by adding environmental concerns to international standards of human rights due diligence utilising increased collaboration with standardisation organisations and environmental advocacy groups, which are still less involved in discourses on due diligence than their counterparts in the fields of human or labour rights.<sup>71</sup> Environmental and human rights due diligence procedures in this sense could, in turn, be integrated into national due diligence regulation. Such laws, and the institutional procedures for their enforcement, thus could establish criteria for using private transnational standards and initiatives to demonstrate compliance with mandatory due diligence and thereby, at least in theory, create an incentive to improve private environmental standards.

### 4.2.3 *Current Initiatives: Binding Human Rights Obligations of Transnational Corporations?*

39 The legal status quo, with no general and few specific legally binding international obligations of private enterprises, may change. The legal qualification as a subject of international law is not necessarily reserved for certain categories of actors in the

<sup>70</sup>Momsen and Schwarze (2018).

<sup>71</sup>Scherf et al. (2020), p. 34.

international system as there exists no *numerus clausus* of legal agents in the current international legal order.<sup>72</sup> International agreements could thus prescribe direct obligations on private actors; legal practice and *opinio iuris* may evolve and extend both the scope and addressees of international norms. With respect to human rights law and its environmental implications, many authors argue that the factual changes in the international world order must lead to the imposition of international obligations directly on non-State actors, which would then be held accountable for any violations of these rights along with the relevant States.<sup>73</sup> The issue of potentially evolving new environmental obligations in international customary law, which may also be based on the analysis of international civil liability conventions, will be further reflected on in Chap. 5. However, it seems appropriate to briefly detail two recent initiatives to establish general obligations of private actors in international treaty law here.

### UN HRC Resolution 26/9

The first relevant initiative is Resolution 26/9, which was passed by the UN Human Rights Council in June 2014. The resolution created the United Nations' open-ended intergovernmental working group on transnational corporations and other business enterprises with respect to human rights. The working group has the mandate to elaborate a legally binding instrument to regulate, in international human rights law, the activities of such private entities. In contrast to existing private or soft-law instruments to strengthen corporate responsibility for human rights violations, the mandate aims at a binding inter-governmental instrument that would be part of international law. *De Schutter* identifies four options the open-ended intergovernmental working group may consider: (i) to clarify and strengthen States' duty to protect human rights, including extraterritorially; (ii) to oblige States, through a framework convention, to report on the adoption and implementation of national action plans on business and human rights; (iii) to impose direct human rights obligations on corporations and establish a new mechanism to monitor compliance with such obligations; and (iv) to impose duties of mutual legal assistance on States to ensure access to effective remedies for victims harmed by transnational operations of corporations.<sup>74</sup>

Negotiations on the instrument are ongoing, however, the preliminary results clearly indicate the direction of the process. In its first sessions and drafts, the working group seemed to focus on quite radical solutions with respect to its major tasks. In the "Elements for the draft legally binding instrument on transnational corporations and other business enterprises with respect to human rights",<sup>75</sup> published in September 2017, (hereafter: "Elements") the working group considered

<sup>72</sup>Nowrot (2018), p. 14.

<sup>73</sup>de Brabandere (2009), p. 193.

<sup>74</sup>de Schutter (2016).

<sup>75</sup>Elements for the draft legally binding instrument on transnational corporations and other business enterprises with respect to human rights.

regulatory options “to put an end to impunity in cases of violations or abuses of human rights that occur in the activities performed by TNCs [transnational corporations] and OBEs [other business enterprises]”, see Elements, 5 “Legal Liability”. While the responsibility of the States to implement legal liability was a central focus of the text, the draft explicitly addressed corporations and formulated the fundamental “responsibility of TNCs and OBEs to respect all human rights, regardless of their size, sector, operational context, ownership and structure” (cf. Principle 5 of the Elements) and their obligations “wherever they operate and throughout their supply chains” (3.2. of the Elements). At the same time, the Elements emphasised, that “not only national institutions [are] in charge of the promotion and protection of human rights” and considered international judicial mechanisms such as an “International Court on Transnational Corporations and Human Rights”.<sup>76</sup> *De Schutter* plausibly suggested that such a mechanism would be feasible in a new treaty: By ratifying such an instrument, a State “would express its consent to a new monitoring mechanism applying directly to the TNCs under its jurisdiction: where it is alleged that a human rights violation has been committed by a corporation, that state would agree that the corporation itself would have to respond to such allegations before an international mechanism unless the violation has been addressed either by the internal grievance mechanisms of the corporation concerned or through legal remedies available within the state concerned”.<sup>77</sup>

42 The subsequent drafts, the ‘zero draft’ of the binding instrument<sup>78</sup> as well as the ‘revised drafts’<sup>79</sup> turn away from more radical disruptions to the traditional view of international legal subjectivity. In contrast to the “Elements”, the drafts do not explicitly address obligations of corporations and other business enterprises but focus on the obligations of States. In its preamble, the revised draft stresses that “the primary obligation to respect, protect, fulfill and promote human rights and

<sup>76</sup> See the Elements, at 9.b)b.1.

<sup>77</sup> *de Schutter* (2016), p. 59.

<sup>78</sup> OHCHR, legally binding instrument to regulate, in international human rights law, the activities of transnational corporations and other business enterprises. Zero Draft 16.7.2018; Online available at: <https://www.ohchr.org/Documents/HRBodies/HRCouncil/WGTransCorp/Session3/DraftLBI.pdf>, last accessed on 31 Aug 2022.

<sup>79</sup> See HRC, OEIGWG Chairmanship Revised Draft, legally binding instrument to regulate, in international human rights law, the activities of transnational corporations and other business enterprises, 16.7.2019. Online available at: [https://www.ohchr.org/Documents/HRBodies/HRCouncil/WGTransCorp/OEIGWG\\_RevisedDraft\\_LBI.pdf](https://www.ohchr.org/Documents/HRBodies/HRCouncil/WGTransCorp/OEIGWG_RevisedDraft_LBI.pdf), last accessed 4 Apr 2022; HRC, OEIGWG Chairmanship second Revised Draft, legally binding instrument to regulate, in international human rights law, the activities of transnational corporations and other business enterprises, 6 August 2020 (hereafter 2nd revised draft, online available at: [https://www.ohchr.org/sites/default/files/Documents/HRBodies/HRCouncil/WGTransCorp/Session6/OEIGWG\\_Chair-Rapporteur\\_second\\_revised\\_draft\\_LBI\\_on\\_TNCs\\_and\\_OBEs\\_with\\_respect\\_to\\_Human\\_Rights.pdf](https://www.ohchr.org/sites/default/files/Documents/HRBodies/HRCouncil/WGTransCorp/Session6/OEIGWG_Chair-Rapporteur_second_revised_draft_LBI_on_TNCs_and_OBEs_with_respect_to_Human_Rights.pdf), last accessed 4 Apr 2022; HRC, OEIGWG Chairmanship third Revised Draft, legally binding instrument to regulate, in international human rights law, the activities of transnational corporations and other business enterprises, 17.08.2021 (hereafter 3rd revised draft) online available at: <https://www.ohchr.org/sites/default/files/Documents/HRBodies/HRCouncil/WGTransCorp/Session6/LBI3rdDRAFT.pdf>, last accessed 4 Apr 2022.

fundamental freedoms lie[s] with the State, and that States must protect against human rights abuse by third parties, including business enterprises, within their territory jurisdiction, or otherwise under their control, and ensure respect for and implementation of international human rights law”.<sup>80</sup> The drafts still underline the duty of enterprises to respect human rights in their preambles and may thus be read as aligning with the argument that obligations which, although not regulated by the instrument itself, still do exist.<sup>81</sup> In its substance, however, they coincide with the archetype of international law dealing with non-State conduct indirectly, namely through the intermediation of required domestic law and State action.<sup>82</sup>

Consistent with its State-centred focus, the drafts aim at concretizing and consolidating extraterritorial obligations of the States with respect to corporate human rights abuses.<sup>83</sup> They stipulate, for example, that State Parties “shall regulate effectively the activities of all business enterprises domiciled within their territory or jurisdiction, or otherwise under their control, including those transnational corporations and other business enterprises that undertake activities of a transnational character” and shall require business enterprises to undertake adequate human rights due diligence, Article 6. In doing so, the more recent draft treaty texts clearly reference the UNGPs’ concepts of corporate human rights due diligence.<sup>84</sup> In addition, the treaty, if adopted, would also contain the obligation to establish a liability regime that is also effective across borders. Article 8.1 of the third revised draft stipulates that States “shall ensure that their domestic law provides for a comprehensive and adequate system of legal liability of legal and natural persons conducting business activities, within their territory, jurisdiction, or otherwise under their control, for human rights abuses that may arise from their own business activities, including those of transnational character, or from their business relationships.” Article 7.1 requires States Parties to endow their domestic courts ‘with the necessary competence [...] to enable victims’ access to adequate, timely and effective remedy’. As an exception to the *lex loci damni* rule, which de lege lata primarily applies in transnational tort litigations,<sup>85</sup> Article 11.2 provides that, upon request of the victim, matters of substance may be governed by the domestic law of the home-State court.

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<sup>80</sup> See 3rd revised draft, preamble, paragraph 7.

<sup>81</sup> For all cf. Carrillo-Santarelli (2018), pp. 2–3; ¶ 8 *et seq.* Carrillo-Santarelli (2018) also highlights that Article 10 of the draft speaks of corporate liability for “violations” of human rights, thus abstains from euphemisms as “non-state” abuses that are sometimes construed by some as indicating that such actors do not violate human rights. The passage could, accordingly, entail a possible recognition of direct obligations under other sources and, in addition, have a potential expressive effect that empowers the claims of activists and civil society.

<sup>82</sup> Carrillo-Santarelli (2018), pp. 2–3.

<sup>83</sup> Augenstein (2022).

<sup>84</sup> Augenstein (2022).

<sup>85</sup> Chapter 6 at ¶ 44 *et seq.* (Sect. 6.5.1).



### The Draft Global Pact for the Environment

44 In a second noteworthy development, the Draft Global Pact for the Environment, which, as will be further outlined below, included a formulation of a right to a decent environment in its Article 1, explicitly incorporated a correlative “duty to take care of the environment” in its Article 2. The consolidation of the general duty of care for the environment in international law, as *Francioni* explains in some detail concerning the draft, aimed at strengthening “objective eco-standards” in international law.<sup>86</sup> The integration into a binding instrument was supposed to support the further implementation of environmental principles that may be derived from a general duty of care, such as the principle of prevention of harm.<sup>87</sup> An environmental duty of care should be understood in the sense of an obligation towards the environment as autonomous value of the international community, worth of protection in itself. It further was considered to be able to trigger the evolution of the duty of care which transcends the traditional conception of environmental protection framed in a spatial horizon, that is territory and spaces beyond national jurisdiction, to a contemporary conception of global environmental goods.<sup>88</sup>

45 Importantly, this duty of care for the environment now was supposed to be imposed not only “on “[e]very State or international institution”, but also on “every person, natural or legal, public or private”, Article 2 Draft Global Pact for the Environment. The draft was thus seen to propose a broad formulation to guarantee a wide obligation<sup>89</sup> as it suggested to expand the spectrum of duty-bearers<sup>90</sup> and followed a “very progressive stance” indeed, especially given the state of scientific discourse and *opinio iuris* explicated above.<sup>91</sup> The comprehensive formulation of the duty of care was seen to be particularly innovative because of this potential ‘horizontal’ application to non-State entities, such as transnational corporations.<sup>92</sup>

46 As will be further outlined below, the open-ended working group tasked with examining the draft’s proposals regarding substance and implementation as a new international treaty, ultimately abandoned the idea of a binding instrument. In accordance with the recommendations of the working group, the General Assembly agreed “to forward these recommendations to the United Nations Environment Assembly for its consideration, and to prepare [...] a political declaration for a United Nations high-level meeting, subject to voluntary funding [...] with a view to

<sup>86</sup>Francioni (2019), p. 43.

<sup>87</sup>Francioni (2019), pp. 38–39, also Chap. 2 ¶ 5 (Sect. 2.2.1).

<sup>88</sup>Francioni (2019), pp. 39–40.

<sup>89</sup>Le Club des Juristes (2017), p. 39.

<sup>90</sup>¶ 71 *et seq.*

<sup>91</sup>Aguila and Viñuales (2019), p. 25.

<sup>92</sup>Kotzé and French (2018), p. 825. On the other hand, as *Kotzé* and *French* pointed out, it was not entirely clear, what implications the inclusion of the provision in Article 2 would have: “Does it do so in the aspiration that States will domestically incorporate them, for purely symbolical reasons, or as recognition of the evolving nature of environmental principles?”

strengthening the implementation of international environmental law and international environmental governance” in its resolution 73/333, adopted on 30 August 2019.<sup>93</sup>

### 4.3 Private Actors as Rights-Holders in International (Environmental) Law: Substance of a Human Rights-Based Approach

The link between human rights and the environment has long been debated. It was first suggested by the Stockholm Declaration on the Human Environment in 1972 which stated in its Principle 1 that “Man has the fundamental right to freedom equality and adequate conditions of life, in an environment of quality which permits a life of dignity and well-being, and he bears a solemn responsibility to protect and improve the environment for present and future generations.” Despite the considerable evolution of this concept,<sup>94</sup> both its nature as well as the substance and scope of the connection between human rights and the environment, is still being dynamically developed. With respect to the nature of the relationship, three major approaches may be analytically distinguished. These approaches do not necessarily exclude one another,<sup>95</sup> priorities regarding one approach or another can, however, have different implications for the question of if individuals possess subjective rights with respect to environmental damage.

First of all, the relationship between the environment and human rights can be understood in a narrow sense, considering the obligations of States or other duty-holders to protect the environment as a potential implication of “traditional” human rights impaired by a lack of protection. Substantially, environmental pollution or harm can lead to the violation of human rights, such as the rights to life, health or property. Such rights violations are straightforwardly associated with the possibility of taking legal action and various claims of this sort have been legally recognised in a large number of international human rights litigations, e.g. before the European Court of Human Rights.<sup>96</sup> A ‘narrow view’ in this sense may also indicate that a healthy environment and environmental protection, even where traditional human rights are not concerned, is an objective of the State. Environmental protection in this sense can be seen as an existential precondition for the realisation of human dignity as well as the right to life, health and food, and should, as a policy goal, guide State action but may not necessarily be considered to be justiciable as a subjective legal

<sup>93</sup>Resolution 73/333 adopted by the General Assembly on 30 August 2019.

<sup>94</sup>Cf. Atapattu and Schapper (2019).

<sup>95</sup>Cf. Kampffmeyer et al. (2018), pp. 5–7.

<sup>96</sup>For an overview of relevant case law of the European Court of Human Rights see ECtHR, Environment and the European Convention on Human Rights, 2021. Available online at: [https://www.echr.coe.int/documents/fs\\_environment\\_eng.pdf](https://www.echr.coe.int/documents/fs_environment_eng.pdf), last accessed 6 Apr 2022.

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claim. Environmental protection as a State-objective can still become relevant in legal disputes, prominently, because the protection of the environment is considered to be a legitimate aim justifying interference with certain individual human rights.<sup>97</sup> From such a point of view, human rights have to be clearly distinguished from environmental interests but can still be seen as indispensable yardsticks for government policies to shape the process of sustainable development in a just manner.<sup>98</sup> Legally, the protection of the environment in the sense of a State objective is, for example, set out in Article 20a of the German Basic Law.

49 Second, from a procedural perspective, rights such as access to information, participation in public affairs and access to justice are key to securing governance structures that enable society to adopt fair decision-making processes concerning environmental issues.<sup>99</sup> This approach thus emphasises the possibility of using (procedural) human rights to achieve adequate levels of environmental protection.<sup>100</sup>

50 A third approach aims at substantially integrating human rights and environmental protection: This integration can be made in accordance with a view focusing on State or policy objectives where concepts of sustainable development highlight that societal objectives must be treated in an integrated manner concerning economic, environmental and social justice issues.<sup>101</sup> An integrative approach, however, may also conform to a rights-based strategy<sup>102</sup> to environmental protection: An increasing number of national constitutions and international instruments recognise a human right to a healthy environment. The recognition of such a right is supposed to significantly intensify the legal link between the environment and human rights.

### 4.3.1 *The Narrow View: Environmental Damage as Violation of Existing Human Rights*

#### “Greening” Existing Human Rights

51 Traditionally, many international human rights treaties have not included a specific reference to the environment.<sup>103</sup> However, for some time now treaty bodies, regional tribunals, special rapporteurs and other international human rights bodies

<sup>97</sup>For example, the ECtHR has established that the right to peaceful enjoyment of one’s possessions may be restricted if this is considered necessary for the protection of the environment, cf. Council of Europe (2012), p. 8.

<sup>98</sup>E.g., when it comes to determining priorities for the use of resources see the website of the German Institute for Human Rights (DIMR), <https://www.institut-fuer-menschenrechte.de/themen/klima-und-nachhaltigkeit>, last accessed on 6 Apr 2022.

<sup>99</sup>UN GA 2011, A/HRC/19/34, 4.

<sup>100</sup>UN GA 2011, A/HRC/19/34, 4.

<sup>101</sup>UN GA 2011, A/HRC/19/34, 4.

<sup>102</sup>See Chap. 2 ¶ 26 *et seq* (Sect. 2.2.2).

<sup>103</sup>Boer and Boyle (2013), p. 6.

have, to varying degrees,<sup>104</sup> pursued a jurisprudential approach of ‘greening’ traditional human rights.<sup>105</sup> According to many observers, this process has been quite successful, creating an extensive jurisprudence on human rights and the environment.<sup>106</sup> The interpretation of existing human rights norms with regard to environmental rights or basic needs can, for example, be observed in the extensive environmental jurisprudence of the European Court of Human Rights: Environmental harm, according to the Court, interferes with the full enjoyment of a wide spectrum of human rights. It has been held that very diverse kinds of environmental damage can undermine the rights to life (Article 2 of the Convention), the prohibition of inhuman or degrading treatment (Article 3 of the Convention), the right to liberty and security (Article 5 of the Convention) and the right to respect for private and family life and home (Article 8 of the Convention).<sup>107</sup>

### **TĂȚAR v ROMANIA (2009)**

In *Tătar v Romania* before the European Court of Human Rights, the claimants, a father and son, alleged that the technological process used by a company in their gold mining activity put their lives in danger as part of the company’s mining activity was located close to the claimants’ home. In the year 2000, a dam breached, releasing approximately 100,000 m<sup>3</sup> of cyanide-contaminated tailings water into the environment. The applicants also complained of inaction on the part of the authorities regarding numerous complaints lodged by the first applicant about the threat to their lives, to the environment and his asthmatic son’s health. The Court found a violation of Article 8 of the European Convention of Human Rights and determined that the authorities had failed in their duty to assess the risks of the mining operation and to take suitable measures to protect the rights of those concerned. It recalled in particular that pollution could interfere with a person’s private and family life by harming his or her well-being.<sup>108</sup>

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An extensive ‘mapping project’ on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment carried out on behalf of the UN Human Rights Council has claimed to provide “overwhelming support” for the assumption that environmental damage can have both direct and indirect negative implications for the effective enjoyment of a wide range of human rights. For example, it describes the international obligations of States to protect the right to life from the risk of nuclear disaster and other environmental pollution and

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<sup>104</sup> Cf. Boyle (2012). Anton and Shelton (2011).

<sup>105</sup> Boyle (2012), p. 613.

<sup>106</sup> Knox, UN HRC Docs. A/HRC/37/59, A/HRC/25/53.

<sup>107</sup> ECHR (2022); cf. Beyerlin (2005), p. 528.

<sup>108</sup> ECtHR *Tătar v Romania* App No 67021/01 (2009); ECHR (2022), pp. 14 *et seq.*

that States as well as many other sources, including the Human Rights Council, the Committee on Economic, Social and Cultural Rights, the African Commission and the European Committee of Social Rights, have all identified environmental threats to the right to the enjoyment of the highest attainable standard of physical and mental health. Citing reports and legal opinions commissioned by States and international institutions, the UNHCR report also describes the legal implications of climate change for a wide range of rights, including the rights to health, water, food and others, before specifically highlighting the right of self-determination for peoples living in small island States.<sup>109</sup> Similar approaches to addressing such issues are practically relevant in many respects. For example, observers have diagnosed a strong trend towards encouraging States to take actions to protect against transboundary harm impacting human rights caused by actions under their jurisdiction or control. Moreover, it is seen to be clear that States have an obligation to cooperate internationally with respect to human rights, which is of particular relevance for global environmental threats such as climate change.<sup>110</sup>

54 From these mapping projects, the then Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, John Knox, concluded that there remained a need to clarify the relationship between human rights and the environment. A first consequence was drafting the Framework Principles on Human Rights and the Environment.<sup>111</sup> These principles are not supposed to create any new obligations but are intended to reflect the main existing human rights relevant to the environment, to facilitate their practical implementation and further development, helping to ensure that they “continue to develop in a coherent, consistent and integrated manner”.<sup>112</sup> Given that the “intrinsic link” between the environment and a wide range of human rights<sup>113</sup> is widely accepted and the existing instruments are already being

<sup>109</sup>Knox, UN Doc. A/HRC/25/53, 6.

<sup>110</sup>Report of the Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, John H. Knox, Compilation of good practices. UN doc. A/HRC/28/61, para. 84–86. Kotzé (2015) elaborates on the concept of an international environmental constitutionalism which is supposed to evolve to a significant part due to the interactions between national courts and legislators on issues regarding constitutional rights.

<sup>111</sup>Knox, Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, UN doc., A/HRC/37/59, 7–20. In response to the report, the Council has not formally endorsed the principles. However, it has adopted a resolution that took note with appreciation of the report, renewed the mandate, and requested the new Special Rapporteur to report not only to the Human Rights Council, but also to the General Assembly, UN HRC, UN Doc A/HRC/RES/37/8. Also cf. Knox (2019).

<sup>112</sup>Knox, Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, UN doc., A/HRC/37/59, 3–4.; Knox/Boyd, ‘Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment’, UN Doc A/73/188, 14.

<sup>113</sup>UN HRC, Report of the OHCHR on the Relationship Between Climate Change and Human Rights, UN Doc. A/HRC/10/61, 2009, para. 18.

practically used<sup>114</sup> some however argue that “there is little to be said in favor of simply codifying the application of the rights to life, private life and property in an environmental context” and that “making explicit in a declaration or protocol the greening of existing human rights that has already taken place would add nothing and clarify little”.<sup>115</sup>

### **Implications of a Narrow View for the Legal Protection of Environmental Rights**

This argument may be disputed from a practical point of view as the knowledge of State agents, as well as of private actors, about the effects of environmental damage on human rights may, in fact, often be limited. The recognition and clarification of the substantial connections between ‘traditional’ human rights and the environment in any given case however do not imply that major questions in legal doctrine concerning the implications of environmental damage for human rights would be resolved.

A narrow view of the connection between human rights and the environment rather entails considerable gaps for rights-based strategies undertaken to improve environmental policies. More specifically, the current human rights framework is not unequivocally well-equipped to deal with environmental degradation and its diffused effects on communities and societies and has a blind spot regarding the intrinsic linkages between the individual and the collective interests of society.<sup>116</sup> This can be the case where damage, such as “pure environmental damages”,<sup>117</sup> are seemingly unrelated to direct impacts on human rights and interests. Problematic gaps for judicial protection have also emerged where human rights violations were evident but affected not only certain individuals in particular but a large number of citizens in a similar way.

#### **The Cases of *Kyrtatos v Greece* and the *People’s Climate Case***

In *Kyrtatos*<sup>118</sup> the ECtHR reiterated that none of the articles of the Convention are specifically designed to provide general protection of the environment as such. The claimants relied on Article 8 of the ECHR, namely the right to respect for their private and family life, their home and their correspondence, and complained that urban development had destroyed the swamp adjacent to their property and about other environmental pollution. The Court noted that

(continued)

<sup>114</sup> Knox, Report of the Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment. Compilation of good practices. UN doc. A/HRC/28/61, 2015.

<sup>115</sup> Boyle (2012), p. 619.

<sup>116</sup> Albers (2017).

<sup>117</sup> Cf. Chap. 8 ¶ 71 *et seq* (Sect. 8.3.1).

<sup>118</sup> ECtHR *Kyrtatos v Greece* App No 41666/98 (2003).

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severe environmental pollution could affect individuals' well-being and prevent them from enjoying their homes in such a way as to affect their private and family life adversely. However, the Court could find no violation of the applicants' right to private life or enjoyment of property arising out of the destruction of the area in question. The crucial element for the violation of the rights in Article 8 was the existence of a harmful effect on a person's private or family sphere rather than the general deterioration of the environment.<sup>119</sup>

This reasoning reveals a narrow view on the interrelations of human rights and the environment and is also reflected by a decision of the General Court of the European Union which dismissed the claim of 10 families from Portugal, Germany, France, Italy, Romania, Kenya, Fiji and the Swedish Saami Youth Association Sáminuorra. The claimants sued the European Parliament and the Council of the European Union for the inadequacy of the EU's climate target, which they consider to be too low to prevent the worst of the climate crisis and thus failed to protect their fundamental rights of life, health, occupation and property. The Court acknowledged that "every individual is likely to be affected one way or another by climate change" but dismissed the case by arguing that the 10 families and the Saami Youth Association are not allowed to challenge the EU's climate policies in court since they are not sufficiently and directly affected by these policies ("direct and individual concern").<sup>120</sup> On March 25, 2021, the European Court of Justice (ECJ) upheld the General Court's order and held the plaintiff's claims inadmissible on standing grounds for failing to demonstrate that they were individually impacted by EU climate policy.<sup>121</sup>

**58** This narrow view thus has procedural as well as substantive implications. Procedural rules may radically diminish the potential of rights-based strategies<sup>122</sup> to improve environmental policies by not admitting human rights claims in the first place. Just as in the Court's decision in *People's Climate Case*, limited, indirect or

<sup>119</sup> ECtHR *Kyrtatos v Greece* App No 41666/98 (2003); cf. ECHR (2022).

<sup>120</sup> See website of *People's Climate Case*: <https://peoplesclimatecase.caneurope.org/2019/05/peoples-climate-case-court-acknowledges-climate-change-is-affecting-everyone-but-dismisses-the-case/>, last accessed on 31 Aug 2022. GC *Armando Ferrão and Others v The European Parliament and the Council* [2019] ECLI:EU:T:2019:324. For the doctrinal discussion about procedural implications of an environmental fundamental right in Germany cf. Kotulla, *Verfassungsrechtliche Aspekte im Zusammenhang mit der Einführung eines Umweltgrundrechtes in das Grundgesetz*, KJ 2000, 23–25. Also cf. Boyle (2012), pp. 627–628.

<sup>121</sup> ECJ *Armando Ferrão and Others v The European Parliament and the Council* [2021] ECLI:EU:C:2021:252, available at <http://climatecasechart.com/climate-change-litigation/non-us-case/armando-ferrao-carvalho-and-others-v-the-european-parliament-and-the-council/>, last accessed 6 Apr 2022.

<sup>122</sup> See Chap. 2 ¶ 26 *et seq* (Sect. 2.2.2).

gradual impacts on human rights have been repeatedly considered to be insufficient for the admissibility of legal action. Even if, such as in the case of severe systemic environmental degradation or climate change, it hardly can be disputed that the human rights of the plaintiffs will be affected in one way or another, courts may thus not even get to the point to where they need to balance these affected rights, the risks and intensity of their potential infringement against the legal or economic interests which may be opposed to a State's preventive measures.<sup>123</sup>

The difficulties to invoke links between environmental damage and potentially very serious, but indirect or still uncertain, violations of existing human rights can be ascribed to the self-restraint of human rights courts to intervene in the tasks of the legislator, or more positively, out of respect for the general division of powers. This self-restraint also has substantive implications. Importantly, the ECtHR emphasises that it considers national authorities as the entities best placed to strike a fair balance between the interests of the individuals affected by environmental problems and that of the community as a whole and, for this reason, affords States a wide margin of discretion.<sup>124</sup>

Claims are also frequently rejected by the courts when plaintiffs assert a State's duty to protect their human rights in the face of potential future violations. Human rights courts, as well as constitutional or administrative courts, in principle, acknowledge a duty to protect human rights, such as the right to life or physical integrity, however, they are often reluctant to determine that the omission of an action infringes this duty. The simple existence of a risk of future damage is often not seen to equate to an infringement of subjective rights. Even if possible infringements are acknowledged, courts concede a wide margin of appreciation to States when cases concerning a duty to protect are at stake.<sup>125</sup> Only under certain circumstances can this margin be narrowed down in such a way as to warrant a declaration that a certain measure of protection be taken.<sup>126</sup>

In cases involving potential future environmental damage, the question of whether there exists an obligation to prevent this damage is often considered as an issue that entails weighing objective interests rather than being concerned with subjective rights. According to such an understanding, the prevention of environmental damage, even if it affects the existential living conditions of citizens, primarily concerns a political obligation of the legislator. Such a view can be quite relevant for the application and interpretation of the law by courts and officials. However, in such cases, citizens have no environmental legal positions that could be individually enforced. Awarding environmental interests without a direct and imminent connection to life, health or property—(only) an objective status of political or 'objective' constitutional goals,<sup>127</sup> may seem *prima facie* plausible with respect to

<sup>123</sup> Cf. Ekardt (2010), p. 42.

<sup>124</sup> Cf. ECtHR *Greenpeace e.V. and Others v Germany* App No 18215/06 (2009).

<sup>125</sup> ECtHR *Hatton v UK* App No 36022/97 (2003), at para. 97. Cf. Jarass/Pieroth, Grundgesetz für die Bundesrepublik Deutschland, 13. Aufl. 2014, Article 2, para. 91. Cf. Ekardt (2010), p. 35.

<sup>126</sup> Cf. Federal Constitutional Court 1 BvR 2722/06 (2008), para. (1–98) at 78.

<sup>127</sup> See ¶ 48.

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democratic principles and the separation of powers and leads to old but still difficult to answer questions.<sup>128</sup> It implicates however, as Boyle convincingly points out, a structural debility of such interests of environmental common goods towards contrary interests, which are usually backed by subjective rights: Lacking the status of an independent right may imply that the goals of environmental protection can be trumped by those values which have that status, including economic development and natural resource exploitation.<sup>129</sup> The doctrinal debate about progressive complementation or reform in international environmental rights, therefore, concentrates on filling the gaps in international human rights law: These efforts focus firstly on intensifying the link between subjective rights and the environment, prominently concerning procedural rights and the recognition or codifications of the right to a decent or healthy environment. Secondly, and as explicated above, these endeavours aspire to broaden the scope and the addressees of human rights obligations.<sup>130</sup>

### 4.3.2 *Procedural Environmental Rights*

62 In general, three basic procedural rights can be distinguished: first, the access to environmental information, second, public participation in decision making, and third, access to justice and remedies, e.g. in the event of environmental harm. Other than substantive obligations, which are concerned with obligations of conduct, procedural environmental rights and obligations are concerned with the observance of certain procedures related to the conduct of activities that may cause environmental harm.<sup>131</sup> These rights are supposed to serve as a guarantee of rights to the environment, as a tool to increase participatory democracy and active involvement of the public in environmental protection and, something that is of specific interest in the context of this study, as an effective instrument of monitoring compliance with and enforcement of environmental law.<sup>132</sup> The first comprehensive formulation of the concept in international law was made by the 1992 Rio Conference on Environment and Development, including in Principle 10 of the Rio Declaration, a clear mandate for the States with respect to the three procedural rights.<sup>133</sup> The binding international standard in relation to procedural environmental rights was set with the adoption in 1998 of the UNECE Convention on access to information, public participation in decision making and access to justice in environmental matters in

<sup>128</sup>For a critical reflection of the restrained approach esp. of the German Constitutional Court from an environmental perspective cf. Ekardt (2010).

<sup>129</sup>Boyle (2012), p. 629. For the respective problems in German Constitutional Law cf. Ekardt (2010).

<sup>130</sup>Cf. ¶ 69 *et seq.*

<sup>131</sup>Peters (2018), p. 3.

<sup>132</sup>Jendroška (2017), p. xvii.

<sup>133</sup>Anton and Shelton (2011), p. 356.

the city of Aarhus (Aarhus Convention).<sup>134</sup> International environmental agreements adopted since then have increasingly focused on, or at least contained, procedural environmental rights<sup>135</sup> and there is considerable ongoing political and scientific interest in the matter.<sup>136</sup>

The adoption of procedural environmental rights, according to some, constitutes the most important environmental addition to human rights law since the 1992 Rio Declaration on Environment and Development.<sup>137</sup> Their adoption can be seen as a particular reflection of a rights-based strategy being employed in environmental legal policy as described above,<sup>138</sup> a strategy that focuses on those rights whose enjoyment could be considered a prerequisite to effective environmental protection.<sup>139</sup>

The discourse about procedural environmental rights thus reflects many issues related to this study. However, here it seems sufficient to highlight three key potentials that are associated with such rights.

First of all, access to justice is considered an especially impactful and, in some contexts, quite “novel tactic of mounting pressure” by which not only individuals but also NGOs and other members of the public push national adjudicating bodies to hold governments accountable for environmental damage and/or mounting threats to individuals, the climate and the environment at large.<sup>140</sup> Specifically, the legal standing of members of the public is seen to be capable of overcoming the traditional procedural obstacles to environmental litigation.<sup>141</sup> The Aarhus Convention accordingly is of major importance because, unlike human rights treaties, it provides for public interest activism by NGOs insofar as claimants with ‘sufficient interest’ are empowered to engage in public interest litigation, even when their own rights or the rights of victims of a violation are not at issue.<sup>142</sup> In this regard, procedural rights, and specifically access to justice for members of the public, allow the reformulation of the protection of environmental interests as legal questions, which is a perspective those who seek to ‘green’ existing human rights often do not take into account.<sup>143</sup>

<sup>134</sup>Jendroška (2017), p. xviii; Vöneky and Beck (2017), p. 156.

<sup>135</sup>See, for example, the “Guidelines for the Development of National Legislation on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters” (Bali Guidelines), the Convention on Biological Diversity (CBD), also cf. SDG 16 the international community pledges to “promote peaceful and inclusive societies for sustainable development, provide access to justice for all, and build effective, accountable and inclusive institutions at all levels.” For further examples see Anton and Shelton (2011), pp. 356–393.

<sup>136</sup>Peters (2018), p. 2. Cf. Jendroška and Bar (2017).

<sup>137</sup>Boyle (2012), p. 216.

<sup>138</sup>Cf. Chap. 2 ¶ 26 *et seq* (Sect. 2.2.2).

<sup>139</sup>Anton and Shelton (2011), p. 356.

<sup>140</sup>Colombo (2017), p. 442.

<sup>141</sup>Schoukens (2017).

<sup>142</sup>Boyle (2012), pp. 621–625.

<sup>143</sup>This implication of public interest litigation concerns typical questions about the functions of (constitutional) courts. Accordingly, by granting legal standing to “any” member of the public

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Environmental NGOs, for example, may step in as effective ‘guardians’ of endangered species that require additional recovery measures to stave off imminent extinction.<sup>144</sup> Given the potential effectiveness and political implications of ‘public interest litigation’, the definition of the criteria members of the public have to meet to have standing is both a relevant and disputed question.<sup>145</sup>

66 Secondly, scholars highlight the interaction and reciprocal development of procedural rights, such as access to justice for victims of environmental damage or NGOs and substantial environmental rights. Access to justice, such as in instances of climate change litigation, may thus prompt the deployment of human rights litigation techniques and is expected to be secured through greater interaction between human rights and environmental law.<sup>146</sup> For example, it is held that further development and use of procedural rights will not only provide opportunities to protect environmental rights but can also further the development of a substantive right to a clean environment.<sup>147</sup> Specifically, access to justice is, even though it implies strictly procedural obligations, regarded as a means towards the end of protecting the individual's substantive right to a healthy environment.<sup>148</sup> The proceduralisation of rights, it is presumed, serves as a substitute for the contentious recognition of any substantive right to the environment.<sup>149</sup>

67 Third, this reciprocal evolution of procedural norms granting access to justice and substantive environmental law is also considered to link diverse national and international legal orders: Procedural environmental rights are seen to foster the implementation of international environmental obligations by national courts.<sup>150</sup> For example, national courts’ engagement with international (environmental) law is considered to be not only required to shore up the principle of access to justice in (environmental) matters. It is also supposed to be beneficial for upholding the international and domestic rule of law as a claimant can present an argument using all the relevant legal bases once access to justice is granted.<sup>151</sup>

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“without a particularized injury” to a private applicant—courts will be displacing legislative or executive power contrary to the traditional role of courts, cf. Mikosa (2017), p. 264.

<sup>144</sup> Schoukens (2017), p. 287.

<sup>145</sup> Article 9(3) of the Aarhus Convention stipulates that “members of the public” have to be entitled to initiate a case also where more general public interests such as these are at stake. Defining under which conditions and when “members of the public” are to be entitled is left to a considerable extent to contracting parties, providing the possibility of introducing “criteria, if any” that a member of the public has to meet to have standing, Mikosa (2017), pp. 265–266.

<sup>146</sup> Colombo (2017), p. 442.

<sup>147</sup> Soveroski (2007).

<sup>148</sup> Pallemmaerts (2004), p. 18.

<sup>149</sup> Colombo (2017), p. 442; Anton and Shelton (2011), p. 356.

<sup>150</sup> Peters (2018), p. 9; Colombo (2017), p. 440.

<sup>151</sup> Colombo (2017), p. 463.

***Urgenda Foundation v State of the Netherlands***

The judgment of the Dutch Court of Appeal of the Hague<sup>152</sup> in the case of the *State of the Netherlands v Urgenda Foundation* is insightful concerning the potential of procedural rights in a number of ways. The court confirmed a previous ruling<sup>153</sup> and found that the State had acted negligently and, therefore, unlawfully by implementing a policy that only pursued the reduction targets imposed upon the Netherlands by European Union law for 2020.<sup>154</sup> It established that these measures were insufficient to meet the State's obligations to protect its citizen's right to life as well as the right to a home and private life because there is a known, imminent and real danger that these human rights will be violated by climate change impacts.

In two aspects, the decision seems to deviate from previous judgements conforming to a narrow view regarding the links between existing human rights and the environment. First of all, the Appellate Court dismissed the government's claim of judicial intervention with government policies, which it said should be discussed in Parliament rather than in a court, pursuant to the principle of the division of powers.<sup>155</sup> Second, it held that claims of Urgenda, as an agent of public interest actions', are admissible insofar as it was acting on behalf of the current generation of Dutch nationals against the emission of greenhouse gases on Dutch territory. Even though it based its judgment, *inter alia*, on provisions of the ECHR, it contradicted the jurisdiction of the ECtHR that provides access to the ECtHR only if the claimants' own rights are infringed.<sup>156</sup> The Dutch courts allowed Urgenda to proceed with its claims on behalf of Dutch citizens generally due to fairly liberal standing right granted to non-governmental organisations in the Dutch civil code.<sup>157</sup>

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<sup>152</sup>Court of Appeal of The Hague *Urgenda Foundation v the State of the Netherlands* (2018) 200.178.245/01, english translation available at: <https://uitspraken.rechtspraak.nl/inziendocument?id=ECLI:NL:GHDHA:2018:2610>, last accessed 31 Aug 2022.

<sup>153</sup>District Court of The Hague *Urgenda Foundation v the State of the Netherlands* Den Haag, (2015) C/09/456689 / HA ZA 13-1396.

<sup>154</sup>Cf. Verschuuren (2019). These targets require a 21 percent reduction for sectors covered by the EU emissions trading system (ETS) (i.e. large industrial installations and power stations) and a 16 percent reduction for non-ETS sectors (including transport and agriculture).

<sup>155</sup>Cf. Verschuuren (2019). Stein and Castermans (2017), p. 316.

<sup>156</sup>Court of Appeal of The Hague *Urgenda Foundation v the State of the Netherlands* (2018) 200.178.245/01, at paras. 34–38.

<sup>157</sup>Cf. Woerdman et al. (2021), p. 287.

The ruling provides strong evidence for the argument that (national) access to justice can help to integrate diverse, international, national and non-legal norms and orders. To substantiate its judgement, the decisions of the District Court and the Court of Appeal referred to a striking “continuum of rules”<sup>158</sup> on diverse legal (and non-legal) levels: The Court of Appeal upheld the decision that the State had breached the standard of due care towards its citizens under Dutch tort law and Articles 2 and 8 ECHR.<sup>159</sup> To establish the relevant “degree of care”, it stressed the importance of the precautionary principle and noted that, precisely the uncertainty of the future requires the State to adopt proactive and effective climate policies.<sup>160</sup> In addition, the Court relied heavily on IPCC reports and also on decisions adopted by the UNFCCC Conference of the Parties (CoP) in the past decade, which all indicate that concentrations of greenhouse gases in the atmosphere have to remain below the 450 parts per million (ppm) limit or even below a 430 ppm limit if the 1.5 °C temperature goal of the Paris Agreement is to be met with any degree of certainty.<sup>161</sup> Although the Urgenda foundation as a (private) claimant could not rely upon those international standards, the court found that they may directly inform the interpretation of national laws’ “open standards and concepts” and affect the obligations of the parties.<sup>162</sup> The relevant standard of due care was thus derived directly from scientific data in the IPCC reports,<sup>163</sup> international human rights law, non-binding international norms and national torts law.

### 4.3.3 *Expanding the Scope of the Environmental Dimension of Human Rights: An Independent Right to a Healthy Environment*

- 69 The controversy about expanding the concept of human rights towards environmental guarantees has continued for many years.<sup>164</sup> A constitutional or human right to a safe, clean, healthy and sustainable environment now is recognised in various forms

<sup>158</sup>Cf. Stein and Castermans (2017), p. 314.

<sup>159</sup>The court concluded that the State had failed to fulfil its duty of care pursuant to Articles 2 and 8 of the ECHR by not reducing its emissions by at least 25 percent by the end of 2020. The judgment, according to Verschuuren, seems to replace the duty of care under the Dutch Civil Code referred to by the Hague District Court, with the duty of care under Articles 2 and 8 ECHR, thus essentially turning the *Urgenda case* into a human rights case, cf. Verschuuren (2019).

<sup>160</sup>Verschuuren (2019). Court of Appeal of The Hague *Urgenda Foundation v the State of the Netherlands* (2018) 200.178.245/01, para.73.

<sup>161</sup>Cf. Verschuuren (2019).

<sup>162</sup>Stein and Castermans (2017), p. 311.

<sup>163</sup>Cf. Verschuuren (2019).

<sup>164</sup>Cf. Gormley (1990); Roberts (1970).

in regional agreements<sup>165</sup> and many national constitutions.<sup>166</sup> Courts in many countries are, accordingly, applying a constitutional right to a healthy environment; regional agreements, such as the African Charter on Human and Peoples' Rights and the Additional Protocol to the American Convention of Human Rights, specifically recognise the right to a healthy environment.<sup>167</sup>

Recently, the debate has gained further, significant momentum as various approaches have been suggested for the creation of a binding international instrument that includes environment-related rights. For example, the 3rd revised draft for a legally binding instrument to regulate the activities of transnational corporations and other business entities elaborated by the open-ended intergovernmental working group established by the human rights council on the ground of UN Resolution 26/9 explicitly refers to the right to a safe, clean, healthy and sustainable environment, draft Article 1.2.<sup>168</sup> The draft for a Global Pact for the Environment, presented in 2017, recognised in its first article the right of every person "to live in an ecologically sound environment adequate for their health, well-being, dignity, culture and fulfilment".

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### **The Global Pact for the Environment**

This initiative aimed at integrating and synthesizing the principles outlined in existing instruments such as the Stockholm Declaration, the Rio Declaration and other instruments and to address existing gaps in international environmental law—e.g. the absence of a broader common core of legally binding principles in international environmental law, the lack of overarching principles in international environmental law which could provide solutions for conflicts between instruments with limited sectoral or spatial scope, the respective judicial decisions in diverse fora as well as deficits regarding clarity and force of environmental principles.<sup>169</sup> One of the major objectives of the Global Pact was thus to consolidate all the existing principles of environmental law into one instrument. Several elements, particularly the first global

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(continued)

<sup>165</sup> Lewis (2018) holds that regional treaties, however, do not provide for a truly independent right to a decent environment but rearticulate rights and claims which are arguably already available on the basis of a range of other rights.

<sup>166</sup> Knox (2019) identifies at least 100 national constitutions which explicitly recognise this right.

<sup>167</sup> Knox, Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, UN doc., A/HRC/37/59, 4. Atapattu and Schapper (2019).

<sup>168</sup> HRC, OEIGWG Chairmanship third Revised Draft, legally binding instrument to regulate, in international human rights law, the activities of transnational corporations and other business enterprises, 17.08.2021. Available online at: <https://www.ohchr.org/sites/default/files/Documents/HRBodies/HRCouncil/WGTransCorp/Session6/LBI3rdDRAFT.pdf>, last accessed 7 Apr 2022, cf. ¶ 40 *et seq.*

<sup>169</sup> For a detailed analysis of the context and concept of the pact cf. Aguila and Viñuales (2019).

recognition of a right to a decent environment in a global treaty and its centrality as a potential ‘Grundnorm’ of the Pact was considered to be particularly important and innovative.<sup>170</sup> Resolution 72/277 “Towards a Global Pact for the Environment” adopted by the UN General Assembly on 10 May 2018 was supposed to open the floor to negotiations on the Pact. However, the opened working group, tasked by the General Assembly with examining the draft’s proposals regarding its substance and implementation as a new international treaty, abandoned the idea of a binding instrument. In accordance with the recommendations of the working-group, resolution 73/333, adopted by the General Assembly on 30 August 2019, provided “to forward these recommendations to the United Nations Environment Assembly for its consideration, and to prepare [...] a political declaration for a United Nations high-level meeting, subject to voluntary funding [...] with a view to strengthening the implementation of international environmental law and international environmental governance.”<sup>171</sup>

**72** While the failure of the Pact may be understood as evidence for the challenges associated with environment-related international treaty law, the positive expectations attached to the binding instrument remain instructive. John Knox, the former Special Rapporteur to the UN Human Rights Council on the issue, holds that including the human right to a healthy environment in a Global Pact would strengthen the growing ties between human rights norms and environmental principles. It would accordingly infuse international environmental norms with human rights: Including the human right to a healthy environment as the first article of the Pact thereby would allow to place its environmental principles—such as the precautionary principle, rights of access to information, participation, and remedy, reference to environmental impact assessment and the calls for adoption of effective enforcement laws and international cooperation—in the context of subjective rights. The right thus would “help to re-orient international environmental law from its traditional State-centric focus, according to which its obligations are owed only by States to other States and make clear that States owe obligations not only to one another, but also, and more importantly, to individuals, who therefore should have access to compliance mechanisms to ensure that the obligations are being met”. A human-rights-based approach to environmental protection thus was supposed to support stronger compliance mechanisms open to the public as well as calls for new agreements on procedural rights. Relatedly, such an approach was supposed to help re-orient international environmental law from its traditional focus on transboundary harm. The recognition that environmental harm has implications for human rights, even if the harm does not cross an international border, would open

<sup>170</sup> Cf. Kotzé and French (2018), pp. 821, 823.

<sup>171</sup> Resolution 73/333 adopted by the General Assembly on 30 August 2019.

the door to considerations of sustainable development in terms of binding human rights obligations, not just non-binding political declarations.

### UN HRC Resolution 48/13

In contrast to the Global Pact, other approaches to linking human rights to environmental protection have been more successful. At the conclusion of his efforts to map national and international practice on the intersection of human rights and the environment,<sup>172</sup> the Special Rapporteur to the UN Human Rights Council on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment recommended that the Human Rights Council support the recognition of the right in a global instrument.<sup>173</sup> In October 2021, the Human Rights Council adopted its Resolution 48/13 and thereby, in a step applauded as “historic”,<sup>174</sup> recognized the human right to a safe, clean, healthy and sustainable environment.<sup>175</sup> The resolution acknowledges the importance of a safe, clean, healthy and sustainable environment as critical to the enjoyment of all human rights and calls on States to build capacities for its implementation, to enhance their cooperation with relevant stakeholders for the implementation of the right. Importantly, in the context of this book, the resolution also cites the UNGPs on Business and Human Rights, which underscore the responsibility of all business enterprises to respect human rights.<sup>176</sup>

Resolution 48/13, albeit not legally binding, is considered a strong statement highlighting the importance of the link between human rights and the environment and providing an additional tool to challenge State and corporate actors for failing to take prompt and adequate action to address the triple environmental crises of climate change, pollution, and nature loss.<sup>177</sup> In the end, it could pave the way for formal recognition by the UN General Assembly and thus gather the expressed support of all 193 Member States.<sup>178</sup>

With respect to the gaps left by a narrow view on the links between human rights and the environment outlined above, it is unclear whether Resolution 48/13 goes

<sup>172</sup> S. ¶ 53 *et seq.*

<sup>173</sup> Knox, Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, UN doc., A/HRC/37/59, 4.

<sup>174</sup> OHCHR (2021).

<sup>175</sup> Resolution 48/13, The human right to a safe, clean, healthy and sustainable environment, A/HRC/48/L.23/Rev.1.

<sup>176</sup> On the same day, the Council adopted resolution 48/14 establishing a Special Rapporteur on the promotion and protection of human rights in the context of climate change, cf. Resolution adopted by the Human Rights Council on 8 October 2021, Mandate of the Special Rapporteur on the promotion and protection of human rights in the context of climate change, A/HRC/RES/48/14.

<sup>177</sup> Savaresi (2021) and Jauer (2021).

<sup>178</sup> Jauer (2021).



beyond simply ‘greening’ traditional human rights. To some extent, the resolution seems to reflect a rather narrow understanding when it emphasises the importance of a healthy environment for the enjoyment of traditional individual and collective rights as well as the important role of procedural rights for environmental protection. It is clear, that a right to a healthy environment can entail very different outcomes: The preceding Framework Principles of the Special Rapporteur, as explicated above,<sup>179</sup> are supposed to reflect the main existing human rights relevant to the environment and explicitly are not intended to create new obligations. Such a right may have advantages and may even be helpful in successively closing the gaps related to current attempts to ‘green’ existing human rights.<sup>180</sup> It thus is supposed to recognise and clarify the links between a healthy environment and the achievement of existing civil, political, economic, and social rights and, thereby, raise the profile and importance of environmental protection.<sup>181</sup>

**75** The practical implications of such an understanding of a right to a healthy environment, for example by emboldening progressive judges in the adjudication of environmental disputes all over the world,<sup>182</sup> should not be underestimated. A mere clarification of the links between ‘traditional’ human rights and the environment would, however, not necessarily solve the problems identified with holding a narrow view: It therefore is held, that a right to a healthy, decent or satisfactory environment should not be confused with existing case law on the right to life, health, or private life or with procedural innovations stemming from the Aarhus Convention: “To do so would make it little more than a portmanteau for the greening of existing civil and political rights”.<sup>183</sup> An independent right to a healthy environment should, accordingly, rather refer to the environment as a public good and provide additional legal means of balancing environmental objectives against economic development. It could be envisaged within the context of economic and social rights, where to some extent it already finds expression through the right to water, food, and environmental hygiene.<sup>184</sup> When applied by the judiciary, it should provide additional legal means to close gaps in environmental laws and create better opportunities for access to justice. Environmental rights could encompass the realisation of additional individual rights and obligations and even rights to a particular quality of environmental conditions. Such rights also entail new rights holders, such as future generations.<sup>185</sup>

**76** Irrespective of the interpretation of Resolution 48/13, there is evidence to suggest that a progressive understanding of environment-related environmental rights in this

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<sup>179</sup> ¶ 53 *et seq.*

<sup>180</sup> ¶ 51 *et seq.*

<sup>181</sup> HRC, Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, UN doc., A/HRC/37/59, 4.

<sup>182</sup> Savaresi (2021).

<sup>183</sup> Boyle (2012), p. 628.

<sup>184</sup> Boyle (2012), p. 628.

<sup>185</sup> Peters (2018), p. 4.

respect is also becoming increasingly relevant. Substantive ideas of inter-generational or inter-temporal dimensions of human rights have gained significant momentum, in particular in climate change litigation. Accordingly, future generations will be more susceptible to the long-term effects of climate change as its impacts will disproportionately disadvantage them. Not only will the consequences of climate change directly interfere with their enjoyment of human rights; the (side-) effects of measures of adaptation and mitigation may also indirectly interfere with their enjoyment of human rights.<sup>186</sup> In Germany, the German Federal Constitutional Court has prominently clarified that protection of life and physical integrity under Article 2(2) sentence 1 of the German Basic Law can involve the right to protection against impairments of fundamental rights by environmental harm, regardless of by whom and through what circumstances these rights are threatened. The State's duty to protect, which follows from Article 2 of the Basic Law, also includes the duty to protect life and health from the dangers of climate change, which can also establish an obligation to protect with regard to future generations.<sup>187</sup>

Moreover, and contrary to the dominant anthropocentric perspective which perceives environmental rights as individual (human) rights, many consider environmental rights as extending to non-human rights holders, thus reflecting eco-centric approaches and perspectives to environmental protection.<sup>188</sup> In this respect, a recent resolution of the parliamentary assembly of the Council of Europe deserves attention in that it echoed a similar understanding: The resolution criticises the ECtHR's "anthropocentric and utilitarian" approach to the environment which often prevents natural elements from being afforded any protection *per se*. As the Court's case law provides for indirect protection of a right to the environment by sanctioning only environmental violations that simultaneously result in an infringement of 'traditional' human rights, the Assembly encourages the Council of Europe to recognise, in time, the intrinsic value of nature and ecosystems in the light of the interrelationship between human societies and the environment. The resolution states, that "[r]ecognizing an autonomous right to a healthy environment would have the benefit of allowing a violation to be found irrespective of whether another right had been breached and would therefore raise the profile of this right."<sup>189</sup>

An eco-centric approach to environment-related rights, according to *Kotzé*, sees the environment as a condition to life, thus placing limitations on individual freedoms. Stopping short of giving rights to the environment, eco-centric rights are thus

<sup>186</sup> Albers (2017).

<sup>187</sup> Cf. Bundesverfassungsgericht, Beschluss vom 24. März 2021 – 1 BvR 2656/18 – 1 BvR 96/20 – 1 BvR 78/20 – 1 BvR 288/20 – 1 BvR 96/20 und 1 BvR 78/20. For examples for international case-law regarding an inter-generational dimension of environmental constitutional and human rights see Albers (2017).

<sup>188</sup> Peters (2018), p. 4.

<sup>189</sup> See Council of Europe, Parliamentary Assembly, Resolution 2396, 29 September 2021 (27th sitting). provisional version, Anchoring the right to a healthy environment: need for enhanced action by the Council of Europe.

more inclined towards limiting the currently almost unfettered human entitlement to resources.<sup>190</sup>

## 79 **The Inter-American Court of Human Rights' Advisory Opinion on the Environment and Human Rights—An Eco-centric Approach to Human Rights**

On 7 February 2018, the Inter-American Court of Human Rights published an Advisory Opinion on the Environment and Human Rights which is seen to open the door to new categories of claims in the Inter-American system because it recognised an independent right to a healthy environment (Article 26 of the American Convention on Human Rights).<sup>191</sup> The Court held that the right not only protects individual human rights such as health, life or physical integrity of individuals. It held that forests, rivers and seas, rather constitute protected juridical interests in and of themselves, meaning that harm to the environment could potentially be justiciable, even in the absence of evidence of harm to individuals (a requirement which has led to the dismissal of environment-related claims in other cases).<sup>192</sup> The Court also made clear that States have an obligation to act diligently to prevent impacts on human rights and, much like in *Urgenda v the Netherlands*, relied on the precautionary principle to substantiate the duty to protect human rights: States must act in accordance with the precautionary principle for the purpose of protecting the right to life and personal integrity, in cases where there are plausible indicators that an activity could bring serious and irreversible damage to the environment, even in the absence of scientific certainty.<sup>193</sup>

## 4.4 Conclusion: Extending the Scope of Environmental Rights, Strengthening Environmental Standards and Obligations

80 The analysis has shown significant dynamics in jurisprudence, legislative and scientific discourses with respect to environmental rights and correlative horizontal obligations of private actors. Even though the further course of these dynamic developments must be regarded as open, certain tendencies can be identified.

81 First of all, in light of the above, it seems plausible to assume that concepts about environmental human rights will further evolve. A closer look at the substantial links between human rights and environmental protection has shown that there is

<sup>190</sup> Kotzé (2014), p. 258.

<sup>191</sup> IACtHR *The environment and human rights* (Advisory Opinion) OC-23/17 (2017), available at: [http://www.corteidh.or.cr/docs/opiniones/seriea\\_23\\_esp.pdf](http://www.corteidh.or.cr/docs/opiniones/seriea_23_esp.pdf), last accessed on 7 Apr 2022.

<sup>192</sup> Banda (2018).

<sup>193</sup> IACtHR *The environment and human rights* (Advisory Opinion) OC-23/17 (2017), at para. 180.

considerable potential to improve the prospects of a (human) rights-based approach to environmental protection. Victims of environmental damage *de lege lata* can, in many cases, already translate the sustained impacts in justiciable violations of ‘traditional’, universally recognised human rights. The progressing “greening” of human rights in this sense emphasises the existential threats posed by environmental damage and climate change and is of significance in its own right. However, it can be plausibly assumed that the developments may go beyond this clarifying function of environmental human rights. It is an open question, if recent initiatives seeking to introduce a right to a healthy environment refer to both conceptual and normative clarifications of the links between environmental damage and existing human rights without extending the limits of a traditional approach.

A number of prominent examples illustrate that national, as well as international courts and international organisations, are willing to apply and further develop progressive approaches which extend the substantial scope of environmental human rights. Such an understanding of environmental rights may implicate a right to certain environmental qualities, introduce new rights holders, or even imply that harms to the environment are justiciable absent evidence of harm to individuals. Traditional limitations of rights-based approaches to environmental protection, e.g. in cases of dispersed, uncertain, or delayed damage might be overcome.

It also becomes increasingly evident that international courts and organisations may be, at least in principle, prepared to implement standards of environmental care. The normative foundation of this environmental standard of care lies in a progressive understanding of environmental human rights and their relation to international principles of environmental law such as the precautionary principle. The specific standards which shape the content of the obligations, duty-holders owe to the human rights-holders when facing environmental risks, are found in international environmental hard and soft law, but also in internationally recognized scientific data, e.g. in IPCC reports.<sup>194</sup> Given such productive intersections, it seems plausible to explore the preconditions and implications of a growing “regime-congruence” between human rights and international environmental law. Such an approach conceptualizes, on the one hand, if and to what extent “congruent interpretation of environmental norms by human rights courts could indirectly reinforce compliance with the environmental regime” and, on the other hand, how, giving effect to environmental standards in human rights litigation, supports the protection of human rights.<sup>195</sup> In any case, the examination seems to confirm the potential of a rights-based strategy of environmental protection to contribute to normative change.

With respect to the complementary issue concerning international environmental obligations of private actors, however, the analysis has returned an ambiguous result. While certain developments regarding such international obligations are observed in specific international regimes, the prospects for direct corporate obligations in

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<sup>194</sup> ¶ 27.

<sup>195</sup> Banda (2019), p. 1958.

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international law appear rather poor at the moment. This does not mean that there is a lack of relevant standards for private parties in transnational and international law. However, regimes of international hard and soft law still lack effective implementation and enforcement in transboundary constellations. Private standards may become increasingly important in commercial transactions and in the business relations of transnational companies but won't provide the necessary and appropriate level of regulation.

**85** The international governance gaps<sup>196</sup> with respect to transnational corporations and other businesses thus remain. That's why debates and policies aiming at a juridification of businesses' transnational obligations, for some time, have concentrated on national legal instruments with extraterritorial effects. The most prominent example of such an approach is the State's use of domestic law to impose legal human rights due diligence obligations on business actors and activities within their territorial jurisdiction that reach out into the corporate group and the global value chain. Concurrently, it is stressed, that human rights obligations towards foreign victims of corporate human rights abuse, should be enforceable in home-State courts *via* transnational tort litigation.<sup>197</sup> Common principles of tort law already provide certain bases the development of a standard of care, which aims at the protection of human beings and, at the same time, gives effect to transnational environmental norms.<sup>198</sup> Properties, conditions and potential limitations of national civil liability for environmental damage will be further discussed in Chap. 6, national value chain regulation is looked at in Chap. 7. At this point, it is sufficient to point out that such approaches in national law might also be seen as tools to process and further develop the productive intersections between environmental law and human rights.

**86** All of this does not mean that policies designed to improve the state of businesses' liability for environmental harm on the international level should generally be disregarded. The UN Treaty Body's approach, sketched out in this Chapter, which aims at anchoring States' domestic due diligence regulation with extraterritorial effect in international legal obligations to prevent and redress business-related human rights violations outside their borders,<sup>199</sup> may be promising also with a view on the productive intersections between human rights and environmental law. Such an approach would involve international agreements that establish new obligations for States to impose and/or enforce obligations on businesses and clarify the scope of States' duty to protect human rights and the environment. Governments then would be accountable for any failure to regulate and control environmental hazards, specifically those caused by businesses, while also being responsible for facilitating access to justice and enforcing environmental laws and judicial decisions.<sup>200</sup> The further development of this process remains to be seen. A comparable pathway is

<sup>196</sup> Cf. ¶ 34 and Chap. 2 ¶ 22 *et seq* (Sect. 2.2.2).

<sup>197</sup> Cf. Augenstein (2022).

<sup>198</sup> Banda (2019), p. 1957.

<sup>199</sup> Augenstein (2022).

<sup>200</sup> Boyle (2012), p. 628.

further examined in Chap. 5 which looks at international conventions focusing on the international harmonisation of national environmental liability regimes.

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# Chapter 5

## International Standards for National Environmental Liability Regimes



Kirsten Schmalenbach

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## 5.1 Introductory Remark

- 1 Civil liability conventions are generally seen as instruments that push the costs of pollution into the polluter's sphere, thereby implementing the 'polluter pays principle' (Chap. 2 ¶10 (Sect. 2.2.1)).<sup>1</sup> If ratified, they have many advantages when compared to national tort laws: First, they facilitate cross-border lawsuits within their scope of application as civil liability conventions harmonise the domestic tort regimes in all the contracting States. Second, civil liability conventions introduce strict liability whereas general tort law is based on fault or negligence. In terms of disadvantages, at least from an environmental law perspective, is the fact that civil liability conventions serve to shield operators from exposure to excessive claims via liability caps, which is a deviation from the full-compensation principle of tort law.<sup>2</sup>
- 2 However, for civil liability conventions to be an internationally effective means of implementing the polluter-pays principle requires that States go beyond negotiating and adopting these conventions but ratify them, a step the overwhelming majority are reluctant to take. As *Noah Sachs* pointedly observed, expertly designed

<sup>1</sup>Faure and Wang (2008), p. 593.

<sup>2</sup>Brunnée (2004), p. 357.

treaties, such as the existing civil liability conventions, may attract scholarly attention due to their political aims and legal innovations, but they are of little practical value if States refuse to ratify them.<sup>3</sup> Of the thirteen duly adopted civil liability conventions<sup>4</sup> that aim at creating distinct civil liability regimes, only four have entered into force.<sup>5</sup>

### Civil Liability Conventions

1. Convention on Third Party Liability in the Field of Nuclear Energy of 29 July 1960, as amended by the Additional Protocol of 28 January 1964, by the Protocol of 16 November 1982 and by the Protocol of 12 February 2004, 1519 UNTS 329 (1960 Paris Convention).
2. Convention on the Liability of Operators of Nuclear Ships, AJIL 57 (1963) 268 (1962 Brussels Convention).
3. Vienna Convention on Civil Liability for Nuclear Damage, as amended by the Protocol of 12 September 1997, 1063 UNTS 266 (1963 Vienna Convention).
4. International Convention on Civil Liability for Oil Pollution Damage, 973 UNTS 4, replaced by the 1992 Protocol, 1956 UNTS 255 (1992 CLC).
5. Convention on Civil Liability for Oil Pollution Damage Resulting from Exploration for and Exploitation of Seabed Mineral Resources ILM 16 (1977) 88 (1977 London Convention).
6. Convention on the Regulation of Antarctic Mineral Resource Activities, ILM 27 (1988) 868 (1988 Wellington Convention).
7. Annex VI to the Protocol on Environmental Protection to the Antarctic Treaty, 2941 UNTS 3 (2005 Environmental Protection Protocol Annex VI)

(continued)

<sup>3</sup>Sachs (2008), p. 837.

<sup>4</sup>In literature, the recognized number of civil liability conventions varies considerably. The decisive criterion for the selection of the 13 conventions examined here is that they all represent a full-fledged civil liability regime in their respective scopes of application. This excludes conventions with a primarily administrative approach (e.g. the 2010 Nagoya-Kuala Lumpur Protocol) and conventions which mainly refer to other liability conventions (e.g. the 2007 Nairobi International Convention on the Removal of Wrecks). Moreover, amending protocols were only taken into account in the present analysis if they made significant additions to the substantive liability provisions, which led to the exclusion of, for example, protocols on liability limitations and international funds as well as conventions that exclusively seek to solve conflicts of application between other liability conventions.

<sup>5</sup>In force for the States parties are the 1960 Paris Convention, the 1963 Vienna Convention, the 1969 CLC Convention and the 2001 Bunker Oil Convention.

8. Convention on Civil Liability for Damage Caused During Carriage of Dangerous Goods by Road, Rail and Inland Navigation Vessels, UN Doc. E/ECE/TRANS/79, (1989 CRTD).
9. Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment, ILM 32 (1993) 1228. (1993 Lugano Convention).
10. International Convention on Liability and Compensation for Damage in Connection with The Carriage of Hazardous and Noxious Substances by Sea as amended by the 2010 Protocol, ILM 35 (2010) 1406 (1996 HNS Convention).
11. Protocol on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes and their Disposal to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, UN Doc. UNEP/CHW.1/WG/1/9/2 (1999 Basel Protocol).
12. International Convention on Civil Liability for Bunker Oil Pollution Damage, IMO document Leg/CONF.12/DC/1 (2001 Bunker Oil Convention).
13. Protocol on Civil Liability and Compensation for Damage Caused by the Transboundary Effects of Industrial Accidents on Transboundary Waters, UN Doc. ECE/MP.WAT/11-ECE/CP.TEIA/9 (2003 Kiev Protocol).

4 The degree of willingness that States manifest to commit to civil liability conventions is primarily driven by the subject matter, with issues such as nuclear energy safety and oil transportation seeming to generate the most support, triggered by, *inter alia*, the resultant devastation of related large-scale accidents. The last attempt of the international community to introduce a new international civil liability regime was in 2003 with the adoption of the Protocol on Civil Liability and Compensation for Damage Caused by the Transboundary Effects of Industrial Accidents on Transboundary Waters.<sup>6</sup> Of the 43 States parties to the main convention, only one State has ratified the Protocol – Hungary, which in 2000 experienced an environmental catastrophe caused by cyanide pollution spilling into the river Tisza.<sup>7</sup>

<sup>6</sup>2003 Kiev Protocol [https://treaties.un.org/doc/source/docs/ECE\\_MP.WAT\\_11-ECE\\_CP.TEIA\\_9-E.pdf](https://treaties.un.org/doc/source/docs/ECE_MP.WAT_11-ECE_CP.TEIA_9-E.pdf), last accessed 25 April 2022.

<sup>7</sup>The Protocol is attached to two conventions, the Convention on the transboundary Effects of Industrial Accidents of 1992 (41 parties; 2105 UNTS 457) and the Convention on the Protection and Use of Transboundary Watercourses and International Lakes of 1992 (43 parties; 1936 UNTS 269).

### 2000 Baia Mare Cyanide Spill

The Tisza is one of Central Europe's main rivers, releasing almost 800 m<sup>3</sup> of water per second into the Danube. The Tisza basin is shared by five countries (Hungary, Romania, Serbia, Slovakia and Ukraine) and has experienced several disastrous spills of toxic chemicals in the past, often related to leaks from mining facilities. In 2000, two dam walls that formed a gold mine's retention reservoir broke, releasing thousands of tonnes of sediments and water containing toxic heavy metals and heavily contaminated with cyanide into tributaries of the Tisza River. On 27 April 2001, the Hungarian government filed civil proceedings in Budapest against the Australian-Romanian Aurul Company/Transgold S.A. that, at the time, ran the gold mine at Baia Mare in Romania. Explicitly referring to the polluter-pays principle, the lawsuit filed in Budapest sought approx. US\$100 million for the damage caused to tourism and the ecosystem as well as for the cost to rehabilitate the poisoned areas along the Szamos, Tisza and Danube rivers.<sup>8</sup> In May 2007, a preliminary decision of the Metropolitan Court Budapest established the liability of the Romanian company (File No. 4.P.23.771/2001/79-1), however, the company initiated bankruptcy proceedings against itself in Romania in April 2006 which led to it being delisted from the Romanian company registry. The Metropolitan Court Budapest was therefore forced to end the Hungarian civil procedure due to the lack of a defendant.<sup>9</sup>

The importance of polluters bearing the costs of the damage they cause has been emphasised on many occasions over the last five decades. Unsurprisingly, the multitude of international acknowledgements has given rise to hope that treaty failure, due to a lack of ratifications, can be remedied by parallel norms of customary international law (Chap. 3 ¶ 38 (Sect. 3.3.3)). Indeed, while States have little or no international repercussions to fear if they evade treaty obligations on environmental liability, openly objecting to parallel customary law, as identified by international authorities such as the ICJ, is a completely different matter. Regrettably, there is not yet even a single international decision that identifies a general legal obligation of States under customary international law to ensure domestically civil liability for environmental damage. However, and irrespective of this absence of precedent, it is quite possible that rules of customary international law will emerge and evolve even if States continue to shy away from ratifying civil liability treaties. To identify customary international law provisions on the polluter's environmental civil liability, this Chapter will provide an overview of existing treaties and internationally

<sup>8</sup>Harper (2005), p. 226; see also the official announcement available under <https://reliefweb.int/report/hungary/hungary-summary-environment-catastrophe-caused-cyanide-pollution-river-tisza>, last accessed 25 April 2022.

<sup>9</sup>Springer (2016), pp. 96–109.

developed instruments and guidelines in this area to then evaluate the customary nature of common elements.

## 5.2 Civil Liability Conventions

### 5.2.1 *Obligations Under Civil Liability Conventions*

7 Civil liability conventions are designed to harmonise the rules of tort law across jurisdictions for specific types of dangerous activities that could foreseeably result in transboundary damage.<sup>10</sup> Consequently, the conventions first and foremost oblige States parties to incorporate the substantive provisions into their respective domestic law regimes. When doing so, these States have some flexibility regarding both the method of incorporation and the design of domestic liability regimes as long as it is effective for the purpose of the convention. This leeway has its roots in the prevailing view that provisions of international civil liability conventions do not directly bind the operator or owner engaging in environmentally hazardous activities,<sup>11</sup> however, this assessment has been occasionally disputed.<sup>12</sup>

8 The view taken here is that convention-specific assessments are required as the question of whether a convention imposes direct rights and obligations on domestic public and private actors (e.g. the operator or the owner) will depend on the convention under consideration and its interplay with both the international and national law perspectives on the issue. Some civil liability conventions leave little doubt that States parties' intended all the aspects of a given liability regime to be implemented in domestic law.<sup>13</sup> However, other agreements do not address transposition and their unconditional language offer the possibility of direct application by domestic courts.<sup>14</sup> For example, in the *Amoco Cadiz* case, the US District Court considered the 1969 Convention on Civil Liability for Oil Pollution Damage as a part of French law and not of US law due to the lack of ratification.<sup>15</sup> From a conflict-of-law perspective, it is not surprising that US courts seek to anchor the international convention in domestic law; nonetheless, it is remarkable that the court interpreted the Convention "in light of its legislative history and French Law", referring to the French 1978 implementation act.<sup>16</sup> In the *Erika Oil Spill* case, the Paris Court of

<sup>10</sup>Sachs (2008), p. 839.

<sup>11</sup>Karavias (2013), pp. 14–15; Bothe (2005), p. 437; see also Boyle (1991), p. 368.

<sup>12</sup>See e.g. Jägers (2002), p. 32; Nollkaemper (2006), p. 189.

<sup>13</sup>See e.g. Article 8 of the 2003 Kiev Protocol.

<sup>14</sup>E.g. the 1993 Lugano Convention; see also Peters (2014), p. 143.

<sup>15</sup>US District Court for the Northern District of Illinois, Eastern Division *Oil Spill by Amoco Cadiz* (1984), para. 2077; see for an analysis Rosenthal and Raper (1985), p. 263.

<sup>16</sup>See also US Court of Appeal for the 7th Circuit *Matter of Oil Spill by the Amoco Cadiz* (1992) 954F.2d1279, para. 1310; France decided to disain their remedies under the Civil Liability Convention in favour of the US lawsuit under Article 1382 of the French Civil Code.



Appeal (2010) and the Cour de Cassation (2012) directly applied 1992 Civil Liability for Oil Pollution Damage which was implemented by a French Decree in 1996.<sup>17</sup>

### 1999 Erika Oil Spill

The Erika was a single-hulled vessel owned by Tevene Shipping and chartered by TOTAL Transport Corporation (France) to transport heavy fuel oil from Dunkerque in France to Milazzo in Italy. The vessel was carrying 31,000 tonnes of oil when it was caught in heavy swells that caused the tanker to break in two on the night of the 13 of December 1999 some 45 nautical miles off the coast of Brittany. The hull breach resulted in 19,800 tonnes of the heavy fuel oil spilling into the ocean and polluting almost 400 km of the French coastline. In 2008, the Paris Criminal Court convicted the shipowner, an Italian company that declared the Erika seaworthy and TOTAL; the criminal conviction was confirmed by the Paris Court of Appeal which, however, exempted TOTAL from any civil liability with reference to the International Convention on Civil Liability for Oil Pollution Damage (CLC)<sup>18</sup> which places all civil liability with the shipowner. In 2012, the Cour de Cassation, France highest court, confirmed TOTAL's criminal conviction and reserved the rest of its judgment to declare TOTAL liable for the damage. Even though the CLC makes the shipowner solely liable, other actors can be liable if they acted recklessly and with the knowledge that potential damage could result. Unlike the Court of Appeal, the Cour de Cassation decided that TOTAL, as the charterer, had committed a reckless act. Consequently, TOTAL was found to be severally liable with the shipowner, based on the CLC and French law. Damages were awarded under French Law comprising economic loss, moral prejudice and environmental harm.<sup>19</sup> In parallel proceedings before a French Commercial Court, in the second instance the Court of Appeal in Rennes and finally the Cour des Cassation,<sup>20</sup> TOTAL was found liable after the European Court of Justice, in a preliminary ruling requested by the Cour des Cassation, decided that CLC compensation system is insufficient to fully compensate the victims: For civil liability purposes, an oil spill can be considered as a waste and the charterer is the producer of the product from which the waste came.<sup>21</sup>

9

<sup>17</sup> Judgment of the Court of Cassation, Chambre criminelle (2012) ECLI:FR:CCASS:2012:CR03439 is available at <https://www.courdecassation.fr/decision/61400e5defd934822802c162>, last accessed 25 April 2022.

<sup>18</sup> Paris Court of Appeals *Clemente et al v General Council of la Vendée et al* (2010) 08/02278.

<sup>19</sup> Adshead (2018), p. 440.

<sup>20</sup> Court of Cassation, Chambre civile 3 *Commune de Mesquer v Total France Sa and Total International Ltd* (2008) 04-12.315.

<sup>21</sup> ECJ *Commune de Mesquer* C-188/07 [2008] ECLI:EU:C:2008:359, para. 82.

**10** Irrespective of direct references to civil liability conventions by domestic courts, it is a bridge too far to claim that these conventions impose an international legal obligation on States parties to directly apply the conventions' provisions within their scope of application. As a rule, international treaties leave it to States to determine how they will give effect to their convention obligations. In fact, the status of any given civil liability convention can be quite diverse in various domestic law regimes and the general stance of international law is to respect national peculiarities. Therefore, the question of whether the liability of operators arises directly from international law cannot be answered in the affirmative without qualifications. If implementation is not explicitly addressed and the language of the provisions is clear and precise, civil liability conventions do not oppose the notion of direct liability obligations,<sup>22</sup> which is of significance for domestic legal systems that lean towards a monistic approach, such as that of France.

**11** Since 2003, the international community has been quiet in terms of further codification efforts regarding international civil liability.<sup>23</sup> That does not mean that liability, as a topic, is off the international negotiation table; however, the focus has shifted to an administrative approach to liability with public authorities being the decisive actors in pursuing redress. This shift in focus is illustrated by the 2010 Nagoya-Kuala Lumpur Supplementary Protocol on Liability and Redress, which entered into force in 2018 (Chap. 14). Supplementing the Cartagena Protocol on Biodiversity (Article 27), the Nagoya-Kuala Lumpur Protocol applies to damage resulting from of border-crossing living modified organisms (LMO). Despite its administrative approach to liability, Article 12 of the Protocol addresses civil liability by obliging States parties to provide domestic rules and procedures address damage resulting from such organisms, either through their existing general rules on civil liability (tort) or by creating new special civil liability laws to address biodiversity damage. These existing or new civil liability laws should address four issues: damage, the standard of liability (strict or fault-based), the channelling of liability where appropriate and the right to bring claims (Article 12(3)). Apart from the enumeration of these elements, Article 12 makes almost no substantive specifications; only the element "damage" is rather convolutedly defined in Article 12 as "material and personal damage" associated with "an adverse effect on the conservation and sustainable use of biological diversity, taking into account risks of human health" (Article 12(2) in conjunction with Article 2(2)). This approach makes Article 12 deficient in terms of establishing an effective civil liability regime. Given the lack of actual cases involving damage caused by LMOs, the negotiating parties could not

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<sup>22</sup>Peters even considers civil liability conventions to impose a prior primary obligation to refrain from environmental damage, see Peters (2016), p. 154.

<sup>23</sup>When negotiating the 2001 Stockholm Convention on Persistent Organic Pollutants (POP), the States adopted the resolution on liability and redress concerning the use of and intentional introduction into the environment of POPs. The relevant resolution (Resolution 4) was adopted as a part of a package consisting of seven resolutions attached to the Final Act of the Conference (UNEP/CONF/4). Currently, no amendments or protocols on liability have been adopted.

agree on the necessity for tort law harmonisation.<sup>24</sup> One can only speculate whether the States' willingness to ratify the Nagoya-Kuala Lumpur Protocol (as of September 2022, 51 parties have done so) has been fostered by the underdeveloped Article 12 on civil liability.

Concerning the substantive specifications, the 13 environmental civil liability conventions under consideration address, *inter alia*, the following substantive issues which are of relevance for the formation of customary international law:

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- Relevant damage
- Relevant activities
- Causality
- Standard of liability and possible defences
- Claimant (access to justice)
- Respondent
- Compensation

Other aspects of the 13 civil liability regimes, such as the establishment of compensation funds, mandatory insurance, liability ceilings, statutory limitations, dispute settlement and procedural rules are too specific to the relevant civil liability regime to be generalised. Even though the insurability of environmental liability has high practical relevance and the duty of States to establish an insurance scheme for such liability is addressed in several instruments,<sup>25</sup> the following comparison focuses on the elements that determine liability for environmentally harmful activities rather than the financial safeguards ensuring effective compensation, which have various degrees of appropriateness for various risks.<sup>26</sup> However, some aspects of financial safeguard mechanisms are meaningful in the interpretation of the seven substantive issues under consideration here, especially the element of prompt and adequate compensation.

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### 5.2.2 *Relevant Damage*

Civil liability conventions are designed to compensate an injured person by requiring the responsible actor to pay the economic costs of damage resulting from its activities (1992 CLC: quantifiable economic loss). Therefore, all of them focus on tort, i.e. damage to persons or property, while environmental damage<sup>27</sup> is only referenced through the (reasonable<sup>28</sup>) costs of reinstatement, covering both cleaning

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<sup>24</sup> Shibata (2016), p. 247.

<sup>25</sup> See e.g. ILC Draft Principles on the allocation of loss in the case of transboundary harm arising out of hazardous activities, Principle 4(3) ("where appropriate") and (4) ("in appropriate cases").

<sup>26</sup> Faure and Grimeaud (2000).

<sup>27</sup> For a detailed analysis see De La Fayette (2002).

<sup>28</sup> Article 1(6)(a) CLC; Article 1 (10) (c) CRTD.

up costs and restoration costs.<sup>29</sup> The 1993 Lugano Convention addresses and enhances the concept of environmental damage<sup>30</sup> by covering not only reinstatement of the environment as such but also preventive measures (1963 Vienna Convention: preventive measures if the authorities approve them according to its laws). It is equally difficult to identify a common threshold at which damage entails liability: Most conventions do not designate any threshold (e.g. 1993 Lugano Convention; 1992 CLC), whereas few require significant impairment (1960 Paris Convention; 1963 Vienna Convention, 1988 Wellington Convention).

- 15 Remarkably, the damage does not have to be transboundary to fall within the scope of the conventions, even though crossing borders may be required for the relevant activity (see e.g. 1999 Basel Protocol that applies to damage due to an incident occurring during a transboundary movement of hazardous wastes). That said, civil liability conventions concern activities where transboundary damage is particularly likely to occur and thus facilitate cross-border litigation, including activities in areas beyond national jurisdiction such as the high sea.

### 5.2.3 *Relevant Activities*

- 16 All civil liability conventions, except for the 1993 Lugano Convention and the Antarctica-specific 1999 Environmental Protection Protocol Annex VI, are sectoral, meaning they cover only one type of ultra-hazardous activity, such as:

- The operation of nuclear installations,
- The maritime transport of oil in bulk,
- Antarctic mineral extraction activities,
- The movement and disposal of hazardous wastes,
- The carriage of bunker oil by sea,
- Transporting dangerous goods by road, rail and river,
- Exploring for and exploiting seabed mineral resources,
- Engaging in hazardous activities that could have transboundary effects on transboundary waterways,
- The operation of nuclear-powered ships,
- The transportation of noxious and hazardous substances by sea.

<sup>29</sup> Article 10(c), (d) 1989 CRTD; Article 2(7)(c), (d) 1993 Lugano Convention; Article 1(6)(c) and (d) 2010 HNS Convention; Article 2(2)(c)(iii), (iv), (v) 1999 Basel Protocol; Article 1 para. 6 1992 CLC (“reasonable measures of reinstatement actually undertaken or to be undertaken”). In contrast, the 1960 Paris Convention in the original form and the 1962 Brussels Convention simply do not have provisions requiring actors to cover the costs of reinstating an environment they have damaged. The 2004 Protocol to Amend the Paris Convention, which entered into force on 1 January 2022, covers certain types of economic loss, the cost of measures of reinstatement, loss of income and the cost of preventive measures.

<sup>30</sup> See also the 1988 Wellington Convention and the 2005 Environmental Protection Protocol Annex VI: “damage to the Antarctic environment”.

The 1993 Lugano Convention covers any dangerous activity relating to dangerous substances, living modified organisms, micro-organisms and the operation of an installation or site dealing with hazardous waste. **17**

### 5.2.4 Causation

Unsurprisingly, all of these conventions require a link between a given incident and damage done, which is often described with the phrase “caused by” or “results from” without getting involved in further details regarding the proximity of the activity or harmful event and the damage as this issue is left to the competent domestic court to decide. Some civil liability conventions contain a presumption of causality when different types of damage are not reasonably separable, under such conventions the entirety of the damage is deemed to have been caused by the activity in question.<sup>31</sup> **18**

The determination of a causal link can pose considerable difficulties with regard to environmental damage. Article 10 of the 1993 Lugano Convention requires domestic courts to take into account the increased danger of causing damage that is inherent to the dangerous activity in question when considering evidence of the causal link between the incident and the damage or, in the context of the dangerous activity, between the activity and the damage. **19**

### 5.2.5 Standard of Liability and Defences

All thirteen civil liability conventions impose strict liability for damage on the person in control of the activity, i.e. *prima-facie* liability without the necessity to prove intent or negligence. The notable exception is the 1999 Basel Protocol which additionally prescribes fault-based liability on “any person” for their “lack of compliance with the provisions implementing the Convention or by his wrongful intentional, reckless or negligent acts or omissions”, without defining these terms.<sup>32</sup> **20**

All conventions make allowance for the validity of certain defences, which have to be proven by the respondent. Generally, recognised defences entail natural disasters (of an exceptional, inevitable and irresistible character), international war, hostilities, civil war or insurrection as well as intentional or grossly negligent acts or omissions by third parties.<sup>33</sup> Less commonly accepted is the defence that damage occurred via compliance with a compulsory measure of a public authority and dangerous activities undertaken lawfully in the interest of the person who suffered the damage (e.g. Article 8 b and e of the 1993 Lugano Convention). In the special **21**

<sup>31</sup> Article IV Nuclear Ships, Article IV Vienna Convention, Article 1(6) HNS Convention.

<sup>32</sup> Article 5 of the 1999 Basel Protocol; see also Article 5 of the 2003 Kiev Protocol.

<sup>33</sup> Article 3 of the 1977 London Convention; Article VIII 1962 Brussels Convention.

case of shipping activities, incidents arising from negligence or other wrongful acts of public authorities responsible for the maintenance of lights or other navigational aids is accepted as a valid defence.<sup>34</sup>

### 5.2.6 *Claimant (Access to Justice)*

- 22 None of the thirteen civil liability conventions refer to the entity entitled to bring a claim as it is assumed that the entity suffering damage can do so. The only convention to give standing to associations or foundations is the 1993 Lugano Convention with regard to requests for preventive and reinstatement measures (Article 18: *actio popularis*).
- 23 Aside from issues of standing, access to justice in these conventions entails expeditious and equal access to domestic courts and remedies on a non-discriminatory basis. Clauses addressing these issues are included in a number of conventions, such as Article 14 of the 1960 Paris Convention, Article 8 of the 2003 Kiev Protocol.
- 24 Furthermore, access to justice also entails questions of jurisdiction, which refers to the competence of the court to decide on the compensation claim brought before it. States are called on to ensure that their courts possess the necessary jurisdiction to hear compensation claims covered by the given convention. The civil liability regimes under consideration generally provide for criteria to establish jurisdiction in cases involving transboundary damage. For example, the jurisdiction for claims under the nuclear conventions is vested in the domestic courts of the State where the incident has occurred (Article 13(a) of the 1960 Paris Convention, Article XI(1) of the 1963 Vienna Convention) whereas for the 1992 CLC and the 1996 HNS Convention jurisdiction is vested in the domestic courts of the affected State. The 1989 CRTD, the 1993 Lugano Convention and the 1999 Basel Protocol all offer a choice of forum between the courts of the State where the damage was suffered, the State where the incident occurred or the State where the defendant is habitually resident.<sup>35</sup>

### 5.2.7 *Respondent*

- 25 Most of the conventions identify the actors in control of the hazardous activity as the party liable for any damage caused by that activity. These actors are usually the

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<sup>34</sup> Article 3(3)(c) Bunker, Article 7(2)(c) HNS Convention.

<sup>35</sup> Article 19(1) of the 1989 CRTD; Article 19 of the 1993 Lugano Convention; Article 17 1999 Basel Protocol; Article 13 of the 2003 Kiev Protocol.

‘operator’, ‘carrier’<sup>36</sup> or, less commonly, the ‘owner’<sup>37</sup> because they are in the key position to take preventive steps to eliminate or reduce the risk of damage. When dealing with cases of strict liability, the 1999 Basel Protocol sets forth a detailed system of liable persons based on the point in time and step in the transportation or disposal process when the damage occurred to determine if, for example, the notifier, disposer or exporter of the waste is at fault. The legal channelling of strict liability to the operator, carrier or owner is one of the principal aims of civil liability conventions.<sup>38</sup> However, the channelling of liability by international liability conventions does not in and of itself preclude the application of national tort law or environmental liability laws of the forum State.<sup>39</sup> Even though the above-stated object and purpose of the civil liability conventions should not be undermined by domestic tort laws, civil liability conventions do not preclude the tortious liability of actors other than the strictly liable operator or owner.

### 5.2.8 Compensation

In some civil liability conventions reference to ‘prompt and adequate compensation’ is made in the preamble (1993 Lugano Convention; 1977 London Convention, 2001 Bunker Oil Convention) or in the first article (Article 1 of the 1993 Lugano Convention; Article 1 of the 2003 Kiev Protocol). This placement shows the significance of such compensation as a key outcome or, in the cases where it appears in the preamble, as an aid in the interpretation of that convention’s provisions. While none of the conventions elaborate details such as timeframes and valuation methods for environmental damage, they do, however, safeguard prompt and adequate compensation through insurance schemes to ensure the effectiveness of compensation regimes. Under the revised 1962 Vienna Convention, both the reinstatement and the preventative costs are only compensated to the extent determined by the law of the competent court (Article 1(k) (iii)(vii)).

All civil liability conventions, except for the 1993 Lugano Convention, contain a provision allowing States parties to limit the liability of the operator or owner, although these limits vary greatly in terms of the owner’s or operator’s financial exposure.

<sup>36</sup> Article 5 of the 1989 CRDT.

<sup>37</sup> Article 1 and 3 of the 1992 CLC; Article 7 of the 1996 HNS Convention; Article 3 in conjunction with Article 1 of the 2001 Bunker Oil Convention.

<sup>38</sup> Stoiber et al. (2003), p. 112.

<sup>39</sup> See e.g. Article 25(1) Lugano Convention: “Nothing in this Convention shall be construed as limiting or derogating from any of the rights of the persons who have suffered the damage or as limiting the provisions concerning the protection or reinstatement of the environment which may be provided under the laws of any Party or under any other treaty to which it is a Party.”.

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### 5.3 Administrative Approaches to Liability: The Nagoya-Kuala Lumpur Supplementary Protocol

28 The 2010 Nagoya-Kuala Lumpur Supplementary Protocol to the 2000 Cartagena Protocol on Biosafety entered into force in March 2018 and deals with liability and redress in cases of damage to biodiversity caused by living modified organisms (LMO).<sup>40</sup> As of September 2022, of the 173 parties to the Cartagena Protocol, 51 have ratified the Nagoya-Kuala Lumpur Protocol, which adopted an administrative approach to liability accompanied by one very shallow provision on civil liability (Article 12). The administrative approach to liability means that the Nagoya-Kuala Lumpur Protocol obliges its parties to require the operator to take action if there is (1) sufficient likelihood of damage, or (2) damage occurs. In cases where damage occurs, the operator is required to inform the authorities, evaluate the damage and take appropriate response measures. The authorities themselves may implement appropriate response measures where the operator fails to take the required action. In contrast to civil liability regimes, the responsibility for any damage is attached to administrative processes because the authorities are empowered to implement the system.<sup>41</sup> In contrast, civil liability regimes allow the injured person to initiate proceedings against the operator through the State judiciary. The pivotal role of the administrative authorities is highlighted in Article 5 Nagoya-Kuala Lumpur Protocol which dictates that the authority determines which response measures shall be taken by the operator and decides whether to recover costs.

29 The administrative approach to liability is a rather recent development given that its origins trace back to the US 1980 Comprehensive Environmental Response, Compensation and Liability Act.<sup>42</sup> Through this act, the US Environmental Protection Agency was given the power to seek out those parties responsible for any release of pollutants and compel them to cooperate in the clean-up. Decades later, the EU introduced the administrative approach in its Environmental liability directive 2004/35/EC,<sup>43</sup> which predefined the EU's negotiation position in the working groups and meetings that led to the adoption of the Nagoya-Kuala Lumpur Protocol. However, it is worth noting that this Protocol does not internationalise liability and redress as other international civil liability conventions do, such as those covering damages caused by oil pollution and nuclear energy accidents.<sup>44</sup> Instead, an alternate mechanism was agreed upon whereby State parties assign their own standard of liability based on their respective domestic laws (Article 12).

<sup>40</sup>Reprinted in ILM 50 (2011) 109.

<sup>41</sup>Nijar (2013), p. 276.

<sup>42</sup>42 U.S.C. §9601 *et seq* (1980).

<sup>43</sup>Directive 2004/35/EC of the European Parliament and the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage, OJ 2004 No L 143/56.

<sup>44</sup>Telesetsky (2011).



### 5.3.1 *Relevant Damage*

The term “relevant damage” in The Nagoya-Kuala Lumpur Protocol refers to “significant adverse effect on the conservation and sustainable use of biological diversity”.<sup>45</sup> The damage has to be measurable or otherwise observable, taking officially recognised and scientifically-established baseline valuations into account.<sup>46</sup> Under the administrative approach to liability, damage does not determine the parameters of compensation but functions as a trigger for the operator or the authority to take action.<sup>47</sup> **30**

### 5.3.2 *Relevant Activities*

It is not an ultra-hazardous activity that is central to the Nagoya-Kuala Lumpur Protocol, rather it is a potentially ultra-hazardous substance, namely the above-mentioned LMOs. Consequently, liability is linked to the direct or indirect control of the potentially ultra-hazardous LMO in any given case. **31**

### 5.3.3 *Causality*

Article 4 Nagoya-Kuala Lumpur Protocol requires that a causal link is established between the damage and the LMO in accordance with domestic law without being more specific about the types and standards of causation. In this regard, it follows in the footsteps of the civil liability conventions. **32**

### 5.3.4 *Standard of Liability and Possible Defences*

The Nagoya-Kuala Lumpur Protocol does not determine the standard of liability of the operator in direct or indirect control of LMO as the administrative approach to liability differs in this respect from the civil liability approach. However, the Protocol requires neither intent nor negligence on the part of the operator to assign liability because its duties are triggered by the event of damage alone (Article 5(1)). Being involved in an authorised use of LMOs does not exonerate an operator for **33**

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<sup>45</sup> Article 2(2)(b) of the Nagoya – Kuala Lumpur Supplementary Protocol.

<sup>46</sup> The baseline approach should take into account any other human induced variation and natural variation of the affected environment Article 2(2)(b) of the Nagoya – Kuala Lumpur Supplementary Protocol.

<sup>47</sup> Shibata (2016), p. 36.

their unintentional transboundary movement (Article 3(1) and (2)), however, *force majeure* and civil unrest does. In addition, the States parties are allowed to adopt in their domestic laws any other exemptions to the operators' response duties. In addition, States parties can, in their domestic laws, define under which conditions the operator may not be required to bear the costs and expenses of the public-sector response to the damage (Article 5(5)). Consequently, the standard and extent of liability for private actors in the event of damage strongly depends on the specifics of each State's implementation of the Nagoya-Kuala Lumpur Protocol.

### 5.3.5 *Claimant (Access to Justice)*

- 34 It is a defining characteristic of the administrative approach to liability that it does not deal with an injured person's access to justice. The decision of the authorities is subject to procedural safeguards, including administrative or judicial review (Article 5(6)). However, this provision safeguards the operators' right of appeal, not the rights of injured persons dissatisfied with the authorities' decisions. In addition, the Nagoya-Kuala Lumpur Protocol does not provide for cross-border enforcement of administrative decisions.<sup>48</sup> However, it does not exclude the possibility of civil action for claimants (Article 12).

### 5.3.6 *Respondent*

- 35 The operator who is direct or indirect control of the LMO, typically the permit holder, distributor, dealer, producer and carrier, is obliged to take preventive and/or restorative response measures (Article 2 (2)(d)) in the event of damage to the environment and, if necessary, to reimburse costs of such measures.

### 5.3.7 *Compensation*

- 36 In contrast to civil liability, the administrative approach to liability does not deal with compensation but remediation. The operator bears the cost of the restoration of biological diversity or has to reimburse the authorities' efforts.

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<sup>48</sup>Lefebvre (2016), p. 87.

## 5.4 Non-binding Instruments on Civil Liability Adopted by International Bodies and Conferences

Several non-binding instruments on civil liability have been adopted by international conferences and international organisations that deal comprehensively or selectively with aspects of civil environmental liability. The collection of recommendations and guidelines presented here does not claim to paint a complete picture of all the liability approaches discussed and adopted in international fora, such as the OECD.<sup>49</sup>

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### Civil Liability Guidelines

1. CoP Barcelona Convention, Guidelines for the Determination of Liability and Compensation for Damage Resulting from Pollution of the Marine Environment in the Mediterranean Sea Area (Mediterranean-Sea Guidelines 2008);<sup>50</sup>
2. UNEP, Guidelines for the development of domestic legislation on liability, response action and compensation for damage caused by activities dangerous to the environment, adopted by the Governing Council of the United Nations Environmental Programme in decision SS.XI/5, part B of 26 February 2010 (UNEP Liability Guidelines 2010).
3. UNEP, Guidelines for the development of national legislation on access to information, public participation and access to justice in environmental matters, adopted by the Governing Council of the United Nations Environment Programme in decision SS.XI/5, part A of 26 February 2010 (UNEP Access to Information and Justice Guidelines 2010);
4. UNECE, Code of Conduct on Accidental Pollution of Transboundary Inland Waters, 1990 (UNECE Inland Water CoC 1990).<sup>51</sup>

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Reports, white books and legislative activities within the framework of the EU are not discussed here as the EU finally opted for an administrative approach to

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<sup>49</sup>See e.g. OECD (2012); even though not primarily concerned with liability, the United Nations Economic Commission for Europe (UNECE) adopted a code of conduct on accidental pollution of transboundary inland waters in 1990 that addresses access to justice in cases of accidents, Code of Conduct on Accidental Pollution of Transboundary Inland Waters, 1990, Doc E/ECE/1225, available at: <http://extwprlegs1.fao.org/docs/pdf/eur16417.pdf>, last accessed 25 April 2022.

<sup>50</sup>Adopted on 18 January 2008 on the 15th ordinary meeting of the Contracting Parties to the Convention for the Protection of the Marine Environment and the Coastal region of the Mediterranean (Barcelona Convention: 1102 UNTS 44), Doc UNEP(DEPI)/MED.IG.17/10; for detail see Scovazzi (2009), pp. 183 *et seq.*

<sup>51</sup>Adopted by the United Nations Economic Commission for Europe by Decision C(45), 1990, Doc E/ECE/1225.

environmental liability (EU Liability Directive 2004/35/EC<sup>52</sup>). With regard to the documents under consideration, the following key aspects can be identified:

### 5.4.1 *Relevant Damage*

- 40 The Mediterranean-Sea Guidelines differ between ‘traditional damage’ and ‘environmental damage’. ‘Traditional damage’ covers loss of life or personal injury, loss of or damage to property, pure economic loss, costs of reinstatement measures and costs of preventive measures.<sup>53</sup> Environmental damage, on the other hand, refers to ‘significant’ and ‘measurable’ adverse changes in a natural area or to a biological resource or a measurable impairment of a natural area or biological resource service which may occur directly or indirectly.<sup>54</sup> The UNEP Liability Guidelines specify both ‘significant’ and ‘measurable’: the ‘significance’ of the damage is to be determined based on several factors including long-term change to the environment. Damage is ‘measurable’ if methods of valuation can quantify it, taking into account scientifically established baselines that are recognised by the relevant public authority.<sup>55</sup> The above-mentioned UNECE code of conduct for inland waterways deals with significant transboundary impairment of water quality and significant transboundary damage to aquatic ecosystems.<sup>56</sup> The code’s Annex H provides a list of measures for the physical and monetary assessment of damage, including an evaluation of the impacts on the use of the affected waterways for recreational, cultural, economic and other uses as well as an examination of the related ecosystems.<sup>57</sup>

### 5.4.2 *Relevant Activities*

- 41 The UNEF Liability Guidelines refer to “activities dangerous to the environment” and leave it to domestic law to decide which activities should be classified as such.<sup>58</sup>

<sup>52</sup> OJ 2004 No L 143, 56 (consolidated version).

<sup>53</sup> Para. 14 Mediterranean-Sea Guidelines 2008; see also Guideline 3 (2) UNEP Liability Guidelines 2010 (under headline ‘damage’).

<sup>54</sup> Para. 9 Mediterranean-Sea Guidelines 2008; Guideline 3(3) UNEP Liability Guidelines 2010.

<sup>55</sup> Guideline 3(2)(a) UNEP Liability Guidelines 2010.

<sup>56</sup> Para. I(b) UNECE, Code of Conduct on Accidental Pollution of Transboundary Inland Waters 1990.

<sup>57</sup> Annex H (d) and (e) UNECE, Code of Conduct on Accidental Pollution of Transboundary Inland Waters 1990.

<sup>58</sup> Guideline 3(1) and 4(1) UNEP Liability Guidelines 2010; see also Para. I(g) 1990 UNECE, Code of Conduct on Accidental Pollution of Transboundary Inland Waters: “hazardous activity means any activity which by its nature involves a significant risk of accidental pollution”.

Due to the special conventional framework within which the Mediterranean-Guidelines operate, they apply to activities covered by the Barcelona Convention and its Protocol which governs the pollution of the Mediterranean Sea Area caused by dumping and discharge from ships and land-based sources as well by the exploration and exploitation of sea areas. The UNECE code of conduct on inland waterways covers the direct and indirect introduction of hazardous substances as a result of an ‘incident’<sup>59</sup>

### 5.4.3 Causality

Both the Mediterranean-Sea Guidelines and the Liability Guidelines refer to causality by requiring a “causal link” between the incident and the damage” as well as the activities of the operator and the damage, although no specifics in this regard are forthcoming.<sup>60</sup> In addition, the Liability Guidelines address multi-party causation, in the case of which “liability will be apportioned among the various operators based on an equitable assessment of their contribution to the damage.”<sup>61</sup>

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### 5.4.4 Standard of Liability and Possible Defences

All the guidelines cited here and the UNECE code of conduct on inland waterways establish strict liability without it being necessary to establish fault or negligence.<sup>62</sup> However, the Mediterranean-Sea Guidelines only impose strict liability for activities that are covered by any of the seven protocols to the Barcelona Convention; for all other polluting activities, States may rely on fault-based liability provision.<sup>63</sup> The UNEP Liability Guidelines apply ‘strict liability’ only to an operator, whereas all other persons will only be held ‘liable’ in cases of their non-compliance with applicable statutory or regulatory requirements (a violation of statutory obligations should be considered as a fault *per se*) or if their wrongful, intentional, reckless or negligent acts or omissions (fault) have caused or contributed to the damage.<sup>64</sup>

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<sup>59</sup>Para. I(b) UNECE, Code of Conduct on Accidental Pollution of Transboundary Inland Waters 1990.

<sup>60</sup>Paras 15 and 19 Mediterranean-Sea Guidelines 2008; Guideline 1 UNEP Liability Guidelines 2010.

<sup>61</sup>Para. 21 Mediterranean-Sea Guidelines 2008.

<sup>62</sup>Para. 19 Mediterranean-Sea Guidelines 2008; Guideline 5 UNEP Liability Guidelines 2010; Para. XV(5) UNECE, Code of Conduct on Accidental Pollution of Transboundary Inland Waters 1990; see also OECD (2012), p. 32 recommending the imposition of strict liability.

<sup>63</sup>Para. 20 Mediterranean-Sea Guidelines 2008.

<sup>64</sup>Guideline 5(2) UNEP Liability Guidelines 2010.

- 44 The Mediterranean-Sea Guidelines contain provisions on exonerations, which can be grouped into four categories: (1) acts of God or *force majeure*; (2) armed conflicts, hostilities, civil wars, insurrections, acts of terrorism; (3) contribution through an act or omission of a third party; (4) as a result of compliance with compulsory measures imposed by a competent public authority.<sup>65</sup>

#### 5.4.5 *Claimant (Access to Justice)*

- 45 The Mediterranean-Sea Guidelines asks the parties to the 1976 Barcelona Convention to ensure that natural and juridical persons that are victims of ‘traditional damage’ can bring actions for compensation in the widest manner; in contrast, action for compensation with respect to environmental damage should be made possible for ‘the public’,<sup>66</sup> i.e. the State or other public entities as trustees of the public interest in the preservation of the quality of the environment.<sup>67</sup>
- 46 The 2010 UNEP Access to Information and Justice Guidelines are primarily concerned with the enforcement of the right to access environmental information and facilitate public participation. Its guideline 19 captures the essence of the right to access to justice by referring to effective, fair, open, transparent and equitable proceedings as well as effective procedures for timely review by a court of law as well as other independent and impartial bodies. Guideline 18 requires States to provide for a broad interpretation of standing in proceedings concerning environmental matters. In a somewhat similar vein, the UNECE code of conduct on inland waterways elucidates that States should endeavour to provide persons in other countries with access to justice without discrimination.<sup>68</sup>
- 47 Guideline 8 of the UNEP Liability Guidelines leaves the decision of whether or not to allow claims for environmental damage to domestic law.<sup>69</sup>

#### 5.4.6 *Respondent*

- 48 Both Guidelines and the UNECE code of conduct on inland waterways reference the polluter-pays principle.<sup>70</sup> Therefore, they designate the operator as the strictly liable

<sup>65</sup>Para. 13 Mediterranean-Sea Guidelines 2008; Guideline 6 UNEP Liability Guidelines 2010.

<sup>66</sup>Para. 32 Mediterranean-Sea Guidelines 2008.

<sup>67</sup>Scovazzi (2009), p. 207.

<sup>68</sup>Para. VII(3) UNECE, Code of Conduct on Accidental Pollution of Transboundary Inland Waters 1990.

<sup>69</sup>Guideline 8 UNEP Liability Guidelines 2010.

<sup>70</sup>Para. 2 Mediterranean-Sea Guidelines 2008; Guideline 1 UNEP Liability Guidelines 2010B; Para. II(3) UNECE, Code of Conduct on Accidental Pollution of Transboundary Inland Waters

entity and respondent of a claim, with the reference that the operator is the one supervising and exercising control over the activity in question.<sup>71</sup>

### 5.4.7 Compensation

Whereas the UNEF Liability Guidelines call for prompt and effective response action on the part of the operator to an incident, it remains non-specific as to how compensation should be provided. In contrast, the UNECE code of conduct on inland waterways calls upon States to ensure in their national legislation prompt and adequate compensation for damage caused by accidental pollution.<sup>72</sup>

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## 5.5 Drafts and Proposals by Private Law Associations

Two resolutions adopted by private law associations, the International Law Association (ILA) and the Institut de Droit International (IDI), address elements of civil liability regimes, albeit from different perspectives and with different objectives. Whereas the IDI resolution is a recommendation for negotiations and the management of environmental liability and responsibility regimes established under international agreements, the ILA resolution focuses on transnational enforcement of environmental rights and claims for damages in national jurisdictions. Accordingly, the ILA resolution leaves many details of environmental civil liability to the domestic law of the forum State, i.e. either the State in which the damage arose or the State in which the event or the risk occurred that gave rise to the damage. The two resolutions nevertheless complement each other as the domestic law to which the ILA resolution refers may reflect international civil liability rules along the line of the IDI resolution.

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1990: “Riparian countries should implement, within the framework of their national legislation, the basic principle that responsibility for pollution lies with the polluter”; see also the Brundtland Report, at 220.

<sup>71</sup>Paras. 17 and 18 Mediterranean-Sea Guidelines 2008: “any natural or juridical person, whether private or public, who exercises the de jure or de facto control over an activity”; Guideline 3(4) UNEP Liability Guidelines 2010: “any person or persons, entity or entities in command or control of the activity, or any part thereof at the time of the incident”.

<sup>72</sup>Para. XV(1) UNECE, Code of Conduct on Accidental Pollution of Transboundary Inland Waters 1990.

## 51 **Recommendations by Private Law Associations**

1. Institut de Droit International, Eighth Commission, Rapporteur Francisco Orrego Vicuña, Responsibility and Liability under International Law for Environmental Damage, Strasbourg, 4. September 1997 (IDI resolution),<sup>73</sup>
2. International Law Association, Transnational Enforcement of Environmental Law, adopted by the 72nd Conference of ILA in Toronto on 7 June 2006 (ILA resolution).<sup>74</sup>

52 Both resolutions are the product of lengthy discussions, the extent of which is not always reflected in their condensed language. However, only the adopted texts serve as the source material for the present summary of their core elements.

### 5.5.1 *Relevant Damage*

53 The rules proposed by the ILA Committee are primarily procedural and, therefore, do not contain any specifications on the relevant environmental damage and risks that trigger a claimant's right to gain access to a court, apart from the fact that the incident has to be transboundary in character. The resolution's focus is not on the significance of this damage but the decisiveness of the possible outcome of the proceedings for the enjoyment of the plaintiff's environmental and human rights.<sup>75</sup>

54 According to the IDI resolution, international environmental regimes should conceptually distinguish between environmental damage and tort damage, although it depends on the regime's nature and purpose that will determine what type of damage it should address.<sup>76</sup>

### 5.5.2 *Relevant Activities*

55 The IDI resolution stipulates that it is for the international environmental regimes in question to define the environmentally hazardous activities that may engage the responsibility for harm alone or strict civil liability. If desired, this definition can

<sup>73</sup>Institut de Droit International, Responsibility and Liability under International Law for Environmental Damage, 4. September 1997, ILM 37 (1998) at 1474, available at [https://www.idi-iil.org/app/uploads/2017/06/1997\\_str\\_03\\_en.pdf](https://www.idi-iil.org/app/uploads/2017/06/1997_str_03_en.pdf), last accessed 25 April 2022.

<sup>74</sup>International Law Association: Transnational Enforcement of Environmental Law, Conference Report Toronto 2006, available at: <https://www.ila-hq.org/index.php/committees>, last accessed 25 April 2022.

<sup>75</sup>Rule 1 ILA resolution.

<sup>76</sup>Article 23 IDI resolution.



single out (a) specific sectors of activity, (b) lists of dangerous substances, (c) list of dangerous activities and (d) activities undertaken in particularly sensitive areas.<sup>77</sup>

### 5.5.3 *Causality*

Rule 6 of the ILA resolution contains the common reference that the issue of causality is to be regulated by the national law of the forum State.<sup>78</sup> According to the IDI resolution, a “causal nexus between the activity undertaken and the ensuing damage shall normally be required under environmental regimes.”<sup>79</sup> By way of exemption from this rule, it proposes a presumption of causality relating to the hazardous activities in question or, alternately, to cumulative or long-standing damage not attributable to a single entity but based on sectoral activity, such as bulk oil transport.<sup>80</sup> **56**

### 5.5.4 *Standard of Liability and Possible Defences*

The ILA resolution states that the standard of liability is to be regulated by the national law of the forum state.<sup>81</sup> The IDI resolution specifies that imposing strict liability on operators is the preferred regime,<sup>82</sup> although it also contains exemptions from civil liability, namely armed conflicts, acts of terrorism, natural disasters of an irresistible character and other similar situations as well as intentional or grossly negligent acts or omissions of a third party.<sup>83</sup> **57**

### 5.5.5 *Claimant (Access to Justice)*

Rule 3 of the ILA resolution deals with ‘standing’: “Every State shall ensure that any person having ‘a sufficient interest’ has the right of access to the competent domestic court or administrative authority to challenge acts or omissions by private persons and public authorities relating to the environment.” What constitutes sufficient **58**

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<sup>77</sup> Article 17 IDI resolution.

<sup>78</sup> Rule 6 (a) ILA resolution.

<sup>79</sup> Article 7 IDI resolution.

<sup>80</sup> Article 7 IDI resolution.

<sup>81</sup> Rule 6 (b): “the grounds for exemption from liability, any limitation of liability and any division of liability”, ILA resolution.

<sup>82</sup> Article 5 IDI resolution.

<sup>83</sup> Article 22 IDI resolution.

interest shall be decided based on the applicable national law but should be consistent with the objective of widest possible access to justice and, therefore, shall include environmental NGOs. The IDI resolution recommends that international environmental regimes should make flexible arrangements to facilitate the standing of claimants but allows for requirements such as the affected party having a direct legal interest to make an environmental claim under international law.<sup>84</sup>

- 59 The jurisdictional Rule 4 of the ILA resolution stipulates that the plaintiff has the option to sue the defendant in a court of the State where (a) the defendant is domiciled or resident; or (b) the act or omission that caused the injury occurred or may occur; or (c) the injury arose or may arise.

### 5.5.6 Respondent

- 60 The ILA resolution leaves the question of who the respondent is to be regulated by national law,<sup>85</sup> as the resolution's primarily concerned with the claimant's access to justice. In contrast, the IDI resolution explicitly mentions the polluter-pays principle in Article 13 and assigns primary liability to operators.<sup>86</sup>

### 5.5.7 Compensation (*Prompt and Adequate*)

- 61 Rule 6(f) of the ILA resolution leaves it to the applicable national law to decide whether a right to compensation may be assigned or inherited. Article 10 IDI resolution obliges States to ensure that operators have adequate financial capacity to pay reasonable compensation resulting from lawsuits brought against them. This includes the requirement that operators have adequate insurance and other financial security.<sup>87</sup>

## 5.6 ILC Draft Principles on the Allocation of Loss

- 62 In 2006, the ILC presented to the UN General Assembly a draft declaration of principles on the allocation of loss in cases of transboundary harm arising out of hazardous activities. This was intended to serve as a parallel instrument to the 2001 draft articles on the prevention of transboundary harm from hazardous activities. The

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<sup>84</sup> Article 27 IDI resolution.

<sup>85</sup> Rule 6 (a) ILA resolution.

<sup>86</sup> Article 6(1) IDI resolution.

<sup>87</sup> Article 10 IDI resolution.

two drafts are interrelated: both, the 2006 ILC Draft Principles on Allocation of Loss and the 2001 Articles on Prevention of Transboundary Harm are concerned with primary rules, not secondary rules on responsibility. It is however no accident that the 2006 draft stipulates ‘principles’ which are potentially relevant for a wide range of harmful activities, which indicates that the principles are not intended to be the basis of a possible international convention on the subject. Rather, they are general and residuary in character and are intended to provide guidance to States and lay a foundation for what should be dealt with in future agreements.<sup>88</sup> Most importantly, the ILC itself labelled the draft principles as an effort to contribute “to the process of development of international law in this field”,<sup>89</sup> meaning that the ILC did not claim to put existing rules of customary international law into writing.<sup>90</sup> That said, the ILC’s caution cannot be taken as evidence that no rules of customary international law addressing the allocation of loss arising out of harmful hazardous activities existing.

The ILC’s work on the draft principles was overshadowed by the controversial differentiation between responsibility for unlawful acts and liability for the consequences of lawful activities (Chap. 3 ¶ 4 (Sect. 3.2)), a conceptual distinction that was scrutinised by States in their comments.<sup>91</sup> In addition, while acknowledging the need for an effective liability regime, not all States were overly keen to develop a general international legal regime on liability.<sup>92</sup> Others voiced doubt as to whether general international law can achieve the necessary level of harmonisation of substantive as well as procedural law to enable claims from nationals of one State to be filed before national tribunals of a foreign State.<sup>93</sup> These doubts were expressed by the States before the ILC adopted the draft principles in 2006 and in the 14 years since its adoption little has changed regarding these underlying reservations. The reports of the Secretary-General on the comments and observations of governments to the 2006 draft principles make it clear that, while the main thrust of the statements is favourable, the principles’ possible existence under customary international law is met with widespread scepticism. By way of example, Germany did not see any need to comprehensively codify the regime governing environmental liability as its

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<sup>88</sup> ILC Draft Principles on the Allocation of Loss in the case of Transboundary Harm Arising out of Hazardous Activities, with Commentary, YBILC 2006 Vol II part 2, UN Doc A/61/10, at 59 para. 5.

<sup>89</sup> ILC Draft Principles on the Allocation of Loss in the case of Transboundary Harm Arising out of Hazardous Activities, with Commentary, YBILC 2006 Vol II part 2, UN Doc A/61/10, at 59 para. 5.

<sup>90</sup> ILC Draft Principles on the Allocation of Loss in the case of Transboundary Harm Arising out of Hazardous Activities, with Commentary, YBILC 2006 Vol II part 2, UN Doc A/61/10, at 61 para. 13.

<sup>91</sup> SR Sreenivasa Rao (ILC), Second Report on the legal regime for the allocation of loss in case of transboundary harm arising out of hazardous activities, UN Doc A/CN.4/540, 66 para. 4; 67 para. 10.

<sup>92</sup> See e.g. the statement of the US government UN Doc A/C.6/58/SR.16, para. 12–13.

<sup>93</sup> Statement of the UK government, see ILC SR Sreenivasa Rao, Second Report on the legal regime for the allocation of loss in case of transboundary harm arising out of hazardous activities, UN Doc A/CN.4/540, 67 para. 8.

prevailing view was that the focus should be on agreements specific to individual sectors as they could take account of each sector's particular features.<sup>94</sup> New Zealand considered it best simply to acknowledge and reiterate that the principles in their present form were a major contribution to the achievement of a consistent, coherent and fair international regime for transboundary harm and that they would continue to grow in significance.<sup>95</sup> The US stressed that in their view the draft principles go beyond current international law and practice and were innovative and aspirational in character rather than descriptive,<sup>96</sup> a view shared by Australia and Lebanon.<sup>97</sup>

- 64 So far, the draft principles have not been cited by international jurisprudence with only one exception, namely the Inter-American Court of Human Rights. In its Advisory Opinion on Environment and Human Rights, the Court refers by way of example to the principles in the context of States' duty to mitigate if environmental damage occurs.<sup>98</sup> Then again, the Court does not mention the draft principles in the context of access to justice in cases of transboundary harm,<sup>99</sup> which can be explained by the fact that human rights courts consider access to justice as a means of redressing any human rights violation resulting from the failure to comply with environmental standards, while the ILC Draft Principles are not tied to a violation of any legal obligations.

### 5.6.1 *Relevant Damage*

- 65 Concerning possible elements of customary international law, the cornerstones of the ILC Draft Principles can be summarised by the following: Principle 1 clarifies that the draft principles apply to "transboundary damage" and do not cover purely domestic incidents and environmental damage to common spaces.<sup>100</sup> The word damage here denotes that harm has actually occurred, i.e. the risk of harm has been realised, the damage is significant (Principle 2 lit a) and must be caused by the "physical consequences" of the activities in question, in contrast to intangibles,

<sup>94</sup>Report of the Secretary General, 29 July 2010, UN Doc A/65/184, para. 11.

<sup>95</sup>Report of the Secretary General, 29 July 2010, UN Doc A/65/184, para. 21.

<sup>96</sup>Report of the Secretary General, 22 July 2013, UN Doc A/68/170, para. 31.

<sup>97</sup>Report of the Secretary General, 12 July 2016, UN Doc A/71/136, para. 4 and para. 8.

<sup>98</sup>IACtHR *The environment and human rights* (Advisory Opinion) OC-23/17 (2017).

<sup>99</sup>IACtHR *The environment and human rights* (Advisory Opinion) OC-23/17 (2017), para. 233–240.

<sup>100</sup>ILC Draft Principles on the Allocation of Loss in the case of Transboundary Harm Arising out of Hazardous Activities, with Commentary, YBILC 2006 Vol II part 2, UN Doc A/61/10, at 63 para. 10.

such as political consequences.<sup>101</sup> The relevant categories of damage are those typically covered by tort law, namely damage to persons and property, including cultural heritage as well as loss or damage by impairment of the environment, costs of reasonable reinstatement of property and environment and costs of reasonable response measures (see definition in Principle 2 (a)). Environmental damage is understood in a very broad way to include damage to abiotic natural resources (water, air, soil, minerals) and biotic natural resources (living and once-living organisms in an ecosystem) as well as the interaction between biotic and abiotic factors and the characteristic aspects of the landscape (Principle 2 (b)). Generally speaking, the draft principles aim at treating all factors and aspects as a part of an all-encompassing concept of 'environment' that has a value independent of human life and property and addresses the environment *per se*.<sup>102</sup>

### 5.6.2 Relevant Activities

Only hazardous and ultra-hazardous activities come within the scope of the draft principles as these are undertakings that involve, as a minimum, the risk of causing significant transboundary harm should an incident occur. To qualify for the hazardous or ultra-hazardous classification, it suffices that an activity has a high probability of causing significant transboundary harm even if there is only a low probability of harm causing incident occurring. This combination of low probability of harm but with potentially catastrophic consequences separates these activities from any other.<sup>103</sup> The ILC opted for this abstract definition as a catch-all for relevant activities and to avoid an exhaustive but incomplete list of activities that could result from more precise wording. Only activities not prohibited by international law fall within the scope of the draft principles.<sup>104</sup>

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<sup>101</sup> ILC Draft Principles on the Allocation of Loss in the case of Transboundary Harm Arising out of Hazardous Activities, with Commentary, YBILC 2006 Vol II part 2, UN Doc A/61/10, at 64 para. 12.

<sup>102</sup> ILC Draft Principles on the Allocation of Loss in the case of Transboundary Harm Arising out of Hazardous Activities, with Commentary, YBILC 2006 Vol II part 2, UN Doc A/61/10, at 66 para. 11.

<sup>103</sup> ILC Draft Principles on the Allocation of Loss in the case of Transboundary Harm Arising out of Hazardous Activities, with Commentary, YBILC 2006 Vol II part 2, UN Doc A/61/10, at 62 para. 2.

<sup>104</sup> By noting that for the purpose of the present draft principles, it is assumed that duties of due diligence under the obligations of prevention have been fulfilled (Draft Principles with Commentary, at 63 para. 8), the ILC unnecessarily links the lawful activities that cause harm and the breached duty of the state to prevent these harmful activities, even though the activity does not become unlawful only because the state is internationally responsible for violating the duty to prevent.

### 5.6.3 Causality

- 67 The causal connection between damage and the source of activity is not specified in the draft principles, which only speak of “activity which involves the risk of causing significant harm” (Principle 2 (c)). In the commentary, the ILC is content with stating that the principle of causation is linked to questions of foreseeability (‘adequacy’) and proximity or direct loss while also pointing at legal developments in domestic law which suggest that the ‘modern’ causation test only requires a “reasonable imputation” of damage.<sup>105</sup> For operators to calculate the risk of harm to be covered, they have to take the modern dynamics of the law governing causation into account (from the test of ‘proximate cause’, to ‘foreseeability’ and even to a ‘general capability’ test), which can multiply risk factors.<sup>106</sup> In other words, the draft principles are not committed to a specific causation model that is then vulnerable to being ignored by domestic courts.

### 5.6.4 Standard of Liability and Possible Defences

- 68 Hidden in Principle 4, dealing with prompt and adequate compensation, is the State obligation to impose strict liability on operators (para. 2 of Principle 4: “such liability should not require proof or fault”). Interestingly, the ILC recognises that international instruments provide for a limited set of uniform exceptions to liability, such as war, exceptional natural disasters, compulsory measures imposed by public authorities, wrongful intentional conduct of a third party.<sup>107</sup> However, instead of enumerating these exceptions, Principle 4 para. 2 only stipulates “any conditions, limitations or exceptions to such liability shall be consistent with draft principle 3”, meaning that the exceptions should not serve to needlessly undermine the purpose of the civil liability regime, namely to provide both prompt and adequate compensation to victims as well as ensure the preservation and protection of the environment.

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<sup>105</sup> ILC Draft Principles on the Allocation of Loss in the case of Transboundary Harm Arising out of Hazardous Activities, with Commentary, YBILC 2006 Vol II part 2, UN Doc A/61/10, at 79 para. 16.

<sup>106</sup> ILC Draft Principles on the Allocation of Loss in the case of Transboundary Harm Arising out of Hazardous Activities, with Commentary, YBILC 2006 Vol II part 2, UN Doc A/61/10, at 81 para. 29.

<sup>107</sup> ILC Draft Principles on the Allocation of Loss in the case of Transboundary Harm Arising out of Hazardous Activities, with Commentary, YBILC 2006 Vol II part 2, UN Doc A/61/10, at 81 para. 27.

### 5.6.5 *Claimant (Access to Justice)*

Principle 2 (f) defines ‘victim’ as being either natural or legal persons and can range from a single person, municipality, State or private company through to groups thereof. A ‘victim’ is a person or a group of persons who suffered damage and, in this sense, the term ‘victim’ implies the existence of a legal interest which. This legal interest is not necessarily limited to personal injuries and property damage but could also encompass impairment to the environment as long as the claimant (victim) suffered an injurious impact e.g. as a municipality or public trustee charged with the protection of natural resources. The ILC acknowledged that the status of being a victim is linked to the question of standing but leaves the decision on this matter to domestic legal systems, e.g. whether standing requires a direct legal interest of an individual claimant or whether an *actio popularis* pursued by environmental organisations is permitted.<sup>108</sup> Irrespective of such details, Principle 6 emphasises that victims of transboundary damage should have access to remedies in the State of origin based on national treatment (non-discrimination).

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### 5.6.6 *Respondent*

The term ‘operator’ is purely functional, i.e. it is based on the factual determination as to who has the use, control and supervision of the object and/or material at the time when an incident occurred (Principle 2 (g)). Channelling liability to the operator rather than the owner (in contrast to the 1992 Protocol to the International Convention on Civil Liability for Oil Pollution Damage) is based on the notion that an entity that creates a high-risk situation in pursuit of economic benefit must bear the burden of any negative consequences that result therefrom.<sup>109</sup>

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### 5.6.7 *Compensation*

Principle 4 addresses the necessity of prompt and adequate compensation. Not only must the State of origin<sup>110</sup> ensure prompt and adequate compensation by putting into

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<sup>108</sup> ILC Draft Principles on the Allocation of Loss in the case of Transboundary Harm Arising out of Hazardous Activities, with Commentary, YBILC 2006 Vol II part 2, UN Doc A/61/10, at 11 para. 30.

<sup>109</sup> ILC Draft Principles on the Allocation of Loss in the case of Transboundary Harm Arising out of Hazardous Activities, with Commentary, YBILC 2006 Vol II part 2, UN Doc A/61/10, at 78 para. 11.

<sup>110</sup> ILC Draft Principles on the Allocation of Loss in the case of Transboundary Harm Arising out of Hazardous Activities, with Commentary, YBILC 2006 Vol II part 2, UN Doc A/61/10, at 76–77 para. 1.

place an appropriate liability regime but also ensure prompt and efficient access to justice.<sup>111</sup> According to the ILC, the duty of States to ensure prompt and adequate compensation can be traced back to *Trail Smelter*,<sup>112</sup> which was a case involving diplomatic protection<sup>113</sup> and international dispute settlement. Indeed, States may provide for recourse to international claims settlement procedures as highlighted in Principle 6 (4). The ILC did not address the tension between a victim's right of access to justice in the State of origin and inter-State dispute settlement solutions, including *ex gratia* payments by the State of origin.<sup>114</sup>

## 5.7 Customary Duty to Establish a Civil Liability Regime

- 72 It is the common understanding that the existing civil liability conventions are expressions of the polluter-pays principle (Chap. 3 ¶ 38 (Sect. 3.3.3)) because they are designed to ensure that polluters are financially responsible and accountable to victims, which is the remedial dimension of the principle.<sup>115</sup> By way of example, the 3rd recital of the 2003 Kiev Protocol reads: "Taking into account the polluter pays principle as a general principle of international environmental law, accepted also by the Parties to the above-mentioned Conventions." The close link between the polluter-pays principle and civil liability is also illustrated by Principle 22 of the Stockholm Declaration and Principle 13 of the Rio Declaration, both of which urge States to advance international law regarding liability and compensation for the victims of pollution and for environmental damage. As a matter of practice, the principles receive broad support, both internationally and domestically, and are often referred to when justifying legal steps being taken against private polluters.<sup>116</sup>

<sup>111</sup> ILC Draft Principles on the Allocation of Loss in the case of Transboundary Harm Arising out of Hazardous Activities, with Commentary, YBILC 2006 Vol II part 2, UN Doc A/61/10, at 77 para. 7.

<sup>112</sup> ILC Draft Principles on the Allocation of Loss in the case of Transboundary Harm Arising out of Hazardous Activities, with Commentary, YBILC 2006 Vol II part 2, UN Doc A/61/10, at 77 para. 6.

<sup>113</sup> PCA *Trail Smelter Case* (United States v Canada) (1941) 3 RIAA 1905, at 1961.

<sup>114</sup> ILC Draft Principles on the Allocation of Loss in the case of Transboundary Harm Arising out of Hazardous Activities, with Commentary, YBILC 2006 Vol II part 2, UN Doc A/61/10, at 87 para. 10.

<sup>115</sup> European Commission, Remedying Environmental Damage (Green Paper) COM(1993) 47 final, at 4: "Civil liability is a legal and financial tool used to make those responsible for causing damage pay compensation for the costs of remedying that damage"; see also Schwartz (2010), p. 251.

<sup>116</sup> See also the reference of the Hungarian government in the 2000 *Baia Mare Cyanide Spill* case available at <https://reliefweb.int/report/hungary/hungary-summary-environment-catastrophe-caused-cyanide-pollution-river-tisza>, last accessed 25 April 2022.



### 2010 BP Deepwater Horizon Explosion

US President Barack Obama declared the 2010 ‘Deepwater Horizon’ explosion and resultant oil spill as “the worst environmental disaster in U.S. history”.<sup>117</sup> BP announced it would take full responsibility for managing the oil spill and clean-up, committing to paying ‘legitimate’ claims for damage. However, the determination of liability for the accident was complicated as BP only owns a 65% stake in the oil well that was the source of the disaster. The Obama administration created the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling to address the various issues surrounding the spill and its aftermath. In the US, the liability of oil companies for accidentally-generated damage is capped at \$US75 million.<sup>118</sup> Once this has been reached, victims (both companies and individuals) can apply to a reserve fund supported by a tax on oil companies, however, the total cost here cannot exceed \$US1 billion. Given the enormous costs associated with the incident, and at the request of the US federal government, BP agreed to create a US\$20 billion claims fund, the Gulf Coast Claims Facility (GCCF). In December 2010, the US federal government announced that it was suing BP and the other companies involved in the accident to establish their civil liability.<sup>119</sup> In 2012, class actions of individuals and businesses against BP were settled and in February 2013, the civil lawsuit filed by the US federal government and several US States started and ultimately resulted in the judge finding BP grossly negligent for its role in the oil spill. In 2015, BP agreed to pay about US\$18.7 billion in damages for the water pollution caused by the spill.

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However, despite being an important general principle of international environmental law, the polluter-pays principle has not solidified into a general rule that imposes specific obligations on States, in contrast to the prevention principle (Chap. 3 ¶ 20 *et seq* (Sect. 3.3.2)). The polluter-pays principle is rather the rationale behind and conceptual foundation of civil liability conventions and related instruments as well as one important point of reference for their interpretation and application (Chap. 3 ¶ 38 *et seq* (Sect. 3.3.3)).

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<sup>117</sup>Wills (2013), p. 141.

<sup>118</sup>US Department of the Interior, Bureau of Ocean Energy Management, Consumer Price Index Adjustments of the Oil Pollution Act of 1990 Limit of Liability for Offshore Facilities, Proposed Rule, 79 Federal Register 10,056 (24 February 2014); available at <http://www.gpo.gov/fdsys/pkg/FR-2014-03-19/html/2014-06047.htm>, last accessed 25 April 2022.

<sup>119</sup>Three main bodies of law in the United States establish liability for civil damages from offshore oil and gas accidents: state common law; state oil pollution legislation; and—more importantly—the federal Oil Pollution Act of 1990 (OPA) and the Clean Water Act (1972); claims under one body of applicable law may not bar persons bringing claims under another.

75 In the light of the foregoing, the question which needs answering here is whether or not existing civil liability instruments, supported and reinforced by the polluter-pays principle, have the potential to inspire a rule of customary international law that provides for a general duty of States to ensure the liability of the polluter. At this point, it is worth recalling that the assumption of a duty under customary international law to provide for an environmental civil liability regime requires established general practice on the part of States (Chap. 3 ¶ 15 *et seq* (Sect. 3.3.2)) and, in fact, State practice in this area supports the notion that this criterion is well on its way to being fulfilled.<sup>120</sup> Some States have bespoke environmental compensation laws that impose strict liability at least for some hazardous industrial activities,<sup>121</sup> while all States have general tort laws as a part of their civil code or through their common law. However, while general civil liability systems recognise strict liability for certain hazardous activities they generally require some degree of fault or negligence to be involved in an environmentally damaging incident. This requires courts to rule on whether the liable party breached a standard of care by weighing the risk of their activity against the cost and effectiveness of precautions to reduce that risk.<sup>122</sup> Without going into the national peculiarities of different national tort law regimes (Sect. 6.2), their application to environmental damage reveals that the customary law issue lies with each State's subjective *opinio iuris*, i.e. the acceptance of the liability practice as required by international law.

76 With a view to the methodological considerations discussed in Chap. 3 (Chap. 3 ¶ 15 *et seq* (Sect. 3.3.2)), the first argument against the acceptance of a customary duty to ensure environmental civil liability is an extremely cautious if not lacking ratification practice. The fact that only four of the thirteen civil liability conventions have obtained the necessary number of ratifications for the treaty to enter into force, despite very low thresholds in some cases, does not *prima facie* support the notion of States' *opinio iuris* establishing a customary duty to ensure environmental civil liability. However, a State may have very specific reasons for not ratifying a civil liability convention in which it was involved in the negotiation and adoption processes. Such reasons may vary from its dissatisfaction with the channelling of liability to certain actors, the low liability ceiling<sup>123</sup> or the implications of

<sup>120</sup> See the informative even though dated study on domestic civil liability systems authored by McKenna (1995), further studies Lammers (1984), pp. 644–659; Munro and Lammers (1986), pp. 83–84; Horbach (1996), pp. 109–224; Clarke (2001); UNEP (2003); ILC, Survey of liability regimes relevant to the topic of international liability for injurious consequences arising out of acts not prohibited by international law (international liability in case of loss from transboundary harm arising out of hazardous activities), prepared by the Secretariat, UN Doc. A/CN.4/543, 24 June 2004, paras. 69–112.

<sup>121</sup> E.g. Denmark, Iceland, Norway and certain claims in Germany fall under purpose-built legislation in which liability is strict; in environmental liability legislation in Bulgaria and Lithuania, liability is fault-based.

<sup>122</sup> Commission Staff Working Document, Liability, Compensation and Financial Security for Offshore Accidents in the European Economic Area, COM(2015) 422 final, at 22.

<sup>123</sup> This is the main reason for the US for non-ratification, Ronen Perry (2011), p. 7.

governmental permits for liability.<sup>124</sup> These individual points of criticism regarding a particular convention cannot be used to determine a State's degree of conviction that international law requires harmonised civil liability regimes for certain hazardous activities (*opinio iuris*).

Concerning non-binding documents adopted by international organisations, the declared purpose of each respective guideline and document has to be considered. For example, the 2010 UNEP Liability Guidelines for the development of domestic legislation on liability states in its opening paragraph that "the purpose of the present guidelines is to highlight core issues that States will have to resolve should they choose to draft domestic laws and regulations on liability."<sup>125</sup> And finally, the 2006 ILC Draft Principles on the Allocation of Loss, especially Principle 4,<sup>126</sup> have not taken root in international jurisprudence and practice, which makes it difficult to argue that Principle 4 was progressive in 2006<sup>127</sup> but is today customary international law that obliges States to take all necessary measure to ensure civil liability.

One of the most compelling arguments against the existence of a customary rule that obliges States to provide for environmental civil liability is the 1993 Lugano Convention and its ill-fated relationship with the European Union. As is well known, the Lugano Convention was negotiated under the auspice of the Council of Europe but has not been ratified by a single State. One of the reasons for this reticence to ratify is the EU and its 2004 Environmental Liability Directive.<sup>128</sup> In contrast to the Lugano Convention, this Directive follows an administrative approach by channeling environmental claims via public authorities to the operator.<sup>129</sup> Initially, the Lugano Convention's civil liability scheme provided important inspiration for the Commission and its early approach to environmental liability, however, the Commission then made a U-turn and developed an environmental administrative liability approach using the Lugano Convention as an example of what not to do.<sup>130</sup> The criticism voiced by EU Member States concerned, *inter alia*, the Convention's broad definition of dangerous activities and the all-encompassing definition of

<sup>124</sup>ILC, Survey of liability regimes relevant to the topic of international liability for injurious consequences arising out of acts not prohibited by international law (international liability in case of loss from transboundary harm arising out of hazardous activities), prepared by the Secretariat, UN Doc A/CN.4/543, para. 195 *et seq.*

<sup>125</sup>UNEP Guidelines for the development of domestic legislation on liability, response action and compensation for damage caused by activities dangerous to the environment, both adopted by the Governing Council in Decision SS.XI/5, part B.

<sup>126</sup>Para. 1: "Each State should take all necessary means to ensure that prompt and adequate compensation is available for victims of transboundary damage caused by activities located within its territory or otherwise under its jurisdiction or control". Para. 2: These measures should include the imposition of liability on the operator. . ."

<sup>127</sup>See the 9th recital of the Draft Principles: "Desiring to contribute to the development of international law in this field".

<sup>128</sup>EU Environmental Liability Directive of 21 April 2004, OJ 2004 No L 143, 56.

<sup>129</sup>Article 12 EU Environmental Liability Directive of 21 April 2004, OJ 2004 No L 143, 56.

<sup>130</sup>European Commission, White Paper on Environmental Liability, 9 February 2000, COM(2000) 66 final, at pp. 25–26.

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environment, but it was the competing approach to environmental liability that delivered the final blow to the 1993 Lugano Convention from the EU's perspective. Without drawing any general conclusions from or passing judgment on the EU's approach to environmental liability, it is a matter of fact that civil liability is not the only choice for States. For example, the 2010 Nagoya-Kuala Lumpur Protocol establishes an administrative approach to liability accompanied by a provision on civil liability (Article 12) which is considered a complementary option (Chap. 14; Sect. 5.3). Regardless of whether environmental pollution can be effectively prevented by one approach to liability more effectively than another, the legislative options are indeed manifold. For example, a number of developing countries have imposed an obligation on local governments to provide direct and prompt compensation to victims of environmental harm (government-pays approach), allowing these public bodies to act in subrogation against the individual polluters when possible.<sup>131</sup> The reason for allocating the primary role to provide compensation to local and central governments are manifold: ineffective local civil court systems and the State appearing to its public to be more benevolent and economically considerate (preventing bankruptcy and job loss) being just two. In any case, the diversity of existing liability models illustrates that an environmental civil liability regime is only one of many legislative options supported by the polluter-pays principle.

79 From the foregoing, it follows that the lack of *opinio iuris* has hampered the emergence of a rule of customary international law which obliges States to establish an environmental civil liability regime along the line of existing civil liability conventions. Principle 13 of the Rio Declaration expresses a progressive obligation of States to develop national laws regarding liability and compensation for victims of pollution and other environmental damage but leaves the actual model each State adopts to its own political discretion. Having said that, a growing number of environmental liability provisions in domestic laws, e.g. Articles 65–69 of the Chinese Tort Liability Law<sup>132</sup> and the strict liability under the Japanese Air Pollution Control Act<sup>133</sup> add State practice to the nascent *opinio iuris* and are in line with Principle 13, namely that domestic laws should address, in one way or another, environmental tort, damage and compensation. Even though the polluter-pays principle does not favour or demand one specific approach to liability and compensation at the national level national (the Japanese Air Pollution Control Act combines the administrative with the civil liability approach<sup>134</sup>), it can be argued that the preventive aspect of the polluter-pays principle has a limiting effect on policy options by not supporting models that purposefully and effectively shield the actual polluter from recourse and responsibility (Chap. 3 ¶ 38 *et seq* (Sect. 3.3.3)).

<sup>131</sup> Luppi et al. (2012), p. 136.

<sup>132</sup> See Fitzmaurice (2015), p. 376; for a comparison of European and US tort laws see Larsson (1999), pp. 145–396.

<sup>133</sup> Botta and Yamasaki (2020).

<sup>134</sup> *Ibid.*

With the above in mind, the following observations seek to identify international legal manifestations of liability elements that guide the national implementation of the polluter-pays principle. 80

## 5.8 Legal Manifestations of Liability Elements in Public International Law

### 5.8.1 *Relevant Damage*

In the light of the polluter-pays principle, there is a noticeable tendency in international law to address environmental damage in a way that reflects both the economic and more intangible value of biological diversity and the goods and services derived from increasingly rare unspoiled natural environments. Principle 13 of the Rio Declaration and the ILC Draft Principles point in this direction. Although not applied consistently, the ICJ has recognised the intrinsic value of the environment for the law of State responsibility in the *Wetland Compensation* case (Sect. 3.4.4).<sup>135</sup> Legal instruments such as the 2004 EU Environmental Liability Directive and its national implementation by the 27 EU Member States will help to spread the concept of environmental damage beyond the loss of life, personal injuries as well as damage and loss of property (traditional tort damage); the 2010 Nagoya-Kuala Lumpur Supplementary Protocol would achieve the same on the universal level, especially if a significant number of the 173 parties to the Cartagena Protocol on Biosafety ratify the instrument (as of September 2020, 51 ratifications). 81

In contrast to the 2004 EU Environmental Liability Directive and the Nagoya-Kuala Lumpur Supplementary Protocol, both of which pursue an administrative approach to liability, international civil liability conventions do not provide for a clear concept of what ‘environmental damage’ and ‘impairment to the environment’ are.<sup>136</sup> The reason for the reluctance of civil liability regimes to address damage to the environment *per se* is the imperative of quantifiable economic loss, which is a typical requirement in tort law. The quantifiability is achieved through ‘measures of reinstatement’ without pursuing a clear concept of what constitutes an ‘environment’ needing to be reinstated. All of the civil liability instruments under consideration here show the emerging conviction of States that environmental damage should be addressed indirectly through the concept of reasonable reinstatement measures that fall under the category of consequential economic losses. The ICJ decision in the *Wetland Compensation* case was guided by these considerations, even though the Court drew criticism for its decision of what constituted a “reasonable valuation” (Chap. 3 ¶ 66 (Sect. 3.4.4)). The next step in legal development in this area is a 82

<sup>135</sup> ICJ *Certain Activities Carried Out by Nicaragua in the Border Area* (Costa Rica v Nicaragua) [2018] ICJ Rep 15, 23.

<sup>136</sup> De La Fayette (2002), p. 150.

scientifically-established-baseline approach with regard to the valuation of environmental damage as envisaged in the Nagoya-Kuala Lumpur Supplementary Protocol (Chap. 14) and the UNEP Liability Guidelines 2010 (¶ 37 *et seq.*).

### 5.8.2 *Relevant Activities*

- 83 International civil conventions cannot be invoked to specify the scope of environmentally relevant activities to which liability must be linked as they are primarily sector-specific (e.g. oil transportation, operation of nuclear facilities etc.). However, the overall picture is that hazardous activities with an inherently high risk of significant environmental damage fall within the focus of civil liability conventions and their administrative counterparts, related soft law instruments and ILC Draft Principles.

### 5.8.3 *Causation*

- 84 The analysis of all of the material above illustrates that international law has not yet developed its own concept of causality in the area of liability for environmental damage. Rather, the international instruments considered refer to national law and the particularities of national legal systems.

### 5.8.4 *Standard of Liability*

- 85 The purpose of all civil liability conventions, soft law instruments and the ILC Draft Principles in the allocation of loss is to internationalise the strict liability standard for environmentally ultra-hazardous activities. Strict liability is generally considered to be the best method to implement the polluter-pays principle because it “guarantees that the cost of damage caused by economic activities are born by the operator”.<sup>137</sup> A 2001 comparative law study on OECD countries’ civil law principles found that most States impose a mix of strict and fault-based civil liability for traditional tort claims with a tendency to impose strict liability when remedying environmental damage and damage linked to specific dangerous activities.<sup>138</sup> At least for industrialised States, this study identified a notable trend towards the use of strict

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<sup>137</sup>Communication from the Commission to the Council, European Parliament and the Economic and Social Committee: Green Paper on Remedying Environmental Damage. COM(93) 47 final, section 4.1.2.

<sup>138</sup>Clarke (2001), pp. iv–v; see also de Sadeeler (2002), pp. 49–52.

liability.<sup>139</sup> A 2012 OECD study on environmental liability in States located in Eastern Europe, the Caucasus and Central Asia found that in their legal systems, environmental liability is predominantly fault-based.<sup>140</sup>

***Chief Oule Shadrack VII Bareki & Others v Cencor Ltd & Others***<sup>141</sup>

The High Court of South Africa delivered a judgment in October 2005 which concerned the interpretation of Section 28 of the South Africa National Environmental Management Act of 1998 (NEMA). The plaintiffs in the proceedings alleged that between 1976 and 1981 two mining companies, Gencor and Gefco, caused significant pollution by generating asbestos fibres that were dispersed by the wind, thereby contaminating not only the mining site but also its surrounding area. The plaintiffs claimed that Gencor, Gefco and the Government (as the owner of the land) were responsible for rectifying the pollution and degradation. The plaintiffs estimated the cost of rehabilitation to be R64 million, whereas Gefco, Gencor and the Government estimated the costs to be in the region of R18–24 million (approx. US\$ 2.7–3.6 million).

In its judgment, the High Court noted that the duty created by Section 28 (1) NEMA, which the judge framed as a “duty to take reasonable corrective measures”, stems exclusively from causing significant pollution or degradation of the environment; i.e. the duty arises irrespective of fault. Based on this, the High Court agreed with the defendants that Sections 28(1) and (2) NEMA created strict liability. In finding that Sections 28(1) and (2) NEMA excluded fault, the Court held that Section 49(b) NEMA, which provides that a person is only liable for damages for failure to perform a duty under NEMA where there has been wrongfulness or negligence, was irrelevant to the proceedings because the plaintiffs were not asking the court to award damages but to order reasonable corrective measures (at 440B–D).

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Based on civil law conventions, soft law instruments and resolutions it is safe to say that strict liability is generally considered the standard most appropriate for environmentally ultra-hazardous activities. However, international practice remains elusive and not fully developed in this regard, as can be illustrated using Principle 13 of the Rio Declaration. In the light of very different domestic approaches to civil liability (absolute, strict or fault-based) Principle 13 does not require strict liability even though this is widely held to be the most effective regime to provide prompt and adequate compensation for victims of pollution and other environmental damage. The administrative approach to liability pursued by the Nagoya-Kuala Lumpur Supplementary Protocol is a version of strict operator liability but leaves States and

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<sup>139</sup> Clarke (2001), p. iv.

<sup>140</sup> OECD (2012), p. 15, available at Clarke (2001), pp. iv–v.

<sup>141</sup> High Court of South Africa *Transvaal Provincial Division* (2005) 1895/2003, reprinted in *Journal of Environmental Law* 18 (2006) 479.

their authorities some discretion to relieve the concerns of diligent operators. Most importantly, the Protocol's provision on civil liability (Article 12) does not introduce the strict liability standard for transboundary LMO damage but leaves the decision on the application of fault-based tort law to individual States. International law is thus locked in a stalemate: because the majority of civil liability conventions are not in force, there is a lack of harmonised national civil liability laws, which in turn impedes the development of strict liability standards under customary international law that cover cases of environmentally hazardous activities. Thus, no legal manifestations can yet be identified based on which traditional fault-based liability can be rejected as a proper means of implementing the polluter-pays principle.

- 88 With this in mind, it is a logical follow-up question to ask whether a certain duty-of-care standard is required for fault-based liability regimes (negligence) to comply with international manifestations of the polluter-pays-principle. However, this question cannot be answered based on the materials examined here as those are dedicated to strict liability regimes. It is conceivable that, in the light of the generally agreed objective of civil liability regimes (Principle 13: compensation for victims of environmental damage), international law pursues a stringent understanding of the 'duty of care'—i.e. the duty to prevent environmental damage—that places strict standards and requirements on operators engaged in activities involving significant environmental risks.<sup>142</sup>

### 5.8.5 *Claimant (Access to Justice)*

- 89 Generally speaking, access to justice is the right to obtain remedies before judicial bodies or other authorities.<sup>143</sup> Principle 10 of the Rio Declaration, the Aarhus Convention<sup>144</sup> and the civil liability conventions discussed above are all international manifestations of this right in the area of environmental law. This cannot be said of administrative liability regimes.
- 90 Access to justice is not a free-standing right but is linked to enforceable rights specified by the law, the violation of which is claimed by the aggrieved person.<sup>145</sup> Under no circumstances can customary international law be interpreted as imposing an obligation to extend access to justice to actors who have no direct legal interest and thus cannot be regarded as injured parties (*actio popularis*).
- 91 At least in the context of general tort actions for damages, access to national courts does not, at first glance, pose a major problem. Broadly speaking, polluters can be sued in the place where the polluting activities occurred or the effects of the

<sup>142</sup>Bergkamp (2001), p. 264.

<sup>143</sup>Francioni (2007), p. 1.

<sup>144</sup>Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention), 25 June 1998, 2161 UNTS 447.

<sup>145</sup>Francioni (2007), p. 30.



damage became manifest (Chapter 6 Sect. 6.2). Nevertheless, access to justice is especially problematic in cases of transboundary harm as States may *de jure* or *de facto* deny justice to victims of transboundary environmental damage. In *Adam v Czech Republic*, the Human Rights Committee (HRCComm) established that any legislation regulating restitution or compensation should not discriminate against victims based on citizenship without reasonable grounds.<sup>146</sup> Due to the interdependency between human rights and environmental law, national civil liability regimes must be construed in a fashion that allows victims of transboundary environmental harm to have standing in the State whose territory is the source of the pollution in question. This State should provide access to its justice system based on non-discrimination,<sup>147</sup> a rule is reflected in some civil liability conventions (¶ 22 *et seq*) and the ILC Draft Principles on the Allocation of Loss in the Case of Transboundary Harm Arising out of Hazardous Activities (¶ 62 *et seq*).

### 5.8.6 Respondent

All instruments under consideration channel compensation claims via a civil liability regime or response measures via an administrative liability regime to operators. Even though the term operator can cover a wide range of legal and factual positions in relation to an environmentally hazardous activity or substance, it always denominates the entity that, at a given point in time, has a position of control. This position justifiably carries the onus of being held accountable as the polluter when an incident occurs. Even if national legislators have room for discretion as to who they consider to be an appropriate operator and under which conditions they make an operator liable, laws that fully and indiscriminatorily relieve operators from liability and redress (government-pay approach) do not meet international legal requirements.

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### 5.8.7 Compensation

Civil liability conventions are often not ratified by States because they disagree with the liability ceiling, which is either considered too low or otherwise insufficient. Irrespective of this, liability ceilings deviate from the general principle of full

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<sup>146</sup>HRCComm *Adam v Czech Republic Communication No. 586/1994* [1996] U.N. Doc. CCPR/C/57/D/586/1994, paras. 12.6, 13.1.

<sup>147</sup>Generally: UNHRCComm, General Comment No. 18: Non-discrimination (10 Nov. 1989), available at <http://www.refworld.org/docid/453883fa8.html>, last accessed 25 April 2022.

compensation<sup>148</sup> and thus require an explicit legal provision in either international agreements or domestic (tort) laws.

94 Few of the international instruments under consideration here explicitly address the duty of the State to ensure prompt and adequate compensation, which is a well-known international standard of compensation in cases of lawful expropriation of foreign property.<sup>149</sup> Whereas civil liability conventions safeguard the standard through insurance schemes, other instruments are underwhelming in terms of detail. A notable exception is the ILC Draft Principle on the Allocation of Loss which explicitly point out the substantive and procedural duties of States in connection with compensation in cases of transboundary environmental damage (¶ 71). As *Boyles* observes, these standards are not new and simply build on existing customary international law,<sup>150</sup> which considerably enhances the chances of their international acceptance for environmental damage. In this regard, it is worth noting that the ICJ emphasised in the *Wetland Compensation* case that compensation for environmental damage has to be an “adequate” reflection of the value of the environment (Chap. 3 ¶ 64 *et seq.* (Sect. 3.4.4)).<sup>151</sup> While this case relates to State responsibility, it is nevertheless an authoritative manifestation of the relevant environmental standard of compensation.

95 The standard of prompt and adequate compensation is closely linked to the civil liability regime being used and its mandatory insurance schemas, which is only one legislative option to address transboundary environmental damage. As pointed out in Sect. 5.3 and Chap. 14, the administrative approach to liability does not establish a compensation scheme for injured parties but a remediation and cost recovery scheme. In contrast, albeit arguably, the administrative liability regime of the Nagoya-Kuala Lumpur Supplementary Protocol imposes on the parties the duty to ensure prompt, adequate and effective response measures.<sup>152</sup> This understanding of the Protocol’s Article 5 is not reflected in its wording but can be deduced because is the very object and purpose of the Protocol. Whether or not parties align themselves with this interpretation is one of the litmus tests of the Nagoya-Kuala Lumpur Protocol.

<sup>148</sup> See also ICJ *Certain Activities Carried Out by Nicaragua in the Border Area* (Costa Rica v Nicaragua) [2018] ICJ Rep 15, para. 41; see also from a tort law perspective see Koziol (2015), pp. 823 *et seq.*

<sup>149</sup> So called Hull formula, see Dawson and Weston (1962), pp. 740–741.

<sup>150</sup> Boyle (2005), p. 18.

<sup>151</sup> ICJ *Certain Activities Carried Out by Nicaragua in the Border Area* (Costa Rica v Nicaragua) [2018] ICJ Rep 15, 77.

<sup>152</sup> Lefeber (2016), pp. 84–87.

## 5.9 Conclusion

With regard to the identification of a rule of customary law that would oblige States to have civil liability rules in place that cover environmentally ultra-hazardous activities, it does not bode well that only four of the 13 existent civil liability conventions have entered into force. Naturally, States may have very specific reasons for not ratifying these conventions without necessarily calling into question the basic concept of imposing civil liability for transboundary environmental harm on operators. Nevertheless, the lack of ratification makes most of the existing civil liability conventions so-called ‘failed treaties’, which casts serious doubts on the existence of customary civil liability rule irrespective of any specifics such a rule may take on.

Chapter 3 (see also Chap. 2 ¶ 43 (Sect. 2.3.3)) argues that the combined environmental principles of both polluter-pays and prevention have the potential to bring about a new rule according to which States must ensure a polluter’s ultimate environmental liability by not invariably, indiscriminately and arbitrarily excluding his/her responsibility and liability. This Chapter follows up on this by identifying generally recognised, international legal manifestations of central environmental liability elements, namely that significant damage to the environment, caused by operators engaging in high-risk activities, should be redressed via a compensation mechanism that provides ‘reasonable reinstatement measures’. What this translates to in short is that operator-liability regimes using either a civil or administrative approach to liability can employ either a traditional fault-based liability or be stricter, however, current international legal manifestations in this area point towards States favouring strict liability.

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**Part II**  
**Tackling Transboundary Environmental**  
**Damage in the National Arena**

# Chapter 6

## National Civil Liability and Transboundary Environmental Damage



Peter Gailhofer

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## 6.1 Introductory Remark

- 1 Having discussed the regulatory objectives and functions of international environmental liability (Chap. 2) and the international obligations of private and public actors alike to prevent and redress environmental harm (Chaps. 3 and 4), this and the next chapter's point of departure is the complementary perspective of domestic law and international law on corporations' civil liability for transnational environmental damage.
- 2 Some domestic legal systems provide for environmental corporate liability through special liability rules that go beyond existing tort law. However, in the absence of such special liability laws, or in cases of their inapplicability, claimants have to pursue their actions for damages based on general tort law. This chapter primarily focuses on the conditions under general domestic tort law to establish the liability of companies for transboundary environmental damage. It asks whether and to what extent civil litigation before national courts can be used to vindicate environmental rights, values and interests and, thus, scrutinises whether or not tort law can fulfil the legal functions and objectives outlined in Chap. 2. The answers to these questions are decisive for the broader policy goals related to environmental liability, namely, to enable transnational civil litigation to help provide further impetus for the development of global norms regarding environmental damage.<sup>1</sup>
- 3 Any attempt to determine the suitability of domestic tort law for claims in respect of transboundary environmental damage can only highlight key issues. The reasons for this are numerous, not the least of which is the fact that national laws of tort and delict diverge in many and, at times, even in fundamental respects. A comprehensive analysis of the conditions for transnational environmental liability *de lege lata* would have to take account of this variation between national laws by looking at the relevant substance of different legal systems.<sup>2</sup> This is even more the case where the goal of such an analysis is to delineate the potential of environmental liability in a legal system *de lege ferenda*: a comparative account can then examine whether certain foreign legal concepts would, in principle, be applicable in the legal system at hand. Going further, a *ius commune* approach could try to elucidate common ground

<sup>1</sup>Percival (2010), p. 39. A decisive question from the perspective of national civil law is, accordingly, if and to what extent national courts can refer to such global norms to resolve a given dispute and, in doing so, take part in their concretization and by that, function as a 'hinge' between national and international law, cf. Ammann (2019).

<sup>2</sup>For a comparative approach cf. Seibt (1994).



among the legal systems to discuss their potential for further harmonisation. At least in the European context, the search for such overarching principles of tort law has been going on for several years.<sup>3</sup>

Even if only the material preconditions for transnational environmental liability in just one national legal system are comprehensively explored, the analysis would have to cover an inordinately wide range of different legal issues. These issues would relate to diverse causes of action and their maybe unclear or complicated relationships.<sup>4</sup> It is beyond the scope of any single volume, let alone a single chapter, to do justice to this level of complexity. The present chapter will focus on issues of particular prominence in the context of environmental tort law from a rather general perspective. Although this general perspective provides insight into concepts and issues which will be relevant for many legal systems, the chapter refers to German and European law if more specific doctrinal questions need to be clarified.

## 6.2 Two Types of Transboundary Environmental Damage

Cases of transboundary environmental damage can differ in many respects, e.g. regarding the type of wrongdoing forming the basis of the civil claims, the legal goals of the claimant or the defendant's corporate structure. Despite such differences, many liability cases have a range of common denominators and many of the broader legal issues raised by them are quite similar. Given such general parallels, two broad types of cases have been differentiated for this chapter which, as will be further explicated below, can have different implications with respect to the legal preconditions for liability cases.

In type-one cases, the transboundary implications of the case are rather unambiguous: an activity or facility in one State directly causes environmental damage in another State. The damage is clearly delocalised<sup>5</sup> as it occurs in territory beyond the borders of the State where the source of the damage is located. Typically, there are no intermediate causal factors that may lead to the assumption that another person located, for example, in the State where the damage occurred, could be responsible for the damage. Such cases frequently refer to the flow of pollution (through watercourses, oceans, or the air and atmosphere) from a source State to an affected State.<sup>6</sup> Prominent examples of this kind of transboundary causation of damage are dealt with in current climate change litigation.<sup>7</sup>

<sup>3</sup>For all see van Dam (2014), p. 126.

<sup>4</sup>For example, environmental liability claims in common law systems can be based on doctrines such as private or public nuisance, trespass, strict liability or negligence, all of which are independent of each other and whose relationship to each other has not been systematically and coherently clarified, cf. Pöttker (2014); Shapo (1997), p. 532.

<sup>5</sup>Grušić (2016), pp. 23 et seq.

<sup>6</sup>Sachs (2008).

<sup>7</sup>Cf. Chap. 8.

## 7 **Type-One Cases: Direct Transboundary Causation of Environmental Damage**

In *Bier*, a Dutch horticulturalist (as well as the Rheinwater Foundation, a non-governmental environmental organisation that aims to improve the quality of the water in the Rhine basin), brought an action against the French mining company Mines de Potasse d'Alsace. The defendant had polluted the waters of the Rhine by releasing saline residue from its operations into it and the horticultural company, which used the river water for irrigation, was forced to install a water purification system. The causal event was located in France while the harm became manifest in the Netherlands. The Dutch claimants brought a claim for damages against the French company before the Dutch courts.<sup>8</sup> The Court held, that the claimant could sue the defendant in France as well as in the Netherlands.

- 8 Type-two cases differ from type-one cases in one important aspect: While the environmental damage and its direct cause are localised, i.e. confined to one State,<sup>9</sup> the transboundary dimension of the cases results from indirect causes originating in another State. These types of cases are often seen where claims target multinational corporations' parent companies that are only indirectly involved in the alleged violations of rights and interests.<sup>10</sup> Type-two cases may, as a result, involve cases where victims use European national courts to sue a European-based multinational corporation with an overseas subsidiary, typically operating in a developing State (the host State), that has caused environmental damage in that host State. The parent company's decisions in its home State, which started the chain of events that ultimately resulted in environmental damage, can be regarded as an indirect cause in the sense that it precedes the subsidiary's tortious act that directly caused the damage.<sup>11</sup> In addition to such cases of liability within corporate groups, scholars increasingly discuss the liability of enterprises for infringements of rights and interests in their global value chains, which have been directly caused by a third entity beyond the corporation. In these cases, again, the harm is only indirectly attributed to the defendant's actions or omissions, typically related to management decisions made in the home State. The defendant's conduct (or omission) is regarded as the source of the damage because of the existence of a factual or legal relationship to the direct polluter, typically a supplier.

<sup>8</sup> *Bier v Mines de Potasse d'Alsace* [1976] ECLI:EU:C:1976:166; Grušić (2016), p. 20; Ahern and Binchy (2009), p. 116.

<sup>9</sup> Grušić (2016), p. 23.

<sup>10</sup> Enneking (2012), p. 107.

<sup>11</sup> Grušić (2016), p. 61.

**Type-Two Cases: *Okpabi v Shell***

The recent decision of the UK Supreme Court in the *Okpabi and others v Shell* case is considered to represent an important development in the treatment of type-two cases under common law.

In 2015, the Nigerian communities of Ogale and Bille each filed a lawsuit in the UK High Court against the British-based company Royal Dutch Shell (RDS) and its Nigerian subsidiary Shell Petroleum Development Company (SPDC). Both suits were filed on behalf of some 42,500 residents and citizens of Nigeria who sought redress for serious oil pollution that had and still did significantly affect their livelihoods and the environment. The claimants held both RDS and its Nigerian subsidiary SPDC liable for environmental damage caused by oil spills from pipelines and infrastructure operated by SPDC which, they argued, are the result of negligent pipeline maintenance and oil spill responses by the operating company. They further argued that RDS owed them a duty of care under common law as it consistently exercised significant control and direction over its subsidiary by, amongst other things, promulgating, monitoring and enforcing group-wide health, safety and environmental policies and standards.<sup>12</sup> In 2017, the High Court ruled that the local authorities cannot seek redress against Shell in the English courts. It concluded that there was insufficient evidence that Shell exercised a high degree of supervision, control or direction over SPDC, and that the parent company therefore did not bear legal responsibility for the pollution caused by its Nigerian subsidiary. In 2018, the Court of Appeal upheld the High Court's decision, with the majority of judges ruling that the parent company had no duty of care to the affected communities.<sup>13</sup>

In 2020, the claimants appealed to the UK Supreme Court, arguing that RDS owed them a duty of care in relation to the extensive environmental damage caused by its operations in Nigeria. On 12 February 2021, the Supreme Court heard the appeal and ruled that the case against RDS and its Nigerian subsidiary could proceed in the UK courts, stating that there is a strong case that Shell is legally responsible for the systemic pollution affecting the communities of Ogale and Bille.<sup>14</sup>

In July 2021, it was announced that Shell had not contested the jurisdiction of the English courts and that its Nigerian subsidiary SPDC would join the actions.<sup>15</sup>

<sup>12</sup>Roorda and Leader (2021).

<sup>13</sup>Court of Appeal 14.2.2018, [2018] EWCA Civ 191, [https://media.business-humanrights.org/media/documents/files/documents/Shell\\_Approved\\_Judgment.pdf](https://media.business-humanrights.org/media/documents/files/documents/Shell_Approved_Judgment.pdf). Accessed 13 Apr 2022.

<sup>14</sup>UK Supreme Court *Okpabi and others v Royal Dutch Shell* [2021] UKSC 3, <https://www.supremecourt.uk/cases/docs/uksc-2018-0068-judgment.pdf>. Accessed 13 Apr 2022.

<sup>15</sup>UK Court of Appeal *Okpabi and others v Royal Dutch Shell* [2018] EWCA Civ 191; UK Supreme Court *Okpabi and others v Royal Dutch Shell* [2021] UKSC 3; For all see <https://www.>

### 6.3 Procedural Issues I: Jurisdiction

- 10** A major procedural precondition for cases concerning transboundary environmental damage before national courts is the question of the jurisdiction of the State in which the legal action is brought.
- 11** Depending on the particular jurisdictional regime that is applicable in the home State where a case is brought, the question of jurisdiction can be a crucial matter, especially for a type-two case involving transboundary tort-based litigation. Although domestic rules and legal cultures diverge, it can be said, in general terms, that the key factor which determines the jurisdiction of a national court is whether there exists a sufficiently close nexus between the facts of the case and the forum State (i.e. the State of the court to which the claim is applied).<sup>16</sup> Given the strong connection to the host State that these claims typically have, as that is usually the location where at least part of the harmful behaviour has taken place, where individual rights or environmental interests have been affected, where the damage has arisen and where the plaintiffs, as well as some of the defendants, are located, where local subsidiaries, business partners or sub-contractors may be sued as co-defendants, the exercise of jurisdiction in these cases by home State fora is not assured.<sup>17</sup>
- 12** The jurisdiction of national courts in the EU, when considered in isolation, is less problematic. As will be further explained below,<sup>18</sup> national courts in the EU generally have jurisdiction over (parent) companies domiciled in the EU. Obstacles for transnational torts-based civil litigation tend to arise only as a consequence of a combination of deficits in substantive law and problems of access to justice in the host State: On the one hand, it can be difficult to substantiate claims against a European company for damage directly caused by one of its subsidiaries or suppliers in its European home State. On the other hand, while non-EU victims often encounter difficulties in obtaining effective redress in their countries, EU Member States' courts will, as a general rule, decline jurisdiction in cases directly brought against foreign subsidiaries and contractors.<sup>19</sup>
- 13** Proposals to resolve such problems sometimes point to the possibility to create new international judicial institutions and, thus, to an approach that imposes direct environmental obligations and oversight by new international institutions on corporate actors under international law.<sup>20</sup> This chapter, however, first focuses on the challenges facing extraterritorial liability cases created by existing relevant domestic rules on jurisdiction before considering some of the options and challenges in

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[business-humanrights.org/en/latest-news/shell-lawsuit-re-oil-spills-ogale-bille-communities-in-nigeria-okpabi-v-shell/](https://business-humanrights.org/en/latest-news/shell-lawsuit-re-oil-spills-ogale-bille-communities-in-nigeria-okpabi-v-shell/). Accessed 13 Apr 2022.

<sup>16</sup> Augenstein and Jägers (2017), p. 11.

<sup>17</sup> Enneking (2012), p. 134.

<sup>18</sup> ¶ 33.

<sup>19</sup> Augenstein and Jägers (2017), p. 7.

<sup>20</sup> See Chap. 4, ¶ 40 et seq. (Sect. 4.2.3). Cf. Steinitz (2019).

substantive tort law connected to establishing the liability of (parent) companies domiciled in the EU for environmental damage that occurs abroad.

The jurisdictional rules in national and supranational law need to be considered separately from the concept of jurisdiction in public international law. The former determine the competence of State courts to hear private disputes involving a foreign element and are a part of the forum State's national law. They may emanate from, or be supplemented by, non-domestic sources of law, as is the case in EU Member States where the regime of the Brussels Ia Regulation on jurisdiction and the recognition and enforcement of judgments in civil and commercial matters applies.<sup>21</sup>

Relevant norms and developments in public international law regarding the issue of jurisdiction are examined in more detail in Chap. 7.<sup>22</sup> At this point, it suffices to point out the relevance of international norms for the question of jurisdiction: First of all, courts have to take into account international norms when they interpret the domestic rules regarding extraterritorial jurisdiction. Developments in international law regarding jurisdictional rights and obligations are, as a result, relevant for the understanding of and can induce change in domestic jurisdictional doctrines. They may include the adjudicative obligations of a State to provide access to justice for rights violations, e.g. through the recognition of special grounds of jurisdiction in the State's private international law. As an example, there are cases in which French and Spanish courts have recognised *forum necessitatis* jurisdiction in the light of Article 6 ECHR and the prohibition of a denial of justice.<sup>23</sup>

It should also be noted that interaction between national and international law also takes place in a complementary manner: national rules and practices regarding extraterritorial jurisdiction may provide, as instances of constant practice and legal conviction, arguments for or against a certain interpretation of international law.<sup>24</sup>

### 6.3.1 *The Potential Scope of Extraterritorial Tort Law: The US Alien Tort Statute*

The US Alien Torts Statute (ATS) is the most prominent example for the potential scope of jurisdictional competences of national courts and extraterritorial torts and can be considered as a form of universal civil jurisdiction. It is also exemplary for its integration of international rights and standards into national tort law. Before turning to relevant norms in European and German law, it makes sense to examine the concept and evolution of the ATS as well as some other relevant jurisdictional doctrines in US law.

<sup>21</sup> Enneking (2012), p. 133.

<sup>22</sup> Section 7.7.3.

<sup>23</sup> Augenstein and Jägers (2017), p. 30.

<sup>24</sup> See for example Wuerth (2013).

18 The provision, which was enacted in 1789, provides US district (federal) courts with “original jurisdiction” of any civil action by an alien for a tort only, committed in violation of the law of nations or a treaty of the US.<sup>25</sup> For 200 years the ATS was understood as simply establishing the jurisdiction of US federal courts for actions brought by foreigners based on torts. However, following the first extraterritorial human rights lawsuits in the 1980s, US courts began to reinterpret the provision to entitle the courts to formulate a “cause of action for [a] modest number of international law violations thought to carry liability”.<sup>26</sup> Eventually, the courts began to understand this substantial norm as forming the foundation of liability not only of public actors but also of private individuals and companies.<sup>27</sup> As a consequence, the ATS has been the legal basis for a high number of transnational human rights civil suits before US courts brought by non-US citizens seeking monetary compensation for human rights violations committed by private actors.<sup>28</sup>

19 The uniqueness of the ATS stems from the fact that it made possible so-called ‘foreign-cubed liability cases’, which involve foreign plaintiffs, foreign defendants and involving conduct that occurred outside the US, which means that such cases have few connecting factors with the US legal order.<sup>29</sup> Given the growing relevance of environmental dimensions of human rights, the ATS’ approach has the potential to ensure greater corporate responsibility in a global environmental context. However, from an environmental perspective, it has been pointed out that the ATS is “a flawed mechanism in its current state” for substantial reasons. Under the first prong of the ATS, plaintiffs can bring suit for torts that violate the “law of nations,” i.e. customary international law, which is given if “there has been a violation by one or more individuals of those standards, rules, or customs that govern the relationships between states or between individuals and foreign states”.<sup>30</sup> So far, however, the US courts predominantly do not consider environmental norms in customary international law as universally accepted while also viewing them as inadequately specific to establish the basis of an international cause of action. Human rights to life, health and the environment arising in the context of environmental harm have been seen to be too vague to provide feasible avenues for recovery under the ATS.<sup>31</sup> Under the second prong of the ATS, plaintiffs can sue for torts

<sup>25</sup> 28 U.S.C. Section 1350 Alien’s action for tort.

<sup>26</sup> US Supreme Court *Sosa v Alvarez-Machain* (2004) 542 U.S. 692, pp. 17–30.

<sup>27</sup> For this development of the jurisprudence regarding substance and scope of the Alien Tort Statute see Wagner (2016), pp. 728–732; Enneking (2012), pp. 77–87.

<sup>28</sup> Augenstein and Jägers (2017), p. 28.

<sup>29</sup> Enneking (2014), p. 44.

<sup>30</sup> See US District Court for the Eastern District of Pennsylvania *Lopes v Reederei Richard Schroder* (1963) 225 F. Supp. 292. According to the ‘Sosa-Test’, courts should require any claim based on the present-day law of nations to rest on a norm of international character accepted by the civilised world and defined with a specificity comparable to the features of the eighteenth-century paradigms, US Supreme Court *Sosa v Alvarez-Machain* (2004) 542 U.S. 692, 725. Cf. Kupersmith (2013), pp. 890–892.

<sup>31</sup> Kupersmith (2013), pp. 906–911.

violating a treaty ratified by the United States, which must be either self-executing or implemented through an Act of Congress. Scholars assume that there are too few or too narrowly defined international treaties for this approach to be effective.<sup>32</sup> It is important to note, however, that the legal mechanism of the ATS to integrate norms of public international law as potential causes of action into national torts, could become relevant if treaty law further evolves.

### **Alexis Holyweek Sarei et al. v Rio Tinto PLC and Rio Tinto Limited**

In 2006, the plaintiffs, who were all current or former residents of the island of Bougainville in Papua New Guinea sued the mining company Rio Tinto. The plaintiffs claimed, amongst other things, that Rio Tinto's mining activities had harmed their health and the environment. They relied on the ATS. The Court of Appeals confirmed the District Court's reasoning that the majority of the claims (those regarding war crimes, crimes against humanity, racial discrimination and, notably, violations of the UN Convention on the Law of the Sea) fall within the scope of the ATS, and that the Court had jurisdiction to hear these claims and that the plaintiffs had sufficiently alleged Rio Tinto's liability. Eventually, in 2013, the Appeals Court ruled that the case should be dismissed, citing the recent Supreme Court ruling in the *Kiobel v Shell* case.<sup>33</sup>

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In its landmark *Kiobel* decision in 2013, the US Supreme Court massively restricted the reach of the Alien Torts Statute. In what came as a surprise to many,<sup>34</sup> the Court based this restriction on the doctrinal presumption against extraterritoriality and limitations of personal jurisdiction.<sup>35</sup> The presumption against extraterritoriality is a canon of statutory construction pursuant to which Congress normally intends to regulate domestically<sup>36</sup> and has been applied by the Supreme Court since the nineteenth century in different forms to determine the geographic scope of a statute.<sup>37</sup> It is supposed "to protect against unintended clashes between

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<sup>32</sup>See Kupersmith (2013), pp. 922–923. According to Kupersmith, Congress should resolve this shortcoming by amending the ATS to provide a remedy for corporate-induced environmental harm in U.S. courts.

<sup>33</sup>For a summary of the case US Court of Appeals for the 9th Circuit *Alexis Holyweek Sarei et al v Rio Tinto PLC and Rio Tinto Limited (2006)* cf. <http://www.internationalcrimesdatabase.org/Case/1135/Sarei-v-Rio-Tinto/>, accessed 13 Apr 2022.

<sup>34</sup>The previous ruling of the Court of Appeals had dismissed the claim on the grounds that the Alien Tort Statute, if correctly interpreted, does not give rise to any liability of private undertakings for human rights violations by their employees. Cf. Grušić (2016), p. 3.

<sup>35</sup>Personal jurisdiction refers to the power that a court has to make a decision regarding the party being sued in a case. Before a court can exercise power over a party, the U.S. Constitution requires that the party has a certain minimum contacts with the forum in which the court sits, see [https://www.law.cornell.edu/wex/personal\\_jurisdiction](https://www.law.cornell.edu/wex/personal_jurisdiction), accessed 13 Apr 2022.

<sup>36</sup>Ryngaert (2015a), p. 60.

<sup>37</sup>In the terms of international public law, the presumption thus concerns the question of prescriptive extraterritorial jurisdiction.

[US] laws and those of other nations which could result in international discord” and “to ensure that the judiciary does not erroneously adopt an interpretation of U.S. law that carries foreign policy consequences not clearly intended by the political branches”.<sup>38</sup> According to recent decisions to rebut this presumption, it has to be shown that the relevant rule shows “some clear indication” that it shall be applied abroad and that its substantial “focus” implicates its application to the extraterritorial case in question.<sup>39</sup> In *Kiobel*, the court dismissed the case arguing that, since those drafting the ATS in 1789 did not provide that its reach should extend beyond US territory, it should be assumed that the statute only applies to norm violations perpetrated within the US or on the high seas.<sup>40</sup> According to the US Supreme Court, jurisdiction now is only given if the claim “touch[es] and concern[s] the territory of the United States with sufficient force to displace the presumption against extraterritorial application.” It thereby clarified that it will no longer be possible to bring ‘foreign-cubed cases’ before US federal courts.<sup>41</sup> In its 2021 decision on *Nestle v doe*, the Supreme Court made highly relevant specifications regarding the implications of the presumption against extraterritoriality: It decided that allegations of general corporate activity in the US, such as decision making, cannot by themselves establish a domestic application of the ATS. “Because making ‘operational decisions’ is an activity common to most corporations, generic allegations of this sort do not draw a sufficient connection between the cause of action [...] and domestic conduct.”<sup>42</sup>

**22** The ATS does not convey to US courts either international jurisdiction or personal jurisdiction for lawsuits against companies and individuals domiciled abroad. Therefore, in addition to the hurdle of the presumption against extraterritoriality, jurisdiction has to be substantiated on a case-by-case basis in accordance with the general principles of personal jurisdiction.<sup>43</sup> To ascertain personal jurisdiction, US courts will consider whether the defendants’ contacts with the forum are sufficiently “continuous and systematic” to render it subject to the forum’s jurisdiction.<sup>44</sup> While the US rules regarding personal jurisdiction were originally fairly

<sup>38</sup>US Supreme Court *Kiobel v Royal Dutch Petroleum Co.* (2013) 589 U.S. 2013, at 1664.

<sup>39</sup>In US Supreme Court *Morrison v National Australia Bank Ltd.* (2010) 561 U.S. 247, the Supreme Court developed a transactional test for applying US rules extraterritorially which shall determine if the respective provision focuses on the place of conduct or on another connecting factor (e.g. the place of a transaction). If whatever is the focus of the provision occurs in the United States, then applying the provision is considered domestic and is permitted, even if the conduct occurs abroad, see Dodge (2018).

<sup>40</sup>Enneking (2014), p. 44.

<sup>41</sup>Ryngaert (2015b), p. 139. According to Young, however, the “broader view of ATS litigation” taken by four of the justices deciding on the case suggests that the “universal jurisdiction vision of the ATS is hardly dead” and that the scope for human rights litigation, amongst other things, remains subject to debate, see Young (2015), p. 1065.

<sup>42</sup>Cf. US Supreme Court *NESTLE USA, INC. v DOE ET AL* (2021) 593 U. S. Syllabus, p. 5.

<sup>43</sup>Wagner (2016), p. 730.

<sup>44</sup>Augenstein and Jägers (2017), p. 36.



liberal with respect to extraterritorial constellations,<sup>45</sup> the US Supreme Court asserted a stricter general jurisdiction requirement in the *Daimler AG v Bauman* case in 2014. It decided that a defendant is subject to “general jurisdiction” only if its extensive contacts with the forum render it “at home” there. To satisfy this requirement, US courts will consider the places where a company is incorporated and where it maintains its principal place of business.<sup>46</sup> In decisions post-*Kiobel*, lower US courts have generally followed the idea that cases against foreign companies for conduct abroad should be dismissed.<sup>47</sup> Where extraterritorial jurisdiction was affirmed, the connecting factor was determined on a case-by-case basis, e.g. in cases of US-based decision-making by executives of the company.<sup>48</sup> The Supreme Court has, according to many observers, basically limited the jurisdiction of US Courts to claims against companies domiciled in the US. Furthermore, claims for damages can only be brought for human rights violations that have a connection to the territory of the US.<sup>49</sup>

### 6.3.2 *Discretionary Common Law Doctrines Concerning Jurisprudence*

The jurisdiction in the United States and other common law jurisdictions is restricted by broad discretionary powers of courts to abstain (upon motion by the defendants) from exercising jurisdiction in cases involving foreign defendants, even if the tortious behaviour in question and/or its harmful effects occurred within the US.<sup>50</sup> The *forum non conveniens* doctrine, as applied by the United States and other jurisdictions,<sup>51</sup> provides that a court may decline jurisdiction for the benefit of a court in another State considered to be more appropriate as a forum for the case at hand. In their *forum non conveniens* analysis, courts are guided by private interests

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<sup>45</sup>With respect to corporate defendants, the simple fact that a corporation is “doing business” within the forum, meaning that it has substantial ongoing business relations there, may provide US courts with personal jurisdiction over it, cf. Enneking (2012), p. 141.

<sup>46</sup>Augenstein and Jägers (2017), pp. 36–37.

<sup>47</sup>According to Marullo and Zamora Cabot (2016), p. 22, in most of the cases where the defendant is a US corporation, lower courts are applying the same standard established in US Supreme Court *Kiobel v Royal Dutch Petroleum Co.* (2013) 589 U.S. 2013 and, therefore, they are dismissing all cases where the conduct is verified abroad.

<sup>48</sup>Augenstein and Jägers (2017), p. 36.

<sup>49</sup>The court explicitly justified its restraint by referring to the complementary jurisdiction of European courts for companies domiciled in the EU on the basis of the Brussels Ia regulation, Wagner (2016), p. 731.

<sup>50</sup>Enneking (2012), p. 14.

<sup>51</sup>Cf. De Schutter (2006), p. 49.

such as the burden placed on a defendant in bringing the case and by matters of public interests, especially the use of judicial resources.<sup>52</sup>

#### 24 ***Forum non conveniens* and the Bhopal Gas Leakage Disaster**

A joint case regarding claims seeking to hold the US parent company liable for the harm suffered by the victims of the Bhopal gas leakage disaster, described above (Chap. 2 ¶8), was dismissed by a US court on the grounds of *forum non conveniens*. The court considered that the case should be tried in the Indian legal system rather than in the US, explaining that “[t]he administrative burden of this immense litigation would unfairly tax this or any American tribunal. The cost to American taxpayers of supporting the litigation in the United States would be excessive. When another, adequate and more convenient forum so clearly exists, there is no reason to press the United States judiciary to the limits of its capacity. No American interest in the outcome of this litigation outweighs the interest of India in applying Indian law and Indian values to the task of resolving this case. The Bhopal plant was regulated by Indian agencies. The Union of India has a very strong interest in the aftermath of the accident which affected its citizens on its own soil. Perhaps Indian regulations were ignored or contravened. India may wish to determine whether the regulations imposed on the chemical industry within its boundaries were sufficiently stringent. The Indian interests far outweigh the interests of citizens of the United States in the litigation”.<sup>53</sup>

25 A court’s discretionary power in this regard can, of course, lead to negative consequences for claimants who try to obtain a remedy for extraterritorial damage and, more generally, may entail substantial limitations to the feasibility of extraterritorial lawsuits. According to *Augenstein and Jäger*, it has been noted that US courts have increasingly been granting *forum non conveniens* motions in cases involving foreign plaintiffs.<sup>54</sup> The doctrine, however, is not considered to simply be a constraining factor for extraterritorial jurisdiction, on the contrary, many scholars argue that the flexibility of the *forum non conveniens* doctrine is also a strength as it “allows to escape the dilemma between not taking into account the interests of the other States in exercising extraterritorial jurisdiction, on the one hand, and leaving certain violations unpunished or certain victims without remedies, on the other hand, since the exercise of extraterritorial jurisdiction will be considered justified to the extent that the balancing of interests clearly weighs in favor of such exercise, rather than in favor of deferring to the choices of the territorial State in the

<sup>52</sup> Augenstein and Jägers (2017), p. 26.

<sup>53</sup> In US District Court for the Southern District of New York *In re Union Carbide gas plant disaster at Bhopal, India in December 1984* (1986) 634 F.Supp. 842 (S.D.N.Y. 1986), p. 867; Enneking (2012), p. 94.

<sup>54</sup> Augenstein and Jägers (2017), p. 26.

face of human rights violations committed by transnational corporations or in which such corporations are complicit”.<sup>55</sup> If courts decline jurisdiction based on *forum non conveniens*, they accordingly have to take into consideration, at least in principle, the need to ensure that another forum is available in which the plaintiff may obtain an adequate remedy.<sup>56</sup> Under the regime of the Brussels Ia Regulation, however, courts cannot rely on the *forum conveniens* doctrine to decline jurisdiction.<sup>57</sup> In its ruling in *Vedanta v Lungowe*, the UK Supreme Court clarified that this also applies in cases in which the immediate cause of the damage in question arose from the operations of one of the defendant corporate group’s overseas subsidiaries.<sup>58</sup>

The principle of comity also can play an important role in transnational cases before US courts. This principle, according to the US Supreme Court, concerns “the recognition which one nation allows within its territory to the legislative, executive or judicial acts of another nation, having due regard both to international duty and convenience, and to the rights of its own citizens or of other persons who are under the protection of its laws.”<sup>59</sup> Comity considerations may prompt a court not to adjudicate a case that has been, is or will be heard in a foreign court out of deference to the sovereignty of the other State.<sup>60</sup>

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<sup>55</sup>De Schutter (2006), p. 49.

<sup>56</sup>Mills (2014), p. 227. In the UK context, van Calster (2016), p. 177 points out, that a court which decides to decline jurisdiction under the doctrine of *forum non conveniens* stays proceedings so that the proceedings which are thus provisionally suspended can be resumed should it prove, in particular, that the foreign forum has no jurisdiction to hear the case or that the claimant has no access to effective justice in that forum. As Aristova (2019) summarises, the Supreme Court in UK Supreme Court *Vedanta Resources PLC and another (Appellants) v Lungowe and others (Respondents)* Judgement of 10 April 2019, UKSC 20, acknowledged that there is a real risk that substantial justice will be unobtainable in Zambia based on two principal grounds. First, securing funding to pursue the proceedings in Zambia was a serious problem for the rural villagers. Second, the “unavoidable” complexity of the case means that it would be litigated in Zambia on a simpler and more economical scale than in Britain. Holly (2019) observes that the discussion of substantial justice, in substance and effect if not in name, is not radically dissimilar to the doctrine of *forum necessitatis*, a doctrine which has never been expressly endorsed by English courts, but which plays a significant role in other European legal systems, see below ¶ 37 *et seq.* According to Holly (2019), the increasing number of States where the *forum necessitatis* is available with varying degrees of qualification shows that the sense of such an approach may yet find favour. See also summary in ECtHR *Nait-Liman v Switzerland* App No 51357/07 (2018) at 84, available online [https://hudoc.echr.coe.int/eng/#{%22itemid%22:\[%22001-181789%22\]}](https://hudoc.echr.coe.int/eng/#{%22itemid%22:[%22001-181789%22]}), accessed 13 Apr 2022.

<sup>57</sup>ECJ *Andrew Owusu v N. B. Jackson* [2005] ECLI:EU:C:2005:120.

<sup>58</sup>UK Supreme Court *Vedanta Resources PLC and another (Appellants) v Lungowe and others (Respondents)* Judgement of 10 April 2019, UKSC 20, at 88, 94–95.

<sup>59</sup>US Supreme Court *Hilton v Guyot* (1985) 159 U.S., at 164.

<sup>60</sup>Augenstein and Jägers (2017), p. 26.

### 6.3.3 *Jurisdiction According to European Union Law*

- 27 In the Member States of the EU, rules on jurisdiction in civil cases have been partially harmonised through Regulation (EU) No. 1215/2012 of the European Parliament and of the Council 12 December 2012 on jurisdiction and the recognition and enforcement of judgments in civil and commercial matters (recast) (hereafter: Brussels Ia Regulation). This Regulation is directly applicable in EU Member States and contains some of the most important rules for establishing adjudicative and enforcement jurisdiction in tort cases for corporate human rights abuses and liability for environmental damage.<sup>61</sup> However, Article 71 of the Brussels Ia Regulation also makes clear that it shall not affect any conventions governing jurisdiction or the recognition or enforcement of judgments in relation to specific matters to which the Member States are parties.<sup>62</sup>
- 28 According to the general rule presented in Article 4(1), the Regulation states that persons are, in principle, to be sued where they have their domicile. The place where a company can be sued is determined by the seat of the registered office of the company, the place of its head office or its principal place of business, according to Article 63(1) Brussels Ia Regulation. If one of these places is located in a Member State, a company that may be legally responsible for a violation of rights can, in principle, be brought before the courts of this State.
- 29 A claim arising out of a tort or delict against a person domiciled in a Member State may be brought before the courts for the place where the harmful event occurred if that place is located in an EU Member State (Article 7(2) Brussels Ia Regulation). This covers both the place where the damage occurred and the place where the natural or legal person causing the damage acted. If courts in different States have international jurisdiction, the injured party has the right to choose where to bring action.<sup>63</sup> This rule could serve to establish jurisdiction in type-two cases, e.g. if the place where the organs of the parent company operate is located in an EU Member State while the parent company itself is domiciled in another Member State. However, according to Wagner, courts may not consider every causal contribution to the delict as the place of causal action in the terms of Article 7(2) Brussels Ia. Rather,

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<sup>61</sup> With respect to Switzerland, Norway and Iceland the Lugano Convention regulates jurisdiction and the recognition and enforcement of judgments in civil and commercial matters. It contains essentially the same rules as the Brussels Ia Regulation. Although the Brussels Ia Regulation does not apply to Denmark, Denmark has declared on the basis of an agreement concluded between the European Community and Denmark that the Regulation applies to the relations between the EU and Denmark, cf. BMJV (2019).

<sup>62</sup> A number of international environmental treaties include jurisdictional rules that, therefore, will apply when the incident/harm takes place in the territory of a state that is party to such a treaty, cf. Chap. 5, Chap. 15 ¶ 26. As Garcia-Castrillón notes, these particular jurisdictional rules often coincide with one of the fora offered by the Regulation, cf. Otero Garcia-Castrillón (2011), p. 559.

<sup>63</sup> A problem arises if there is no physical harm but only financial loss or some other kind of non-physical harm, as it is not always clear in such cases where the damage occurs; cf. Hartley (2018). This problem however cannot be treated here in detail.

for the sake of legal certainty and to ensure a forum close to the facts and evidence, the action which has the closest connection to the infringement of legal rights and where the dispute can best be settled should be considered relevant to establishing jurisdiction.<sup>64</sup>

For type-two cases of transnational environmental damage (damage directly caused by subsidiaries or business partners of domestic corporations), at least two more relevant provisions of the Brussels Ia Regulation should be mentioned: Article 7(3) provides for concurrent jurisdiction of the courts of the Member State for a civil claim for damages or restitution which is based on an act giving rise to criminal proceedings, in the court seized of those proceedings, if that court has jurisdiction under national law to entertain civil proceedings. According to Article 8 of the regulation, action can be brought against EU-based business partners or subsidiaries of companies with headquarters abroad as co-defendants before the place of jurisdiction of the purchasing company or the parent company. This is possible if an independent claim against the purchasing company or the parent company does not appear to be evidently unfounded at the time the action is brought. Article 8 gives claimants in intra-EU disputes the choice to consolidate proceedings in order to avoid the risk of irreconcilable judgments.<sup>65</sup> The jurisdiction regarding the claim against the subsidiary or supplier continues to exist even if the action against the parent-company defendant is terminated or dismissed.

The Brussel Ia Regulation also contains a number of rules concerning the enforcement of decisions of national courts. In general, these rules are based on the principle that judgments given in a Member State should be treated as if they had been given in the Member State addressed and thus be recognised in all Member States without the need for any special subsequent procedure. If a judgment contains a measure or order which is unknown in the law of the Member State addressed, the responsible authorities in that Member State shall adapt that measure or order, including any right indicated therein, as far as possible to an equivalent measure under the law of that Member State. The Regulation also exhaustively sets the rules, whereby recognition of a judgment can be refused. The rules of recognition and enforcement of the Regulation also apply if a judgement is given against a person not domiciled in a Member State. It should be kept in mind, however, that these rules

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<sup>64</sup>Wagner (2016), p. 735.

<sup>65</sup>Cf. UK Supreme Court *Vedanta Resources PLC and another (Appellants) v Lungowe and others (Respondents)* Judgement of 10 April 2019, UKSC 20. Under Article 8 No. 1 of the Brussels I Regulation, a foreign subsidiary, as well as suppliers and other business partners domiciled abroad, may in principle be sued as co-defendants before the general place of jurisdiction of the parent company or the customer in Germany, if an independent claim against the (parent) company is not obviously unfounded at the time the action is brought. However, at least according to the wording of the Regulation, this possibility only applies to co-defendant companies with their registered office in a Member State of the EU. In order to avoid discrimination against European companies and to include typical human rights violations by suppliers or subsidiaries, a different interpretation is conceivable but questionable according to Wagner, see Wagner (2016), p. 737.

only apply to EU Member States, if either the deciding court or the enforcing institutions fall outside of the scope of the Regulation, national rules apply.

32 Courts with international jurisdiction under the Brussels Ia Regulation may not deny their jurisdiction on discretionary grounds based on *forum non-conveniens* considerations. However, the Regulation contains rules which follow a comparable rationale: *Forum non conveniens*, according to *van Calster*, has cautiously been introduced into Article 33 and Article 34. Article 33 (*lis alibi pendens*) permits a court to stay the proceedings under certain conditions, when the case is pending before a court of a third State. Article 34 confers the same right on a court in cases related to the action in a court of a third State. These rules impose a more restricted and firmly defined room for manoeuvre for courts in the EU than would be the case in a *forum non conveniens* scenario.<sup>66</sup>

33 To summarise the above, the Brussel Ia Regulation permits suing European corporations and other business enterprises for rights violations suffered abroad before the courts of the States where they are incorporated. Independent actions against non-EU-nationals (including subsidiaries of EU corporations) do not fall within the scope of application of the Regulation. Accordingly, jurisdiction for actions against subsidiaries and suppliers incorporated in a third State is typically not given and depends on the divergent procedural laws of the respective forum State.

34 In the course of the recasting process, several changes were discussed with respect to the scope of the Regulation. The Commission initially suggested extending its rules to non-EU defendants, fully harmonising Member States' rules on jurisdiction in civil and commercial disputes.<sup>67</sup> Proposals to integrate jurisdictional rules to include a *forum necessitatis* provision, which would have provided for jurisdiction where it is impossible or unreasonable for a claimant to bring a case in another State,<sup>68</sup> were also not adopted in the final version of the Regulation. However, as Mills specifies, this was not the case because the idea was specifically rejected, but because the general idea of enlarging the scope of the Regulation to cover non-EU domiciled defendants was deferred. A forum of necessity rule is not considered to be required for defendants domiciled within the European Union because at least one Member State court will always have jurisdiction under the Regulation, and that court will be presumed to be capable of delivering justice because its procedures must comply with the European Convention on Human Rights. *Mills*, therefore, predicts that a forum of necessity rule would form a part of any future proposals on these questions within the European Union.<sup>69</sup>

<sup>66</sup>van Calster (2016), p. 181. However, as Grušić (2016), p. 39 points out, Articles 33 and 34 could lead to a “race to the court”, with the European-based parent company and its overseas subsidiary commencing preventive proceedings in the (developing) country where the harmful event occurred.

<sup>67</sup>Augenstein and Jägers (2017), p. 20.

<sup>68</sup>The original proposal also included a rule on asset-based jurisdiction, which concerns jurisdiction in cases where the defendant owns property in the forum State, provided the value of that property is not disproportionate to the claim, Augenstein and Jägers (2017), p. 20.

<sup>69</sup>Mills (2014), p. 222.

### 6.3.4 *Residual National Jurisdiction*

In cases in which the defendant is not domiciled in a Member State, the Brussels Ia Regulation delegates the issue of forum to the rules of jurisdiction applicable in the territory of the Member State of the court seized, recital (14) Brussels Ia Regulation. If the company to be sued is not domiciled in a Member State of the EU, Switzerland, Norway or Iceland and no specific jurisdictional rules apply, national procedural laws must be used to answer the question of whether national courts have international jurisdiction. Those rules of course, may diverge from State to State in several ways. This chapter, however, limits itself to a rather brief and general outline of the dimensions of national norms which are relevant as they may facilitate tort litigations in cases involving transboundary environmental damage. Where legal norms are cited, it refers to the German Code of Civil Procedure (ZPO).

Section 32 ZPO, which establishes the local jurisdiction for intra-German torts as well as the international jurisdiction of German courts (“principle of the double function of the jurisdictional rules”), follows a similar rationale to Article 7(2) of the Brussels Ia Regulation. Claims based on a tortious act committed abroad by a company that has its registered office outside one of the Member States of the EU (or Switzerland, Norway, Iceland) can be brought before German civil courts if the tortious act was also committed in Germany. An act is deemed to have been committed both at the place where the person causing the damage acted and at the place where the protected legal interests of the injured person were infringed. To establish jurisdiction, it is sufficient that one (of several) causal action was committed in Germany, although a mere preparatory action is not sufficient to invoke jurisdiction. In the case of omissions, the place where the action was required according to the relevant legal duty, is regarded as the relevant place of causal action.<sup>70</sup> It is irrelevant whether the action is directed against the sole perpetrator of a delict or an accomplice. The provision also applies to defendants who are liable for the actions of others and, in the case of actions against more than one co-defender, the tort must be demonstrated conclusively for each of them.<sup>71</sup>

German civil procedural law generally recognises jurisdiction based on *forum necessitatis* considerations for cases in which the plaintiff cannot, for legal or factual reasons, pursue his or her right before a competent foreign court. This is derived from the guarantee of access to justice and the corresponding prohibition of denial of justice in constitutional and customary international law.<sup>72</sup> Similar *forum necessitatis* rules, based either on statute or developed through case law, form part of the law of at least ten European States, including France, Austria, Belgium, the Netherlands and Switzerland.<sup>73</sup>

<sup>70</sup>Musielak and Voit (2020), Section 32, para. 23; Patzina (2016), Section 32 at 20.

<sup>71</sup>Cf. Saenger (2019), Section 32, para. 12.

<sup>72</sup>Patzina (2016), Section 12, para. 100.

<sup>73</sup>Mills (2014), p. 222.

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- 38 In German law, another rule can serve to establish the jurisdiction of domestic courts. Section 23 ZPO states that if a claim under property law is to be brought against a person who does not have a residence in Germany, a German court may have jurisdiction if sufficiently valuable assets of this person or company are located in Germany.<sup>74</sup> However, the legal dispute must still have a sufficient nexus to Germany.<sup>75</sup> Notwithstanding this limitation, the rule of 23 ZPO is considered to be able to fulfil the function of *forum necessitatis*.<sup>76</sup>

## 6.4 Procedural Issues II: Standing

- 39 In addition to the question of the competent national court, plaintiffs seeking to press a tort claim have to overcome more procedural hurdles. One such major requirement a party must satisfy stems from the principle of *locus standi*. Standing qualifications reserve the right to sue to persons who are actually legally aggrieved or have a specific legal interest in a matter. They are, in short, intended to prevent persons from arbitrarily pursuing the legal interests of others or the general public and, thereby, deter so-called ‘popular actions’ (*actio popularis*). As such, a claimant has to establish that he or she is the right party to bring the case at hand, i.e. that he or she is entitled to assert the claim.<sup>77</sup> Depending on the legal culture and adjudicative setting, standing can be restricted to those directly affected by a defendant’s action, to States or certain kinds of non-governmental organisations.<sup>78</sup>
- 40 With respect to environmental liability, standing will usually not be of concern in cases when a person is specifically and uniquely harmed by, for example, someone cutting down their trees or dumping waste on their land.<sup>79</sup> It can be particularly problematic for public interest litigants and victims in cases concerning environmental problems which give rise to different kinds of harm that may have not yet materialised or may be difficult to trace to a particular action.<sup>80</sup> When environmental harm is inflicted upon many people, for example, an entire region is harmed by

<sup>74</sup>If a claim is lodged seeking a pecuniary benefit, it is always a pecuniary claim, even if it is derived from a non-pecuniary legal relationship. It thus is sufficient if the claim seeks monetary compensation; cf. Toussaint (2020), Section 23 at 4; Saenger (2019), Section 23 at 2.

<sup>75</sup>A sufficient domestic nexus is given, for example, if a defendant, in addition to having assets in Germany, also actively participates in business life. In such cases, the domestic connection is deemed as sufficient even if the plaintiff does not have a residence in Germany, cf. Patzina (2016), Section 23 at 15.

<sup>76</sup>Cf. Bertele (1998), p. 228. Given this function, the possibility to establish jurisdiction based on the statutory rule of Section 23 ZPO results in the diminished practical relevance of the judiciary rule of *forum necessitatis*, cf. Patzina (2016), Section 12 at 101.

<sup>77</sup>Musielak and Voit (2020), Section 51 at 18.

<sup>78</sup>Hadjiyianni et al. (2015).

<sup>79</sup>UN Environment (2019), p. 192.

<sup>80</sup>Hadjiyianni et al. (2015).



negligent air pollution, many courts have interpreted statutes to mean that it was the government's political prerogative to find a general solution for the issue.<sup>81</sup> When applied to environmental matters, standing rules can prohibit an individual from suing to protect a natural resource upon which he or she relies, even when the government fails to act, which then effectively precludes access to justice.<sup>82</sup>

Complementary to this restrictive role, however, standing rules can also reflect a legal system's openness to public interest claims by private individuals or non-governmental organisations. For example, the landmark *Urgenda* case,<sup>83</sup> in which the Dutch State was obliged to take stricter climate protection measures, could be taken to a civil court because of particularly liberal practice regarding standing in the Netherlands: Article 3:205a of the Dutch Civil Code stipulates that "a foundation or association with full legal capacity that, according to its articles of association, has the objective to protect specific interests, may bring to court a legal claim that intends to protect similar interests of other persons".<sup>84</sup> Reforms of national laws regarding the *locus standi* can, of course, serve to improve the openness in this sense of civil law systems to public interest litigation: As an instance of growing recognition, in a more general sense, of procedural and substantial rights related to the environment, UN Environment (2019) has highlighted many countries that have enacted broad or universal approaches to standing for those appealing to courts to remedy environmental harm. Such reforms may, for example, introduce so-called citizen suits primarily designed to enforce adherence to the law. Such provisions are supposed to supplement government enforcement, sometimes requiring the citizen to give notice to the government and the accused party of an intent to sue prior to bringing suit so that the government has a chance to act. For instance, Australia allows individuals and organisations to bring civil suits and civil enforcement actions if they have been involved in environmental matters for the previous 2 years. In a more general sense, States may broaden statutory standing for persons acting in their own interest, on behalf of others who cannot act in their own name, in the interest of a group or class, in the public interest or as an association acting in the

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<sup>81</sup> Cf. UN Environment (2019), p. 192. In the case of *Lliuya v RWE* (Regional Court of Essen 2 O 285/15 (2016)), the defendants followed this line of argument, submitting that the claim was both inadmissible due to the lack of a legitimate interest on the part of the claimant and the lack of specificity of the claim, and unfounded as "climate change cannot be addressed through individual civil liability" but must be tackled through national and inter-governmental measures, cf. <https://germanwatch.org/sites/germanwatch.org/files/announcement/21252.pdf>, at 8 (Accessed 14 Apr 2022).

<sup>82</sup> UN Environment (2019), p. 192. In common law systems doctrines regarding the justiciability of a claim fulfill a comparable function. Prominently, the political question doctrine allows US federal courts to refrain from exercising jurisdiction over cases raising issues that are simply too political to be decided by a court of law, as to do so might force it to venture too far into the realm of the legislative and/or executive branches of government and as such be contrary to separation of powers principles, Enneking (2012), p. 144.

<sup>83</sup> See Chap. 4, ¶ 68 (Sect. 4.3.2).

<sup>84</sup> Cf. Saurer and Purnhagen (2016), p. 17.

interest of its members.<sup>85</sup> Section 606 of the German Code of Civil Procedure, which was introduced in 2018, establishes the right of certain associations to take legal action against enterprises to protect the legal interests of consumers affected by mass damage. The association then acts in its own name but on behalf of a collective interest.<sup>86</sup> Although it is not yet clear whether the new norm will have major consequences (specifically concerning environmental issues), the reform proves that even in legal systems such as the German one, which is rather stringently tailored to the two-party process, collective interests can be integrated into *locus standi* regulations.

## 6.5 Applicable Law

- 42 Another critical legal issue in liability cases concerning two or more States in one way or the other, the competent court has to decide which State's law it should apply. Even if a European court accepts jurisdiction it is, as *Enneking* explains, not at all a given that the court will be able to adjudicate on a foreign liability claim based on the forum State's substantive norms on tort law. In fact, in many cases, the forum court involved will have to formulate its judgment with respect to the alleged wrongfulness of the corporate conduct and its legal consequences based on foreign rules of tort law.<sup>87</sup> This application of foreign tort law can have far-reaching consequences, especially when the damage was suffered in a developing State where local law may contain relatively lax environmental and compensation standards in comparison with that operating in EU Member States. Consequently, even though the victims of environmental damage can find German or other European courts willing to accept jurisdiction over corporations domiciled in their State, victims will find it more difficult to prevail in their claim and may even struggle to find lawyers willing to take on their case.<sup>88</sup>
- 43 The issue of the applicable law must, again, be examined on the ground of private international law which is, in principle, part of the law of the forum State. Courts will, accordingly, apply the rules of private international law of their respective countries. Within the EU, except for Denmark, private international law is largely unified and for claims in tort, the applicable law is defined by the Rome II Regulation of the EU. Contrary to the Brussels Ia Regulation, which is concerned only with torts connected to the EU, Rome II applies universally, i.e. to all transboundary torts regardless of the place where the environmental damage or the defendant's actions took place.

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<sup>85</sup> UN Environment (2019), p. 193.

<sup>86</sup> Musielak and Voit (2020), Section 606 at 4.

<sup>87</sup> Enneking (2017), p. 49.

<sup>88</sup> Grušić (2016), p. 65.

### 6.5.1 *General Rule of lex loci damni and a Special Rule for Environmental Damage*

As a general rule, the law applicable to an obligation arising out of a tort shall be the law of the State in which the damage occurred. This applies regardless of the country in which the event giving rise to the damage occurred and irrespective of the country or the countries in which the indirect consequences of that event occur (Article 4 (1) Rome II Regulation). According to this rule (*lex loci damni*), it is the tort law of the host country that will, in principle, be applicable in type-two cases concerning damage directly caused by suppliers or subsidiaries abroad but which are brought before EU Member State courts. The same rule in principle also applies if the tort in question is a type-one case,<sup>89</sup> that is when the act (or omission) giving rise to the damage is located in one country whereas the harm resulting from that act (or omission) has arisen in another country.<sup>90</sup>

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For environmental damage, there is an exception to this principle: Article 7 Rome II gives the claimant a choice between the law of the State where the environmental damage occurs and the law of the State where the event giving rise to the damage occurred. According to recital 24 of the Regulation, ‘Environmental damage’ is understood as meaning an adverse change in a natural resource, such as water, land or air, impairment of a function performed by that resource for the benefit of another natural resource or the public, or impairment of the variability among living organisms. However, the material scope of Article 7 Rome II not only encompasses environmental damage in a strict sense but also damage sustained by persons or property as a result of such damage.

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The event giving rise to the damage is commonly understood as the conduct that has given rise to the damage. In cases of environmental damage, the claimant thus has a right to choose between the law of the place where the damage is sustained and the law of the State where the actions occurred that gave rise to the damage. The Regulation’s choice-of-law rule for environmental damage is based on the principle of ubiquity.<sup>91</sup> The claimant’s right to choose the applicable law is supposed to “discriminate in favour of the person sustaining the damage”, cf. recital 24 Rome II. Article 7 Rome II implies an important facilitation as the claimant is, in principle, free to choose the law which involves more relevant precedents, higher regulatory

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<sup>89</sup> See above, ¶ 6 *et seq.*

<sup>90</sup> Cf. Enneking (2017), p. 50. Article 4 contains two general exceptions to this rule for cases: According to Article 4(2), in cases where the person claimed to be liable and the person sustaining damage both have their habitual residence in the same country at the time when the damage occurs, the law of that country shall apply; according to Article 4(3) in situations where it is clear from all the circumstances of the case that the tort is manifestly more closely connected with a country other than that indicated in paragraphs 1 or 2, the law of that other country shall apply. These exceptions, however, are unlikely to gain much relevance in cases concerning extraterritorial environmental liability.

<sup>91</sup> Before the harmonisation of European private international law this used to be the general rule in German Law for delicts, cf. Junker (2018), Article 7 Rom II-VO at 1.

standards, stricter liabilities, more liberal rules on presumptions of law or on shifting the burden of proof, higher damages awards and so forth.<sup>92</sup> In many cases, especially those involving incidents in the Global South, this will be the law of the corporate defendant's home State.

47 Article 7 Rome II, in accordance with *Enneking's* qualification, can be of significance at least for those liability cases that involve environmental damage as specified in the Regulation, provided they can be construed as transboundary tort claims in which the event giving rise to the damage in the host country has taken place in the home country.<sup>93</sup> This seems to be obvious for type-one cases where the detrimental effects of an action or omission in one country transcend this countries borders and directly cause environmental damage in another country.

48 Regarding type-two cases, however, it is controversial whether Article 7 Rome II makes it possible that a decision taken at a corporation's European headquarters will be understood as the event giving rise to the damage.<sup>94</sup> This could be the case when the demands or policies related to a corporation's supply-chain, or the lack of supervision regarding a parent company's subsidiaries<sup>95</sup> that initiate the chain of events, which results in environmental damage are to be considered the legally relevant action for the purposes of Article 7 Rome II.<sup>96</sup> In such cases, the corporation's behaviour may be regarded as an 'indirect event' in the sense that it precedes the subsidiary's or tortious action causing the damage directly.<sup>97</sup> Many scholars argue, however, that Article 7 has to be interpreted in such a way that, in order to be linked to the place of action, only the action or omission that directly caused the violation of rights is the decisive factor. Causal contributions on a preliminary stage thus would not be relevant.<sup>98</sup> When the legally relevant contribution is an omission, i.e. if the parent company is blamed for not taking the required action to prevent damage directly caused by a supplier or a local subsidiary, the place where the act (omission) giving rise to the damage occurred (*lex loci delicti commissi*) then shall be the place where action should have been taken in accordance with the law applicable at the location of the legal interest to be protected. This place, in principle, will be the place where the legal interest was infringed.<sup>99</sup> In cases of strict liability,

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<sup>92</sup> Enneking (2017), p. 54.

<sup>93</sup> Enneking (2017), p. 54.

<sup>94</sup> Cf. van Calster (2016), p. 265.

<sup>95</sup> Enneking (2012), pp. 212–218.

<sup>96</sup> Grušić (2016), p. 60.

<sup>97</sup> Grušić (2016), p. 61.

<sup>98</sup> Wagner (2016), p. 743.

<sup>99</sup> Junker (2018), Article 7 Rom II-VO at 22; Späth and Werner (2021). Grušić, however, points to a perspective which differentiates according to the substance of the relevant duty: "If the duty is one of exercising supervision over a subsidiary to prevent it from, inter alia, causing environmental harm it can be said that that duty must be exercised in the boardroom of the parent. If, on the other hand, it is framed as a duty to warn, then that duty is breached at the last place where that warning could have been given, usually the place where the harm occurs", Grušić (2016), in footnote 201 citing International Law Association, 'Transnational Enforcement of Environmental Law'

the place to be considered as the *lex loci delicti commissi* is the place where the event causing the damage occurred, understood as the place where the polluter acted dangerously or the place where the damage-causing facility operated.<sup>100</sup>

To support this interpretation, scholars point to common principles of autonomous international tort law<sup>101</sup> and—given that there are no decisions of the European Court of Justice involving Article 7 Rome II—on the case law on Article 7 (2) of the Brussels Ia Regulation.<sup>102</sup> CJEU cases dealing with the jurisdictional treatment of indirect damage accordingly demonstrate that only the place where the direct victim suffers direct damage is of jurisdictional relevance.<sup>103</sup> Applying this distinction to the question of the nature of the event giving rise to the damage for the purposes of Article 7 of Rome II would imply, as *Grušić* explains, that both the ‘indirect event’ (i.e. the parent company’s or purchasing company’s decisions that started the chain of events resulting in environmental damage) and the actions of the ‘indirect tortfeasor’ (i.e. the company whose decisions concerning the operations of the subsidiary or supplier) would be disregarded for choice-of-law purposes.<sup>104</sup>

Although many seem to support this restriction of the ubiquity principle of Article 7 to the type-one kind of direct transboundary damage,<sup>105</sup> a number of arguments can be made in favour of applying Article 7 to type-two cases and, thus, open the door to consider the decisions and actions of the parent company or purchasing company as the causal event relevant for choice-of-law. Most importantly it should be noted, with *Enneking*, that such a narrow interpretation neither seems “to be in line with the Rome II Regulation’s universal application, nor with the environmental damage rule’s main aim, which is to raise the overall level of environmental protection and of making the polluter pay”.<sup>106</sup> As the Commission made clear in the explanatory memorandum to the proposal of the regulation, Article 7 shall, as a reflection of the European Union’s more general objectives of environmental policy, “not only [...] respect the victim’s legitimate interests but also [...] establish a legislative policy that contributes to raising the general level of environmental protection, especially as the author of the environmental damage, unlike other torts or delicts, generally derives an economic benefit from his harmful activity”.<sup>107</sup> The major rationale of the rule, besides having the goal to adequately

(Conference Report Berlin 2004), available at <https://www.ila-hq.org/index.php/committees>, last accessed 14 Apr 2022.

<sup>100</sup> Cf. Junker (2018), Article 7 Rom II-VO at 22.

<sup>101</sup> Wagner (2016), p. 743.

<sup>102</sup> See, ¶ 29 *et seq.*

<sup>103</sup> CJEU, *Dumez France SA and Tracoba SARL v Hessische Landesbank and others*: ECJ 11 Jan 1990 ECLI:EU:C:1990:8; *Marinari v Lloyd's Bank*: ECJ 19 Sep 1995 ECLI:EU:C:1995:289. Cf. *Grušić* (2016), p. 61.

<sup>104</sup> *Grušić* (2016), p. 62.

<sup>105</sup> See Wagner (2016), pp. 743–744; *Grušić* (2016), with further references at footnote 202.

<sup>106</sup> *Enneking* (2017), p. 54.

<sup>107</sup> Proposal for a Regulation of the European Parliament and the Council on the law applicable to non-contractual regulations (Rome II), EU Doc COM (2003) 427 final 19–20.

take into account the right of injured persons to effective redress, is to guarantee an environmental rule of law despite the existence of an uneven regulatory playing field.<sup>108</sup> It was implemented to make sure that private international law does not give economic actors problematic incentives by exclusively applying the law of the place where damage is sustained. Elsewise, benefit-maximising actors could exploit the lower environmental standards in other States by establishing risky facilities at locations well-suited for the purpose, such as border regions, and thereby avoid the costs of effectively mitigating their risk of liability.<sup>109</sup>

51 The Commission thus explicitly acknowledges the significance of environmental liability for environmental policies. It highlights the importance of applying an adequate standard of care to transboundary environmental damage to prevent “pollution havens”.<sup>110</sup> While the Commission only expressly refers to externalities caused in “neighbouring countries”, the regulatory ratio or “underlying philosophy”,<sup>111</sup> regarding environmental liability as a functional precautionary mechanism<sup>112</sup> would not allow the restriction of this rule to only certain situations, such as when local conduct results in transboundary environmental damage which manifests in a neighbouring (EU) country.<sup>113</sup> The assumption that there will be problematic effects from leaving corporate leeway to take advantage of “pollution havens” is also plausible in constellations where liability risks can be shifted to far away developing countries, just as it is in constellations where damage would manifest in a neighbouring (EU) country. To restrict the *lex loci delicti commissi*-rule of Article 7 Rome II to type-one cases would entail that non-EU environmental interests do not fall within the scope of Rome II’s environmental policies.<sup>114</sup> This would, given the global relevance of most environmental problems, not only contradict the ‘enlightened self-interest’ of the EU but would also collide with the ‘cosmopolitan objective’ that the Regulation presumably pursues, namely, raising the general level of environmental protection based on the universally accepted principles of environmental law.<sup>115</sup>

<sup>108</sup> See above, Chap. 2, ¶ 12 *et seq.* (Sect. 2.2.1).

<sup>109</sup> Proposal for a Regulation of the European Parliament and the Council on the law applicable to non-contractual regulations (Rome II), EU Doc COM (2003) 427 final 19–20.

<sup>110</sup> See above, Chap. 2, ¶ 14 (Sect. 2.2.1) and van Calster (2016), p. 264.

<sup>111</sup> Proposal for a Regulation of the European Parliament and the Council on the law applicable to non-contractual regulations (Rome II), EU Doc COM (2003) 427 final 19–20.

<sup>112</sup> Cf. van Calster (2016), p. 264.

<sup>113</sup> Cf. Enneking (2017), p. 54. As Grušić points out, it is unlikely that Member States’ courts will be seised with a claim concerning a type I case of transboundary torts where both elements of the tort occur entirely outside the EU; the effect of Article 7 in this type of case is to raise the level of environmental protection within the EU and at its borders, *cs.* Grušić (2016), p. 50.

<sup>114</sup> Enneking (2017), p. 54.

<sup>115</sup> Grušić (2016), p. 50. The facilitations for victims of environmental damage, according to recital 25 of the regulation, are “fully justified” given the environmental principles of the Union, such as the precautionary principle, the principle that preventive action should be taken, the principle of priority for corrective action at source and the principle that the polluter pays.

It has been proposed that a more ‘cosmopolitan understanding’ of Article 7 Rome II in this sense may be more viable for another reason: This follows, as *van Calster* explains, from the close link between Rome II and the European Environmental Liability Directive (ELD). On the one hand, again according to *van Calster*, the Commission’s reference to the Rome II Regulation in its proposal regarding recent developments, which recognise environmental damage as being included (without specifically mentioning it), undoubtedly relates to the concepts of the ELD. The ELD, on the other hand, specifically mentions in Article 3(2) that it shall apply without prejudice to more stringent Community legislation regulating the operation of any of the activities falling within the scope of the Directive and without prejudice to community legislation containing rules on conflicts of jurisdiction. Article 6 and 8 of the Directive establish liability of the ‘operator’, as defined in Article 2(6): “‘operator’ means any natural or legal, private or public person who operates or controls the occupational activity or, where this is provided for in national legislation, to whom decisive economic power over the technical functioning of such an activity has been delegated, including the holder of a permit or authorization for such an activity or the person registering or notifying such an activity.”<sup>116</sup> With regard to the prevention and remedying of environmental damages, precisely this broad definition of ‘operator’ in the ELD and the ELD’s link to the Rome II Regulation are considered to open up an option to accept the characterisation of corporate-headquarter decisions as “an event giving rise to damage” in terms of Article 7 Rome II.<sup>117</sup> Concerning the relevant content of Article 7 and its practical implications for extraterritorial liability cases, however, there remains a need for further clarification.

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### 6.5.2 Exceptions According to Rome II

In addition to the special rules for environmental damage in Article 7, Rome II contains several relevant exceptions that may allow for the application of the law of the (European) forum, even though the *lex loci damni* rule of Article 4 would stipulate the application of foreign law. The first exception concerns overriding mandatory provisions of the forum which, according to Article 16, should be applicable irrespective of the law otherwise applicable to the non-contractual obligation. The ECJ has defined overriding mandatory provisions as national law with which compliance “has been deemed to be so crucial for the protection of the political, social or economic order in the EU Member States concerned as to require compliance therewith by all persons present on the national territory of that EU Member States and all legal relationships within that State”.<sup>118</sup> Overriding

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<sup>116</sup>van Calster (2016), pp. 263, 265.

<sup>117</sup>Otero Garcia-Castrillón (2011), p. 571.

<sup>118</sup>ECJ *Arblade* C-369/96 and C-376/96 [1999] ECLI:EU:C:1999:575ECJ. Cf. Marx et al. (2019), p. 35.

mandatory provisions, in *Enneking's* words, “include domestic regulations of a (semi-) public law nature that intervene in private legal relationships in order to protect the public interest”.<sup>119</sup> Such “regulatory private law”<sup>120</sup> could be seen in “statutory duties for locally based internationally operating business enterprises with respect to the people and planet related impacts of their activities in host countries, [which] could be considered to be overriding mandatory provisions that should find application in foreign direct liability cases brought before the courts in those EU Member States.”<sup>121</sup> As has been observed recently, legislative provisions on mandatory due diligence, such as the French Law on the Duty of Vigilance, could form the basis for overriding mandatory rules to ensure their applicability in civil liability cases relating to corporate human rights abuses or environmental damage in third countries.<sup>122</sup> Such national due diligence regulations aimed at creating extraterritorial effects, which will be discussed in detail in Chap. 7, may also expressly stipulate that their provisions should be considered as overriding mandatory provisions, and as such, applied regardless of the otherwise applicable law. Drafts for such laws, such as the unsuccessful Swiss Responsible Business Initiative and the regulatory debate that preceded the German Supply Chain Due Diligence Act (“Lieferkettensorgfaltspflichtengesetz”, LkSG), discussed a provision to ensure the applicability of due diligence obligations of companies in civil liability claims irrespective of the foreign applicable law.<sup>123</sup>

**54** The second relevant exception in Rome II is found in Article 26 and provides that the forum can preclude the application of a foreign law that would be manifestly inconsistent with its public policy (*ordre public*).<sup>124</sup> This exception, according to *Marx et al.* could provide a minimum guarantee in transnational liability cases that are brought before EU Member State courts but governed by host country law. *Marx et al.* refer to transnational liability cases arising from human rights violations, as those, whether ensuing from international or domestic law, are considered a part of the public policy of the forum. The same can be true for environmental liability cases, which involve infringements of fundamental human rights. Just as the mandatory-provisions exception, Article 26 may, at least in theory, open the possibility for a forum State to apply its own law when the law of the host State does not offer sufficient protection for the victims, or when damages in a host country is too low to deter businesses from further abuse.<sup>125</sup>

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<sup>119</sup> Enneking (2017), p. 55.

<sup>120</sup> Cf. Hellgardt (2016).

<sup>121</sup> Enneking (2017), p. 56. Cf. Otero Garcia-Castrillón (2011), p. 576.

<sup>122</sup> Marx et al. (2019), p. 113.

<sup>123</sup> Smit et al. (2020), p. 280.

<sup>124</sup> Cf. recital (32) Rome II Regulation.

<sup>125</sup> Marx et al. (2019), p. 113.



These interpretations of Articles 16 and 26 Rome II, however, are not undisputed.<sup>126</sup> In addition, the exceptions to the general rules of the Rome II Regulation are subject to certain restrictions.<sup>127</sup> Their practical relevance for environmental liability cases therefore remains to be seen. A statutory reform could resolve this uncertainty. In this regard, the recent report of the JURI committee proposed to include a new Article 6(a) into the Rome II Regulation that provides a specific choice of law provision for civil claims relating to alleged business-related human rights abuses committed by EU companies in third countries. Victims of business-related human rights violations would, accordingly, be able to choose between the law of the country in which the damage occurred (*lex loci damni*), the law of the country in which the event giving rise to the damage occurred (*lex loci*

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<sup>126</sup>For example, according to Wagner, Article 26 does not create the possibility to apply forum law. This follows from the distinction between a positive and negative function of the *ordre public* principle. The positive function of the reservation in favour of fundamental interests of public policy allows the application of domestic legal norms on situations which are, *per se*, governed by foreign law. The negative function consists of avoiding intolerable results that would arise from the application of foreign law. Article 26 accordingly concerns only the negative function. Article 16 Rome II, on the other hand, shall only apply when the mandatory provisions in national law exclusively concern legal interests and legal relationships within the territory of the forum State. It could be ruled out that the regulation of legal relationships of entities situated in other States would be required for the preservation of the political, social or economic order of the concerned Member State. A legitimate interest of one State to regulate situations on the territory of another State should not be recognized, see Wagner (2016), pp. 744–749. Particularly with respect to Article 16 Rome II, Wagner thus bases his view on fundamental considerations regarding legitimate prescriptive jurisdiction which can, however, be readily disputed. The German Supreme Court, the highest national civil court, also has taken the view that it would run contrary to principles of international law if the application of foreign legal norms would *a priori* depend on their compatibility with constitutional or human rights law, see Federal Court of Justice IV ZR 93/63 (1964), 12 ff. The German constitutional court however has rejected this view. Accordingly, the *ordre public* clause should be understood as a ‘gateway’ or ‘entry-point’ for fundamental rights into private international law, see Federal Constitutional Court I BvR 636/1968 (1971). Results that run contrary to the constitution, as Colombi Ciacchi concludes, thus can be avoided either (indirectly) by using the public policy exception or (directly) by seeing in the fundamental rights a barrier that limits the application of the law designated by a conflict-of-law rule. According to Colombi Ciacchi, the progressive intrusion of fundamental rights into private international law is proving to be a renaissance of the *ordre public*. Its relevance and scope of application are growing as more and more areas of law are being attributed constitutional and human rights dimensions, cf. Colombi Ciacchi (2008), pp. 24, 37. In the context of transnational environmental liability, one may add that the growing recognition of the environmental dimensions of human rights as well as possible developments regarding direct human rights obligations of transnational corporations, which may become relevant for national torts, could further increase the relevance of *ordre public* exceptions in the context of the Rome II Regulation. As Enneking concludes, “in the particular context of foreign direct liability cases, where application of host country law may lead to fundamentally different outcomes with respect to standards of care in relation to the protection of human and environmental interests, including fundamental human rights standards, the public policy exception may well prove instrumental”, Enneking (2017), p. 65.

<sup>127</sup>For example, in accordance with recital 32 Rome II Regulation, courts of the Member States shall apply Article 26 only “in exceptional circumstances”. This suggests that the reservation should be limited to a narrow range of exceptional cases, cf. Colombi Ciacchi (2008), p. 11.

*delicti commissi*) and the law of the place where the defendant undertaking is domiciled or, lacking a domicile in the Member State, where it operates.<sup>128</sup> Such a proposition, as *Marx et. al.* explain, “would take into consideration the specific nature of the business-related human rights claims and redress the power imbalance between the parties, the victims usually being in a situation of particular vulnerability in relation to the multinational companies. It would also promote the interests of the respective countries and of the EU as a whole in upholding higher human rights standards [...] At the same time, it also determines the possibilities for host country-based individuals and communities who have suffered harm as a result of the activities of EU-based businesses with international operations to ensure, through this type of litigation, that the level or protection of their environmental and human rights interests is adequate and not fundamentally different from that afforded to those living in the EU home countries of the business enterprises involved.”<sup>129</sup>

56 Article 17 of the Rome II Regulation provides that “in assessing the conduct of the person claimed to be liable, account shall be taken, as a matter of fact and in so far as is appropriate, of the rules of safety and conduct which were in force at the place and time of the event giving rise to the liability”. Conduct and safety rules may bear specific relevance in the context of environmental damage.<sup>130</sup> According to the Commission’s Explanatory Memorandum to the Regulation, Article 17 shall be of help with respect to “one of the most frequently asked questions [concerning] the consequences of an activity that is authorised and legitimate in State A (where, for example, a certain level of toxic emissions is tolerated) but causes damage to be sustained in State B, where it is not authorised (and where the emissions exceed the tolerated level). Under Article 17, the court must then be able to have regard to the fact that the perpetrator has complied with the rules in force in the country in which he is in business.”<sup>131</sup> Whereas the Commission’s explication indicates that rules of safety and conduct at the place of the event giving rise to the liability may exonerate the perpetrator, this does not necessarily mean that those rules could not also lead to a stricter or extended liability.<sup>132</sup> However, the Commission chose a more neutral wording that also seems to allow for an interpretation in the latter direction by saying that rules of conduct should be taken into account by the court “as a point of fact and insofar as is appropriate, for example when assessing the seriousness of the fault or

<sup>128</sup>JURI committee with recommendations to the Commission on corporate due diligence and corporate accountability (2020/2129(INL)).

<sup>129</sup>Marx et al. (2019), p. 114.

<sup>130</sup>van Calster (2016), p. 264.

<sup>131</sup>EU Com, Proposal for a Regulation of the European Parliament and the Council on the law applicable to non-contractual obligations (Rome II), 20. Available online at: <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2003:0427:FIN:EN:PDF>.

<sup>132</sup>Wagner, however, interprets the rule in a way that Article 17 Rome II-VO allows for an exoneration of the perpetrator regarding the safety and security regulations applicable at the *lex loci delicti*. The application of stricter domestic standards at the expense of the injuring party, in contrast, would undermine the purpose of the Rome II Regulation, which has abandoned the ubiquity principle, cf. Wagner (2016), pp. 741–742.

the author's good or bad faith for the purposes of the measure of damages".<sup>133</sup> Therefore, it seems not out of the question to assume that provisions on rules of safety and conduct may also play a role with respect to type-two cases. Before EU Member State courts dealing with the liability of EU-based parent companies for harm caused to human rights and environmental interests in non-EU host countries, it could allow the court to take into account home country behavioural standards that can be stricter than those in the host country, even when the law of the host country is applicable to the case.<sup>134</sup> There seems to be a wide consensus, however, that Article 17 should, on the one hand, not be understood in such a way as to provide for an application of the rules of safety and conduct, but does only allow the court to take them into account as a matter of fact in assessing the conduct of the tortfeasor and, on the other hand, it is intended as a tool for helping the tortfeasor, but not necessarily the victim.<sup>135</sup>

However, Article 17 may help to resolve the complex issue of how to best deal with public permits or licences for potentially harmful conduct in cases of transboundary environmental damage. As will be further discussed below,<sup>136</sup> permits might limit a perpetrator's liability. If the environmental damage was caused by an emission or event expressly authorised by and fully in accordance with the conditions of an administrative authorisation conferred by or given under applicable national laws, cf. Article 8(4)(a) Environmental Liability Directive, the question arises whether this authorisation affects the juridical assessment of the environmental damage. The aim of an authorisation can be to provide legal certainty about the permissibility and legality of an emitting installation not only for the neighbourhood and the public but also for the owner of the emitting installation. Depending on the concrete legislation, it is conceivable that the authorisation would legalise environmental damage to a certain level or that the authorisation limits the possibility of third parties to claim remediation or compensation.<sup>137</sup>

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<sup>133</sup> EU Commission, Proposal for a Regulation of the European Parliament and the Council on the law applicable to non-contractual obligations (Rome II), 25. Available online at: <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2003:0427:FIN:EN:PDF>. Accessed 14 Apr 2022.

<sup>134</sup> Enneking (2017), p. 58.

<sup>135</sup> Symeonides (2008), pp. 40–41; cf., van Hoek (2006), p. 166; Wagner (2016), pp. 741–742. Also see EU Com, Proposal for a Regulation of the European Parliament and the Council on the law applicable to non-contractual obligations (Rome II), 25. Available online at: <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2003:0427:FIN:EN:PDF>. Accessed 14 Apr 2022.

<sup>136</sup> ¶ 99 *et seq.*

<sup>137</sup> van Calster (2016), pp. 264–265.

## 6.6 Selected Material Problems I: Environmental Damage—Anthropocentrism and Normative Individualism of Tort Law

### 6.6.1 *Protected Rights and Interests: Does Tort Law Protect Environmental Rights?*

58 Scholars differentiate between two different concepts of environmental damage in relation to the protective scope of tort law and do so in a way that mirrors the distinction between a narrow, anthropocentric and a wider, ‘eco-centric’ concept of environmental human rights, as described in Chap. 4 of this study.<sup>138</sup> The ‘rather complex’ notion of environmental damage is, as a result, equally often understood in a binary manner:<sup>139</sup> Firstly, it refers to damage to a private interest, such as personal integrity or property, which is caused by pollution. Here, the natural elements are merely a transmitter of harmful emissions or other detrimental impacts. The second, fundamentally different category,<sup>140</sup> is seen in cases where the harm is not to a private interest but to the environment per se.<sup>141</sup> The latter form of damage, referred to hereafter as ‘pure environmental damage’, covers damage to environmental goods, namely air, water, soil, flora and fauna and interactions between these factors.<sup>142</sup> Traditional tort law only covers most of the first, environment-related harms to private interests.

59 In German law, Section 823 para. 1 BGB protects a number of rights, such as the right to life, physical integrity, health, personal liberty and property as potential starting point for tort claims.<sup>143</sup> If a person loses her life as a consequence of environmental impacts, that victim’s relatives may be entitled to damages; physical injuries or harm to health can occur, for example, in the form of sleep disorders due to noise or as allergic reactions to pollutants released. Tort law also protects against restrictions on the freedom of physical movement. Prominently, environment-related damage may concern the destruction of or damage to property, the withdrawal of property or the reduction of the use-value of property.<sup>144</sup> Property in land or in inland waters, but also in beaches and the seabed is protected as is, under certain circumstances, property in animals.<sup>145</sup> Notably, publicly-owned property can be a

<sup>138</sup> Chapter 4, ¶ 77 *et seq.* (Sects. 4.3.3 and 4.4).

<sup>139</sup> Hinteregger (2019), p. 1038.

<sup>140</sup> Brans (2001), p. 13.

<sup>141</sup> Wagner (2012).

<sup>142</sup> Hinteregger (2019), p. 1038.

<sup>143</sup> Cf. van Dam (2011), p. 243.

<sup>144</sup> Cf. Schimikowski (2002), p. 34.

<sup>145</sup> Wagner (2017), para. 217. However, wild animals are only exceptionally subject to civil law ownership and these animals are usually not part of the natural diversity. Indirect protection of the property of wildlife may only be provided in exceptional cases, e.g. as damage to micro-organisms

protected right under German tort law.<sup>146</sup> Finally, in addition to damage to proprietary rights, certain kinds of environmental damage can be covered by German liability law if they exhibit a relevant similarity to property rights: For example, the appropriation right of a landowner to hunt, i.e. to take possession of the prey and to tend the prey is protected. Comparably, fishing rights within inland waters, as well as certain water-sharing rights are protected.<sup>147</sup>

The focus of (German) tort law on individual rights and the fact that it covers only specific impacts of environmental damage have been thoroughly analysed and controversially debated, especially during the 1990s and early 2000s, and still may be seen as a major limitation of civil environmental liability. It has to be kept in mind, however, that particularly the horizontal protection of individual rights,<sup>148</sup> as *van Dam* has comprehensively described, reflects much of the instrumental potential of torts from a rights-based perspective: “While it is questionable whether corporations have obligations on the basis of international human rights law [. . .], it is beyond doubt that in tort law they are obliged not to infringe (rather, to respect) the citizen’s rights to life, physical integrity, health, property and freedom and other rights. In this respect, human rights and tort law are brothers in arms.”<sup>149</sup> In many

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on a certain territory will frequently be associated with damage to a plot of land; cf. Meyer-Abich (2001), pp. 127–139.

<sup>146</sup>With respect to German law, this is the case if the relevant property can be considered as ownership in the sense of civil law as opposed to public property, which is not subject to civil law, cf. Meyer-Abich (2001), p. 140. The seashore down to the low tide mark and the public rivers are, however, according to the jurisdiction of the federal court of justice, owned by the State and are not subject to the protection of property under civil law, Wagner (2017), Section 823, p. 218.

<sup>147</sup>Meyer-Abich (2001), pp. 142–146. Seibt (1994), pp. 28–31.

<sup>148</sup>Chapter 2, ¶ 68 (Sect. 2.4.3).

<sup>149</sup>*van Dam* (2011), p. 243. Van Dam has also analysed in detail the extent to which tort law systems are designed to protect rights and interests varies between different legal cultures. In German doctrine, a prominent element of the endeavour to establish the required unlawfulness of a perpetrator’s act consists in proving that one of the rights according to Section 823 para. 1 BGB has been infringed. The question of when and whether the infringement of the protected right/interest is sufficient to establish the unlawfulness of the conduct in question is, however, the subject of perennial debate in German doctrine, cf. Wagner (2017), Section 823, para. 5. This somehow contrasts with common law tort law, particularly the tort of negligence, where the emphasis is not on the claimant’s rights but the defendant’s duty of care, and the principle of the freedom of action is a strong driving force. French tort law, with its emphasis on strict liability rules that apply to cases of death and personal injury, is not explicitly rights-based but it is implicitly so, and *de facto* perhaps even more so than German tort law; *van Dam* (2011), pp. 243–244; *van Dam* (2014), pp. 168–169. The differences, however, may not be as striking as they first appear: If the injury is brought about by an act which only indirectly causes the damage or by an omission, the prominent focus of German doctrine on protected rights and interests is less definite as the primary focus shifts to substantiating the duty of care, i.e. the duty to prevent the violation of a protected interest; this also holds true for a right to injunctive relief; cf. *Wilhelmi* (2009), pp. 132–133. Notwithstanding the emphasis of common law on a tortfeasor’s obligations, it is, as *Latham et al.* (2011), pp. 764–765 point out, a fundamental principle of tort law that there must be an actual physical injury to person or property, or at least actual serious emotional harm for a cause of action to exist in common law. In the context of an environmental tort action, there must likewise be an actual injury to a person or

cases, environmental harm will concern individual human interests. The fact that the impairment of soil and water, as well as fishable and huntable animals, are included in the scope of protection under tort law means that many environmental harms can already be taken into account under liability law. Tort litigation regarding environment-related damage can thus be, in principle, quite relevant concerning the regulatory functions and objectives of environmental liability. From a policy perspective, effective access to justice and consequential compensation in such cases may have significant impacts.

- 61 It is clear, however, that ‘pure’ environmental damage does not readily fit into the categories of traditional tort law. The traditional rules primarily concern the protection of private and individual interests and, in cases of pure environmental damage, these interests are only indirectly affected if at all.<sup>150</sup> Pure environmental damage to natural resources which were not held as private property, such as non-huntable animals, natural habitats and the climate, remains outside tort law’s traditional scope of protection.<sup>151</sup> As pure environmental damage affects common instead of private interests, the respective gaps in traditional liability law can also be seen as a ‘collective action problem’:<sup>152</sup> Incidents that affect collective interests do not, generally speaking, give rise to legal rights.<sup>153</sup>

## 62 **The European Administrative Liability Regime for Environmental Damages**

A rather evident approach to fill tort-law’s gaps regarding public and collective goods relies on the traditional division of labour between public and private law. Most importantly, an ‘administrative’ liability regime, as mentioned above,<sup>154</sup> gives national authorities the competence to directly address polluters responsible for activities that pose a threat to the environment.<sup>155</sup> In cases involving pure environmental damage, it is then up to the relevant public authorities to seek injunctive relief or clean up the pollution and seek recovery of the clean-up costs from the person responsible for the damage.<sup>156</sup>

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group of persons or to property. The differences between the legal cultures in this respect are also likely to appear less significant when one takes into account that the duty of care, as the principal point of reference of common law, is, in analytical terms, necessarily related to a right or interest to be taken into account by the liable person. For an analytical account on the complex correlation between rights and duties in private law, cf. Cane (2012).

<sup>150</sup> Brans (2001), p. 13.

<sup>151</sup> Wagner (2012).

<sup>152</sup> Casado Pérez and Gómez Ligüerre (2019), p. 24.

<sup>153</sup> Brans (2001), p. 13.

<sup>154</sup> Chapter 2, ¶ 40 (Sect. 2.3.2), Chapter 3, ¶ 40 (Sect. 3.3.3), see also Chapter 14, ¶ 4 et seq. (Sect. 14.2.1 and 14.2.2).

<sup>155</sup> IICA (2007), pp. 9–10.

<sup>156</sup> Grušić (2016), p. 28.

The German Umweltschadengesetz (USchadG), which implements the European Environmental Liability Directive,<sup>157</sup> takes such an administrative approach to tackle pure environmental damage.<sup>158</sup> The law covers damage to land, damage that significantly affects the environmental (ecological, chemical or quantitative) status of water resources and damage to protected species and natural habitats. Damage is defined as an identifiable adverse change to a natural resource (species and natural habitats, water and soil) or impairment of the function of a natural resource that occurs directly or indirectly.

In accordance with the polluter-pays principle, the polluter shall primarily be responsible for preventing and remedying environmental damage. If the polluter cannot be held liable, the authority itself shall take the necessary measures. An operator who carries out specific hazardous professional activities, or is responsible for them, shall accordingly take preventative measures or, if harm has already occurred, prevent further harm and take all necessary remedial actions. The operator shall also be required to bear the costs of remedying the environmental damage caused.

The rules explicitly do not apply to individual claims for personal injury or damage to property based on tort law. Only the competent government authorities may take action against the polluter and, indeed, private organisations and individuals have no right of action. However, non-governmental organisations promoting environmental protection are entitled to approach the competent authority and request that actions be taken against the polluter.<sup>159</sup>

The USchadG is thus supposed to have a complementary relationship to environmental liability under tort law: While the latter undisputedly covers the violation of private legal goods and interests ‘via the environmental path’, i.e. by means of contamination of environmental media, the USchadG focuses

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<sup>157</sup> Directive 2004/35/EC on environmental liability with regard to the prevention and remedying of environmental damage.

<sup>158</sup> Notably, the Commission at first proposed a comprehensive liability regime applicable to damage to common goods as well as to damage to individual property. Given, that “there are limits to the availability of public resources for this, and there is a growing acknowledgement that the public at large should feel responsible for the environment and should, under certain circumstances, be able to act on its behalf”, it took a “two tier approach”: Member States should be under a duty to ensure the restoration of biodiversity damage and decontamination in the first place (first tier) by using the compensation or damages paid by the polluter. Public interest groups should get the right to act on a subsidiary basis, i.e. only if the State does not act at all or does not act properly (second tier). This approach should apply to administrative and judicial reviews and to claims against the polluter. Cf. EU Commission, White Paper on Environmental Liability, Doc. COM (2000) 66 final, 22–23. Only later did the Commission draw a clear distinction between civil liability and an administrative liability for preventive or remedial actions, cf. Hellberg et al. (2008), p. 30.

<sup>159</sup> Wagner (2012).

on the damage to nature itself. Tort law has a decidedly anthropocentric approach, whereas the USchadG follows an ecocentric approach.<sup>160</sup>

This approach, provided that the competent authorities ensure its effective implementation, may, in principle,<sup>161</sup> be well-suited to provide for the prevention or restitution of pure environmental damage in national constellations. It has to be kept in mind, however, that it has its limits in transboundary constellations. For jurisdictional reasons, the competent authority can only ensure compliance on its own national territory. If environmental damage in another country originates on its own territory, the authority cannot guarantee restoration at the place of damage. If environmental damage caused in another State occurs or is likely to occur on its own territory, a competent authority cannot hold residents of third countries accountable to ensure prevention or restitution. The enforcement of costs incurred by the competent authority for preventative or remedial actions against injuring parties abroad is also unlikely to be successful.<sup>162</sup> The solution to such issues in transboundary cases regarding pure environmental damage thus has to take place in a rather cumbersome manner under traditional rules of jurisdiction, recognition and enforcement of foreign judgments and, if present, international environmental treaties.<sup>163</sup> The prospect of transnational environmental litigation by public authorities to alleviate such difficulties, as *Grušić* concludes, is poor even within the European Union, given that the Member States' traditional laws also contain public law exceptions and the dearth of civil liability environmental treaties.<sup>164</sup>

Scholars have therefore proposed a 'green' interpretation of the Environmental Liability Directive and particularly the Rome II Regulation to enable public authorities to use tort law remedies to address environmental damage. Such an approach would, accordingly, be best suited to accommodate the EU environmental principles as regulated in EU law as interpreted by the EU Court of Justice. The majority of scholars, however, seem to disagree with this interpretation and the proposal does not seem to be reflected in relevant decisions of the ECJ.<sup>165</sup>

<sup>160</sup>Wagner (2017), Section 823, para. 885.

<sup>161</sup>Contrary to this theoretical potential, scholars have highlighted the weak and limited practical implementation of the Environmental Liability Directive, cf. Pouikli (2018), p. 204.

<sup>162</sup>Cf. Beckmann and Wittmann (2012), Section 12, para. 3. Hellberg et al. (2008), p. 98.

<sup>163</sup>Cf. Sec. 12 UmwSchG.

<sup>164</sup>Grušić (2016), p. 30. Given these shortcomings, proposals to improve the directive include the adoption of an international convention on the issue of transboundary pollution or the designation of a special authority on the European level, which will supervise and coordinate the national competent authorities, cf. Pouikli (2018), p. 204.

<sup>165</sup>Cf. Kunda (2012), p. 512. Grušić (2016), pp. 31–36.



In addition to environment-related damage and pure environmental damage, environmental harm can cause so-called pure economic losses; for example, when a hotel or other beach facility operators lose profits due to an oil spill, even though none of their property has been damaged.<sup>166</sup> The possibility to recover such pure economic losses can vary as there are significant differences between different legal systems when addressing this issue.<sup>167</sup> As *Bergkamp* observes, courts have, in principle, been reluctant to award compensation for pure economic loss. Accordingly, denying recovery could be justified because, *inter alia*, the concept of pure economic loss does not provide for the clear and reasonable limits required by the deterrence and insurance rationale of liability law.<sup>168</sup> However, although deterrence efficiency may not require compensation, it is argued that corrective or distributive justice requires that tortfeasors repair the private consequences of their negligence. In addition, the most plausible candidate for a moral- or economically-based exception to a principle denying recovery of pure economic loss would be damage to public resources, for example, when an oil spill kills fish, fishermen who see their income drop should be entitled to compensation.<sup>169</sup>

The argument regarding demarcation problems of the concept of pure economic loss as a right may be less convincing if clear and reasonable limits of liability can be provided for by means of defining a correlative duty or a prohibition. In German tort law, pure economic loss as a consequence of environmental damage can be compensable in specific cases. On the one hand, according to German case law, pure economic losses can be compensable if there is an immediate interference targeting a business itself ('unmittelbar betriebsbezogener Eingriff').<sup>170</sup> On the other hand, this kind of loss can also be covered by Section 823 para. 2 BGB if a statutory obligation has been infringed and when the respective statute can be qualified as a 'protective law' ('Schutzgesetz'). This is the case where the purpose of the provision is to protect the legal interests of a person. If a provision is designed to protect an object, the person to whom this object is legally attributed is included in the protective scope. According to Section 823 para. 2 BGB, violations of environmental standards in public law which, for example, create certain obligations for operators of hazardous facilities, can also give rise to liability, especially if the infringement of the respective rule leads to financial losses.<sup>171</sup>

<sup>166</sup> *Bergkamp* (2001), p. 348.

<sup>167</sup> Cf. Bussani et al. (2003).

<sup>168</sup> In addition, the case against recovery of pure economic loss may be compelling regarding the economic functionality of liability, because private economic losses caused by a tortious act often are not a cost to society—imposing liability in such cases thus would not be economically efficient, *Bergkamp* (2001), p. 346.

<sup>169</sup> *Bergkamp* (2001), pp. 346, 348.

<sup>170</sup> German Federal Court of Justice VI ZR 199/57 (1958); also see below, Chapter 8.

<sup>171</sup> Cf. Meyer-Abich (2001), pp. 146–147.

### 6.6.2 *Problems Regarding the Compensation and Restitution of Ecological Damage*

- 65** An equally complex issue closely linked to the question of the protected legal interest concerns the possibilities of compensation for ecological damage. When an environment-related right or interest protected by tort law has been infringed, it has to be clarified if and how, *de facto* and *de jure*, compensation for damage is possible.<sup>172</sup> With regard to the compensable damage, claims for the restoration of the original state prior to the damage have to be discerned from claims for (monetary) compensation.
- 66** The German law on damages is founded on the principle of restitution in kind: A person who is liable for damages must restore the position that would exist if the circumstance obliging him to pay damages had not occurred, (Section 249 para. 1 BGB). Where damages are payable for injury to a person or damage to a thing (Section 249 para. 2 BGB), or if the injuring party does not remedy the damage within a certain period of time (Section 250 BGB), the obligee may demand the required monetary amount in lieu of restoration. Only if the remedy is not possible or not sufficient to compensate the injured party, or if restoration is only possible by incurring disproportionate expenses, the person liable in damages may, in principle,<sup>173</sup> financially compensate the obligee (Section 251 BGB). Tort law thus primarily entitles the owner of the damaged good or property to claim the costs incurred for its restoration. Only if restoration is not possible or unreasonably difficult to procure, monetary compensation for the reduction of the market value may be requested. The latter may comprise the costs for compensatory restoration.<sup>174</sup>
- 67** The primacy of restitution in kind is an expression of the principles of compensation and prevention and the weight of the “interest of integrity” of the injured party.<sup>175</sup> From an environmental point of view, restitution in kind can be advantageous when compared to a rule which requires financial loss, as it also provides compensation when the damage cannot be quantified in monetary terms. A legal rule providing restoration in kind can be particularly valuable in environmental liability cases as environmental goods often do not have a market value.<sup>176</sup>
- 68** Notwithstanding this general advantage, the rules on restitution in kind can also be problematic. First of all, these rules may not always guarantee that the impaired good is restored to, or close to its pre-damage condition. In principle, it is up to the claimant to decide whether he or she wants restoration of the impaired good or

<sup>172</sup>Cf. Meyer-Abich (2001), p. 161.

<sup>173</sup>In particular, if the environment is damaged or animals are injured, the threshold of proportionality cannot be regarded as equivalent to the economic value of the damaged natural property. Depending on the importance of the natural property for nature conservation, judges may consider a differentiated level of proportionality, Oetker (2019), Section 251 BGB, para. 57.

<sup>174</sup>Hinteregger (2019), p. 1038.

<sup>175</sup>Cf. Meyer-Abich (2001), p. 161.

<sup>176</sup>Cf. Herbst (1996), p. 68.

monetary compensation, which does not have to be spent on restoration efforts. In specific cases, however, this freedom of the claimant to decide how to use the compensation has been restricted. ‘Fictitious’ restoration costs, for example, are not recoverable in the event of pure environmental damage.<sup>177</sup> Second, it may be questionable if compensatory restitution is possible: According to the German Federal Court of Justice, restitution in kind requires the state of the environment prior to the damaging event to be restored “by an identical and equivalent thing”.<sup>178</sup> Frequently, restitution of the previous conditions of the ecological system which has been damaged may be difficult to obtain, e.g. when organisms that are necessary for the system to function have been destroyed or when the damage was caused by non-degradable substances.<sup>179</sup> Given the complexity and dynamic development of biological systems, it can be very hard to determine how and what actually constitutes restoration of the original condition. This can be problematic from a legal point of view because to undertake restitution in kind, in accordance with Section 249 BGB, it is necessary to bring about a situation that comes as close as possible to the state of being damage-free.<sup>180</sup>

This relatively narrow understanding has led to the situation that restitution in kind plays a secondary role. In practice, the rule and the exception laid down in Section 249 have been reversed. In most cases, the damage thus is compensated by monetary means.<sup>181</sup> Whereas there are, in principle, no particularities to be considered in the case of environment-related types of damage (e.g. when an individual’s property is damaged as a consequence of environmental harm), the matter of monetary compensation for pure environmental damage concerns complex and much-debated issues. With respect to monetary compensation, several aspects which are problematic from an environmental perspective have been noted: As a consequence of the difficulty to evaluate pure environmental damage in economic terms, this kind of damage is frequently considered as ‘immaterial damage’,<sup>182</sup> which implies specific problems concerning questions regarding damages for pain and suffering (compensation of ‘immaterial damage’, cf. Section 253 BGB). For example, in cases related to air pollutants, cases of minor and temporary damage may occur on a large scale and some have argued that such minor ‘immaterial’ damage should not be taken into account. German courts, in contrast, do consider compensation for minor damage to do justice to the compensatory function of damages for pain and suffering.<sup>183</sup>

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<sup>177</sup>Oetker (2019), Section 249, para. 382. According to many scholars, this follows from the qualification of pure environmental damage as ‘immaterial’ damage;

<sup>178</sup>German Federal Court of Justice VI ZR 262/82 (1984).

<sup>179</sup>Cf. Seibt (1994), pp. 187–188.

<sup>180</sup>Oetker (2019), Section 249 BGB, para. 325.

<sup>181</sup>Oetker (2019), Section 249 BGB, para. 320.

<sup>182</sup>The question of if and when pure environmental damage should be considered as ‘immaterial’ damage, however, has been the subject of debate, cf. Ladeur (1987).

<sup>183</sup>Cf. Schimikowski (2002), p. 60.

- 70 Prominently in cases of pure environmental damage, compensation may be difficult to measure. Particularly if an environmental good has no market value, tort law can encounter serious difficulties regarding the evaluation and quantification of the harm.<sup>184</sup> The question of which methods or models to use to evaluate pure environmental damage can lead to viable solutions that may differ from case to case.<sup>185</sup> These complex issues, however, cannot be treated in depth here. Specific aspects of this problem will be looked at in the following chapters.<sup>186</sup>
- 71 The notion of monetary compensation for pure environmental damage may also meet even more fundamental, ethical objections: For example, it may seem problematic to try to capture the intrinsic value of natural goods by means of an economic valuation. It is noteworthy, however, that the discussion of such difficult questions in liability cases, might also fulfil a legally productive political function.<sup>187</sup> As *Meyer-Abich* concludes, deliberations about how to evaluate the value of natural goods may, in the end, still contribute to raising awareness of such ecological issues.<sup>188</sup>

### 6.6.3 *Extending the Scope of Environmental Torts?*

- 72 Several solutions have been discussed to fill the gaps regarding addressing environmental damage. In terms of tort law's scope of protected rights and interests, first of all, a protected right to a healthy environment could be defined as the right of the public to have a healthy, secure, quiet, comfortable and aesthetically pleasing environment. Infringement of rights to such an environment means interference with the public's enjoyment of that environment.<sup>189</sup> Understood in this sense, the public would have a collective right to common goods under civil law. The protected interests would be the natural environment and natural goods not related to individual rights.<sup>190</sup>
- 73 As a second approach, it has been suggested that environmental goods, such as clean air, clean water and unpolluted soil, should be directly recognised as an individual right protected by tort law.<sup>191</sup> The protected right should be attributed to where the damage has occurred. Thereby only environmental harm which has caused damage (including 'immaterial' damage) to a specific individual would be

<sup>184</sup>Hinteregger (2019), p. 1038.

<sup>185</sup>For a comprehensive comparative analysis cf. Kokott et al. (2003). For specific methods to quantify environmental damage cf. Cohen et al. (2006); Mortazavi et al. (2019). For an overview see Guijarro and Tsinaslanidis (2020); Wu and Wang (2018); Kappert (2006), pp. 23–33.

<sup>186</sup>For damage related to climate change cf. Chap. 8.

<sup>187</sup>Cf. Chap. 2, ¶ 72 (Sect. 2.4.3).

<sup>188</sup>Meyer-Abich (2001), pp. 184–186.

<sup>189</sup>Cf. Areal Ludeña and Fierro Abella (2010), p. 67.

<sup>190</sup>Seibt (1994), p. 162.

<sup>191</sup>Köndgen (1983), p. 348.

sanctioned.<sup>192</sup> The proposed right would establish a legal entitlement for individuals concerning collective goods.<sup>193</sup>

Finally, a third approach that has been proposed is that pure environmental damage which is irrelevant in terms of property rights etc. could be prevented, restituted or compensated by invoking the affected persons' general personality right.<sup>194</sup> Such an approach would thus neither integrate collective goods, as opposed to individual rights, into the protective scope of tort law nor establish protection against individual (financial or 'immaterial') loss as a consequence of damage to public environmental goods. It would rather entail an extension of the concept of the individual interests covered by tort law. Such a individual right to a healthy environment would protect people against the negative effects on their well-being, which do not have the intensity of an adverse health effect or do not cause damage to property.<sup>195</sup>

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### **The Kunitachi Case**

The Japanese Supreme Court has developed criteria for the violation of a legally protected individual interest in 'valuable' urban landscape. In 2006, the Court had to decide on a building complex in the Kunitachi district of Tokyo. The building complex had been constructed in accordance with the applicable planning law, however, residents, current and former members of a neighbouring school and interested third parties claimed that the complex violated their interest in preserving the valuable, homogeneous urban character of the Kunitachi district. The Supreme Court ruled that people who live near an objectively valuable urban landscape and enjoy the benefits of the landscape on a daily basis have an interest protected by tort law in preserving such "good" landscapes. In support of its judgement, the Court referred to provisions that protect such valuable landscapes to preserve the enjoyment of these landscapes as a common good for the present and future population. Whoever lives in the vicinity of such a good landscape and enjoys it on a daily basis may not have a individual right but does have an interest protected by civil law in the preservation of this landscape.<sup>196</sup>

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In German legal doctrine, such approaches have, however, been predominantly criticised. Particularly with respect to the idea of extending the scope of the

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<sup>192</sup> Seibt (1994), p. 50.

<sup>193</sup> According to Köndgen (1983), the claimant should not be entitled to injunctive relief, a lawsuit would rather presuppose financial damage; also cf. Meyer-Abich (2001), pp. 117–118.

<sup>194</sup> Forkel (1968). The general personality right was created by the German Federal Court of Justice (BGH) in 1954 to provide for better protection for human dignity and the right of free development of one's personality, cf. van Dam (2014), p. 89.

<sup>195</sup> Meyer-Abich (2001), pp. 116–117.

<sup>196</sup> Peukert (2014), p. 55.

individual rights covered by tort law, critics fear that it would necessarily lead to a vague concept of the respective right or interest which would ultimately lead to a situation where any disturbance would give rise to the possibility of legal action.<sup>197</sup> More specifically, it is held that integrating a individual right to a healthy environment into the protective scope of the general personality right would fundamentally contradict the legal nature of the latter. According to *Baston-Vogt*, this right is a individual right that gives the individual the power to assert his or her interests independently and under his or her own responsibility. In this sphere, his or her will has priority over that of his or her fellow citizens. The individual can determine whether, when and for what purpose to assert this right and against which impairments he or she defends herself. It follows from the nature of this right that, although it is well suited to protecting highly personal individual interests, it is unsuitable for protecting public goods such as the environment. Individuals must not be granted exclusive private rights over public environmental goods.<sup>198</sup>

77 Although this critique points to crucial problems of a ‘horizontal’ right to a healthy environment, which cannot be addressed in much detail here, it does not seem to be entirely convincing for two reasons. First of all, the rights protected by tort, and very prominently many of the legal positions subsumed under the general personality right, do not in any way give the right holder an unlimited right to dispose of the protected interest. Rather, courts weigh public and individual interests against each other in each case. Only if the individual interest, for example, the protection of privacy, outweighs colliding public or private interests—e.g. in transparency of a person’s economic activity—is a violation of the law assumed. Tort law is, therefore, in principle well suited to deal with the possible conflicts that arise between private and public rights and interests. Secondly, the question of which individual interests carry sufficient weight to be asserted against other private rights or the interests of the public is in constant development. Civil courts have repeatedly developed new rights or expanded the scope of existing rights to be covered by tort law as reactions to new and evolving modern-day threats or existing threats that manifest themselves with new intensity. This constant redefinition of the limits of subjective autonomy vis-à-vis public and State interests equals corresponding dynamics at the level of fundamental and human rights. As we have seen, a individual right to a healthy environment has long been the subject of debate and

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<sup>197</sup> Cf. Wagner (2017), Section 823 at 309, who believes that a generous recognition of human well-being as a protected right under Section 823 I BGB would come close to an *actio popularis*. Also cf. German Federal Administrative Court, Decision VII B 84.74 (1975); Baston-Vogt (1997), p. 472. According to some critics, the legitimate interests of economic actors, e.g. of those operating facilities, would then be neglected. However, as Baston-Vogt rightly objects, such interests would be taken into account in the balancing of the merits and interests by courts in each individual case. According to the dogmatics of the German civil courts, the general right of personality is a ‘framework law’ (“Rahmenrecht”) in which, in contrast to the other rights pursuant to Section 823 I BGB, the unlawfulness of the conduct of the person causing damage must be positively established.

<sup>198</sup> Baston-Vogt (1997), p. 472.

is increasingly recognised in connection with constitutional and human rights.<sup>199</sup> There is no convincing reason why such a right would be, in principle, impossible in tort law, which protects the realisation of fundamental rights in ‘horizontal’ legal relationships.<sup>200</sup> Decisions and developments which reflect and reshape the relationship between constitutional and human rights and the environment, most prominently in the field of climate-change litigation,<sup>201</sup> may also trigger new discussions about the protective scope of environmental civil liability.

Notwithstanding such theoretical considerations, however, it is not discernible that such a new right or interest is being seriously considered by German civil courts. In addition, as *Meyer-Abich* rightly qualifies, even an approach that extends the concept of individual environmental rights would still exclude much important environmental damage. Such a right still puts people at its centre, whereas environmental damage is often centred on common goods, which sometimes may have no tangible link to individual or collective human interests or well-being. For example, forest damage does not necessarily impair the recovery function of forests for humans.<sup>202</sup>

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## 6.7 Selected Material Problems II: Liability for Acts of Others or a Corporation’s Own Duty of Care?

As a practically pivotal precondition for liability, an act capable of giving rise to liability has to be identified, i.e. a tortious action, which may consist of either an act or an omission. In certain constellations, such as in type-one cases detailed above, in which the effects of an act or omission in the defendant’s State of operation directly cause the infringement of rights or interests in another State, this does not pose any specific problems beyond those common to purely domestic situations.<sup>203</sup>

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In type-two cases, however, the chain of attribution may be interrupted because there is no direct link between the domestic company’s actions and the foreign environmental damage. The question then arises of whether the liability of a

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<sup>199</sup> As has been explicated above, constitutional and human rights increasingly are considered to capture rights and interests, which differ from the traditional scope of traditional human rights law and a ‘narrow’ understanding of the link between human rights and the environment. As we have seen in Chap. 2 of this study, many international or foreign judges and institutions recognize a individual right to a healthy environment in the face of new risks, and even try to reconstruct a concept of environmental rights, which goes beyond an anthropocentric account. It is conceivable that more and more national constitutional courts will follow this path. Such a development could have considerable relevance for tort law.

<sup>200</sup> Cf. Peukert (2014), p. 56.

<sup>201</sup> See Chap. 8.

<sup>202</sup> Meyer-Abich (2001), p. 120.

<sup>203</sup> The question of if a causal link between this behaviour and the harm/damage can established can, of course, be a major problem.

company can be established if the respective environmental damage was directly caused by the action of a subsidiary or a supplier. *De lege lata*, however, establishing liability for third party conduct is difficult to tackle. The basic rule is that each person is responsible for his or her own conduct and property.<sup>204</sup> Beyond this sphere, the scope of a person's legal responsibility for other persons is rather narrowly defined: In Germany, the BGB does not contain any specific rules on the liability of companies but focuses on the liability of the individual. The individual can be liable as a principal according to Section 831 for torts of his vicarious agents, i.e. persons who are bound to the instructions of the company.<sup>205</sup> In practice, it will only rarely be the case that a foreign supplier or a subsidiary can be considered a vicarious agent in this sense. Even if the supplier/subsidiary is subject to the company's instructions, this may be difficult to prove; in addition, a company can exonerate itself from liability in a relatively simple way, namely by demonstrating that the vicarious agent was carefully selected and monitored. Any extension of liability for third parties beyond this principle is met with reservations and, indeed, doing otherwise would result in a disruption of the existing doctrinal system.

**81** The problem of attribution is of specific relevance in cases in which environmental damage abroad is directly caused by a foreign subsidiary of a German parent company or a corporate group. One of the major obstacles for horizontal extraterritorial liability, which also holds true, by and large, for other legal systems,<sup>206</sup> lies in the corporate-law principle of the separation of corporate identity. This principle stipulates that as a shareholder, a parent company is not liable for the conduct of the subsidiaries in which it invests.<sup>207</sup> German law hardly provides any opportunities for the creditors of a dependent company to take direct legal action against the group's parent company.<sup>208</sup> In the case of corporate groups, the conduct of an independent legal entity within the group cannot be attributed to the other elements of the corporate group; there can be neither an attribution between the company and its shareholders nor, in particular, between several companies which are integrated into a corporate group.<sup>209</sup> The corporate law doctrine of separate legal personality is thus considered to create a presumption of the (non-)liability of the constituent parts of a corporation operating in different territories for wrongful acts by other members of the same corporate group.<sup>210</sup>

<sup>204</sup> Wagner (2016), p. 758.

<sup>205</sup> Wagner (2017), sec. 823, para. 95. In addition, the rule of section 31 BGB applies to corporations, according to which the association has to pay for damage caused by one of its constitutional representatives to a third party.

<sup>206</sup> Although common law, e.g. US case law, may provide more flexible means than German law to pierce the corporate veil under specific conditions, cf. Renner and Kunz (2018), p. 60.

<sup>207</sup> van Dam (2011), pp. 247 ff.

<sup>208</sup> Renner and Kunz (2018), p. 60.

<sup>209</sup> Wagner (2016), p. 760.

<sup>210</sup> Augenstein et al. (2010), p. 13.



The difficulties of attribution do not seem to be alleviated by strict liability regimes. The liable party under the German Environmental Liability Act ('Umwelthaftungsgesetz' hereinafter UmwHG) is the operator of a facility, which has been enumerated in Annex 1 to the Act.<sup>211</sup> The operator is the person who permanently uses the hazardous facility for his own purposes, i.e. operates it on his own account and pays for its maintenance, and who has effective control over its use.<sup>212</sup> It is possible that a parent company can be held liable either as an operator in this sense of the dependent company's facility or by means of piercing the corporate veil ('Haftungsdurchgriff'), but only in exceptional cases. It is precisely the effective and direct control of the company that is decisive: Such control may be given when the facility of the subsidiary company is leased or transferred to the parent company or if the operational technical operation of the facility is also under the direct management of members of the controlling company.<sup>213</sup> This reflects the basic idea of strict liability, namely the conjunction of effective control of risk and liability.<sup>214</sup>

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Pathways to pierce the corporate veil in cases involving tortious liabilities of a subsidiary have been widely discussed<sup>215</sup> in recent years, for example, with respect to CSR obligations. A general piercing of the corporate veil in this sense would, however, require legislative intervention or a fundamental change of jurisdiction.<sup>216</sup> To date, imposing liability on a parent company for environmental damage caused by its subsidiaries under German corporate law is only possible in exceptional circumstances.

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Given these difficulties, the main basis for claims against corporations in practice does not consist in piercing the corporate veil but in substantiating an independent duty of care of domestic companies. The allegation here is that the parent company or purchasing company has breached a duty of care that it owed to individuals affected by its overseas operations, be that workers employed by subsidiaries, contractors or local communities, and that this breach resulted in harm.<sup>217</sup>

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<sup>211</sup>Cf. Wetterstein (2002), p. 267.

<sup>212</sup>German Federal Court of Justice III ZR 157/79 (1981); Rehbinder (2019), sec. 1, para. 49.

<sup>213</sup>Rehbinder (2019), sec. 1, para. 49.

<sup>214</sup>Glinski (2004), p. 29. The administrative liability regime of the Environmental Damage Act (USchadG), on the other hand, defines a wider circle of addressees. Accordingly, the party responsible for the obligations under the Act is defined, *inter alia*, as a person who carries out or determines a professional activity. A professional activity is any activity carried out within the context of an economic activity, a business activity or an enterprise, regardless of whether it is carried out privately or publicly and with or without commercial character. As Glinski observes with respect to the European Environmental Liability Directive, which the Environmental Damage Act implements, this definition is understood in such a way that parent companies can also be considered as responsible entities and, thus, subjects of liability. As has been explicated above, the administrative regime of the UmwSchG is, however, of secondary relevance with respect to the transboundary types of cases on which we focus in this chapter.

<sup>215</sup>Cf. for example Teubner (1991). Also cf. Glinski (2004), p. 29.

<sup>216</sup>Kessedjian and Cantú Rivera (2020), p. 409.

<sup>217</sup>van Dam (2011), pp. 247 ff.

Even if this argumentation is in some tension with the principle of corporate separation, the latter does not exclude such a solution under general liability law: This is because liability is no longer based on the attribution of the subsidiary's conduct to the parent company and thus does not require any piercing of the corporate veil. Instead, it has to be determined whether the parent company has breached its own duty of care.

85 This line of reasoning was, for example, adopted by the British Supreme Court in the recent *Vedanta* case where the Court stated that:

[a] parent company will [. . .] be found to be subject to a duty of care in relation to an activity of its subsidiary if ordinary, general principles of the law of tort regarding the imposition of a duty of care on the part of the parent in favour of a claimant are satisfied in the particular case.<sup>218</sup>

86 According to this approach, the legal reconstruction of the transboundary dynamics of type-two cases no longer differs fundamentally from type-one cases. This is because the decisive factor is whether the company against which a claim is made can itself be accused of breaching its own duty of care, which raises the question of the content and scope of the duty of care.

## 6.8 Selected Material Problems III: Breach of Obligation— Features of a Transnational Standard of Care

87 Liability frequently depends on the court being able to establish that the defendant has acted in violation of his obligations. These legal obligations against which the conduct of the liable party is measured are the defendant's duties of care.<sup>219</sup> Duties of care are of prominent importance in the tort of negligence and liability cases, where harm to protected rights and interests has been caused by an omission or an indirect action.<sup>220</sup>

<sup>218</sup>Cf. UK Supreme Court *Vedanta Resources PLC and another (Appellants) v Lungowe and others (Respondents)* Judgement of 10 April 2019, UKSC 20 on appeal from: UK Court of Appeal *Vedanta Resources PLC and another (Appellants) v Lungowe and others (Respondents)* [2017] EWCA Civ 1528, para. 54, confirming the decisions of England and Wales Court of Appeal *Chandler v Cape* [2012] EWCA Civ 525 (see <http://www.bailii.org/ew/cases/EWCA/Civ/2012/525.html>, last accessed 24 Apr 2022) and the decision of Sales LJ in the Court of Appeal decision in England and Wales Court of Appeal *AAA v Unilever* [2018] EWCA Civ 1532, para. 36 (see <http://www.bailii.org/ew/cases/EWCA/Civ/2018/1532.html>, last accessed 24 Apr 2022).

<sup>219</sup>In the German doctrine on the tort of negligence the relevant duties traditionally are called “Verkehrspflichten”, which may be seen, however, as just another term for tortious duties of care (“deliktische Sorgfaltspflichten”), see Wagner (2017), sec. 823, para. 66, p. 11.

<sup>220</sup>Wagner argues that intentional tort and negligence should be constructed uniformly in civil law, i.e. to consider the breach of duty in the sense of a breach of the duty of care (negligence) or a deliberate breach of the permitted risk (intent) as a wrongful act.

### National Strict Liability Regimes

It can be problematic, in cases of environmental harm, to establish the defendant's fault, as damage can occur during normal business operations without any fault occurring or there being an infringement of standards. The awareness that compensation and prevention of environmental damage are critical also in such cases, has led to the introduction of strict environmental liability regimes. Strict liability means that the person who creates a source of elevated risk is liable, even if acting without fault if the risk of damage becomes actual damage.<sup>221</sup> Strict liability is supposed to make it easier for an injured party to pursue claims and has, as a liability standard, traditionally been considered to constitute the legal equivalent to permitted risks.<sup>222</sup> In German Environmental Law, *inter alia*,<sup>223</sup> the Environmental Liability Act (Umwelthaftungsgesetz) establishes a strict liability standard. Accordingly, the operator of a facility that has been enumerated in Annex 1 to the Act is obliged to pay compensation for damage caused by somebody being killed, or injured in his/her health or if his or her property is damaged as a result of the environmental impact. The Act also contains differentiated provisions regarding the burden of proof (Section 6 UmweltHG) and the compensation of damage (Section 16 UmweltHG). Only a *force majeure* (e.g. an act of war, natural disaster etc.) excuses liability.<sup>224</sup>

As it “guarantees that the cost of damage caused by economic activities are born by the operator”, strict liability is considered to be the optimal liability standard to implement the polluter pays principle.<sup>225</sup> It has to be kept in mind, however, that strict liability for environmental damage, typically and certainly in the case of the German UmweltHG,<sup>226</sup> is limited and covers damage caused by specific, very hazardous activities. Other than fault-based liability, a strict

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<sup>221</sup>Cf. Chap. 2, ¶ 38 *et seq.* (Sect. 2.3.1).

<sup>222</sup>Cf. Deutscher Bundestag, Gesetzesbegründung der Bundesregierung, Entwurf eines Umwelthaftungsgesetzes, 10.5.90, Drucksache 11/7104, 15.

<sup>223</sup>Claims based, for example, on Sect. 22 WHG, Sect. 32 GenTG and Sect. 906 para. BGB equally do not need to establish fault.

<sup>224</sup>Cf. Wetterstein (2002), p. 226.

<sup>225</sup>EU Commission, Green Paper on Remedying Environmental Damage, COM(93) 47 final, 1993, section 4.1.2. Bergkamp, in contrast, considers strict liability as “unnecessary, inefficient, and rather pointless”. “Liability beyond fault—by definition” accordingly “constitutes no more than an inefficient insurance program.” Fault-based liability regimes, in contrast, are “at least as capable of dealing with complex situations involving multicausal damages, and long-tail, diffuse, creeping and indivisible damages.” Given its adaptability and openness, fault-based liability continues to evolve and is able to accommodate new technologies and “developments in the health and safety and environmental area”, cf. Bergkamp (2001), pp. 260, 264, 553.

<sup>226</sup>There also exist implementations of strict liability, such as liability under the Wasserhaushaltsgesetz, which are unlimited.

regime also does not contribute to the implementation of primary norms of conduct—and therefore cannot be considered as an enforcement or implementation mechanism.<sup>227</sup> As specific strict liability regimes and their implications are discussed in the previous and the following chapters, this chapter, therefore, concentrates on the general fault-based tort law.

**89** The relevant properties of duties of care for transnational tort law and extraterritorial litigation have been broadly examined in legal doctrine in the last few years, specifically in the context of human rights due diligence obligations of transnational corporations and other business enterprises. Given the overlaps between environmental and individual interests protected by tort as well as human rights law, these discussions are very much relevant for the issues discussed in this book. Equally, the relevant substance and functionality of the doctrine on duties of care regarding environmental liability have been debated quite extensively, albeit predominantly in the geographical context of national tort law. More recently, these different dimensions of duties of care have been put into one perspective: Lawyers then focus on synergies and correlations between duties of care regarding human rights and obligations to prevent environmental harm, often in the context of new legislation on human rights and environmental due diligence.<sup>228</sup> An in-depth analysis of the implications of these debates and developments for environmental liability cannot, however, be carried out here, as necessity requires only briefly highlighting specific features of an environmental standard of care in tort law. This standard is, firstly, open towards norms of different origins (Sect. 6.8.1), it contains, secondly, relevant specifications regarding the relationship between public and private responsibility (Sect. 6.8.2) and thirdly, it can entail obligations to prevent risks caused by others (Sect. 6.8.3). Several more specific issues surrounding such a standard of care will be reflected in the following chapters.

### **6.8.1 *Transnational Focus of an Environmental Standard of Care***

**90** Fault-based liability requires a breach of a duty of care, which means that the defendant did not take the measures required in the specific situation *ex ante* that is, at the stage when the decision to take one particular course of action over another was made.<sup>229</sup> The question of which preventive measures are necessary, refers to an

<sup>227</sup>Cf. Chap. 2, ¶ 38 *et seq.* (Sect. 2.3.1).

<sup>228</sup>See Chap. 7.

<sup>229</sup>Wagner (2021), p. 219. These basic features are, notwithstanding many differences and conceptual disputes within and between legal systems, well established. For comparative analysis see van Dam (2014); Brüggemeier (2020); Stoyanova (2019).

*objective* standard which determines what is to be expected from a reasonable and prudent person in the concrete situation. Comparable concepts exist in many legal systems. In US tort law, a duty of care is commonly defined as a legal obligation imposed on an individual requiring that they adhere to a standard of reasonable care while performing any acts that could foreseeably harm others. English courts similarly refer to ‘the reasonable man’ and French courts to the *bon père de famille* to establish this standard. The same objective standard is reflected as an element of the German concept of duties of care (“Verkehrspflichten”, “Organisationspflichten”), which focus on reference groups or the relevant public spheres (“Verkehrskreise”) to justify concrete obligations.<sup>230</sup> Even though the conceptual distinction between a duty of care and a standard of care is not as prominent in German doctrine as it is in the US, the former also refers to an objective standard (“Sorgfaltsmaßstab”).<sup>231</sup> In view of these similarities between legal cultures, the standard of care in tort law has been adequately described as a universal rule that applies between people, businesses and public institutions.<sup>232</sup>

Some general properties of this ‘universal rule’ illustrate its relevance for the purpose of this project. First of all the duty of care aims at the protection of a right or interest.<sup>233</sup> Its suitability for the concretisation of standards of transnational corporate human rights responsibility has, despite various objections, been emphasised repeatedly in recent years.<sup>234</sup> Second, the standard of care functions as a mechanism of risk deterrence more or less in the same way as the principles of risk assessment in public environmental law.<sup>235</sup> The standard of care to be observed to prevent the violation of such an interest depends on the magnitude of the damage and the degree of probability of its occurrence. Precautionary measures are, therefore, “the more reasonable, the greater the danger and the probability of its realisation”.<sup>236</sup> The risk of serious damage justifies a greater effort to avoid the damage, even if its realisation is not very likely.<sup>237</sup> The significance of private interests in the preservation of an endangered good or interest require a higher standard of care and, as a result, more ambitious precautionary measures. Notably, public or common interests also determine which preventive measures are appropriate vis a vis the respective risks, which means that common interests, and particularly interests in environmental protection, must also be taken into account. If, as *Wilhelmi* explains, in addition to individual

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<sup>230</sup> Glinski (2018), p. 76.

<sup>231</sup> This reference to an objective standard to justify the illegality is indisputably required where infringements have been committed indirectly or by omission. The question of whether and under which circumstances the violation of a behavioural standard is necessary to establish the unlawfulness of the conduct in question has been the subject of perennial debate in German doctrine, cf. *Wilhelmi* (2009), pp. 104–132.

<sup>232</sup> van Dam (2011), p. 237.

<sup>233</sup> *Wilhelmi* (2009), p. 132.

<sup>234</sup> Peters et al. (2020); Wagner (2021), p. 219; Weller and Thomale (2017); van Dam (2011).

<sup>235</sup> Cf. Frank (2019), pp. 518–522.

<sup>236</sup> Federal Court of Justice VI ZR 223/05 (2006), in BGH VersR 2007, 72 para. 11.

<sup>237</sup> Wagner (2017), sec. 823, para. 424.

rights or interests environmental goods are concerned, the common interest in environmental protection can further amplify the interest in more stringent precautionary measures. The legal reconstruction of a standard of care accordingly may support environmental protection by establishing stringent environmental obligations.<sup>238</sup>

- 92 Third, as has been outlined above, the reconstruction of the standard of care by courts in liability cases is a gateway to take into account specific and dispersed information about norms and standards which, from the standpoint of a rational and prudent person, should be applied to prevent environmental damage in a particular situation. The differentiated case law, or ‘reference cases’, as a result of the concretisation of duties and standards of care by courts can also provide orientation about precautionary measures necessary to avoid liability. *Hylton* describes the advantages of this decentralised approach to norm-generation in environmental tort law as follows: “The plaintiff knows more about his injury than any other party. The defendant knows more about his burden of precaution than anyone else. The negligence system gives both parties an incentive to persuade the court that their version of the relevant regulatory rule is appropriate. Courts use their common knowledge, as well as information provided by the parties, to decide which parties’ version is more persuasive, and to determine general conduct norms that will apply in future cases [. . .] What emerges from negligence litigation is a set of conduct norms that are shaped by the private information of parties. Although courts decide only the individual cases in front of them, the decisions create precedents that shape specific conduct norms that apply to future cases. A decision that a firm, or a professional, is not negligent in conforming to industry custom is both a regulatory rule and a judgment based on an assessment of private information in one case.”<sup>239</sup>

93 **Conceptual Clarification: Duty of Care, Standard of Care, Due Diligence**

In this study, as elsewhere, different concepts are used when talking about corporate obligations to prevent violation of rights and interests. Specifically, lawyers often refer to due diligence obligations, duties of care and standards of care. In the present context, we use these terms in the following sense:

The issue to be examined under the concept of duty of care is whether a duty exists: is there a duty whose breach is claimed by the injured party? Is the defendant obligated under this rule? It has to be determined, in other words, if the defendant was subject to a duty of care at all, i.e. that the law expected the defendant to avert harm to the plaintiff’s interests.<sup>240</sup> A breach of a duty of

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<sup>238</sup>Wilhelmi (2009), pp. 282, 285.

<sup>239</sup>Hylton (2002), p. 525.

<sup>240</sup>Wagner (2021), p. 219.

care is a prerequisite for fault-based liability due to negligent causation of rights violations/damage to protected interests.

The standard of care specifies the content and scope of the relevant duty of care, i.e. the degree of care expected from the duty bearer in a specific case. Establishing this standard requires examining what the defendant should have done or not done to comply with the duty of care.<sup>241</sup> Environmental standards of different origins can be understood as elements of an environmental standard of care in terms of liability law. The standard of care is thus determined by reference to different primary norms,<sup>242</sup> duties of result as well as duties of conduct; in addition to substantive duties, the standard of care can also refer to procedural duties.

Due diligence requirements can be understood to form a specific standard of care under liability law. They thus define the content and extent of the required care if a particular duty of care exists. Due diligence is a duty of conduct that relates to the protection of specific legal interests. Contents of a due diligence provision, for example risk-adapted obligations to monitor and control suppliers, audit obligations, the establishment of complaint mechanisms and so forth, substantiate standards, the infringement of which can lead to liability if harm to a protected interest is caused. In the context of approaches for supply chain regulation, environmental and human rights due diligence is understood in a broader sense that goes beyond an understanding as a standard of care. This understanding of due diligence is examined in detail in Chap. 7.

Notably, the term is understood in a very similar way, as a standard, in public international law. The ILA Study Group on due diligence in international law stated: “At its heart, due diligence is concerned with supplying a standard of care against which fault can be assessed. It is a standard of reasonableness, of reasonable care, that seeks to take account of the consequences of wrongful conduct and the extent to which such consequences could feasibly have been avoided by the State or international organisation that either commissioned the relevant act or which omitted to prevent its occurrence. The resort to due diligence as a standard of conduct should be seen against the backdrop of general approaches to accountability in international law”.<sup>243</sup>

It is assumed that States and private parties may have comparable due diligence obligations with regard to the conduct of third parties.<sup>244</sup> This leads to the question

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<sup>241</sup>Wagner (2021), p. 219.

<sup>242</sup>Also see above, Chap. 2, ¶ 38 *et seq.* (Sect. 2.3.1), ¶ 66 (Sect. 2.4.2).

<sup>243</sup>ILA Study Group on Due Diligence in International Law (2016), p. 2.

<sup>244</sup>The ILA Study Group on Due Diligence in International Law (2016), pp. 32, 47 has found due diligence to be an expansive, sector-specific and yet overarching concept of increasing relevance in international law.

of the extent to which certain environmental standards in international law can determine the standard of care of both States and private parties. This question is examined in Chap. 8 with a view to climate protection-related obligations.<sup>245</sup> The case-by-case reconstruction of the standard of care may be of particular use in transboundary cases where the parties can have better information about the factual<sup>246</sup> and normative circumstances relevant for determining risks and adequate precautionary measures.

- 95 As *Glinski* has repeatedly and comprehensively described, the openness and flexibility of the standard of care in tort law have specific potential with respect to transnational norms and standards: On the one hand, companies can be held liable for the violation of their own (internal) technical standards or any deviations from their own tried and tested practices. The law can therefore rely on private rules and knowledge to establish, if necessary, an individual standard of care, especially if special knowledge or capabilities are available.<sup>247</sup> On the other hand, corporate and industry-wide self-regulation reflects a standard of what is considered necessary and feasible to prevent damage. Accordingly, not only public law and institutionalised private standards such as ISO, CEN/CENELEC and DIN may provide a framework for constructing an objective standard of care but also the safeguards and rules that the industries or sectors themselves have developed. Prominently, the UN Guiding Principles are considered to reflect societal norms and expectations with respect to corporate responsibility regardless of whether they are based on international soft law or broad acceptance by the main stakeholders.<sup>248</sup>

96 **A Transnational Standard of Care Determines Corporate Obligations to Reduce CO<sub>2</sub> Emissions: *Milieudefensie v Royal Dutch Shell***

On 5 April 2019, the environmental group Milieudefensie/Friends of the Earth Netherlands and co-plaintiffs served Royal Dutch Shell (RDS), which is domiciled in The Hague, a court summons alleging Shell's contributions to climate change violate its duty of care under Dutch law and human rights obligations. The case was filed in the Hague District Court.<sup>249</sup>

The court decided that RDS is obliged to reduce the Shell group's CO<sub>2</sub> emissions by 45% (net) of their 2019 levels by the end of 2030 as per the group's corporate policy. This reduction obligation is an obligation of result for the Shell group, meaning RDS is expected to ensure that the CO<sub>2</sub> emissions

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<sup>245</sup>Cf. Sect. 8.2.

<sup>246</sup>For example, regarding the local context, financial, technical and organisational resources.

<sup>247</sup>*Glinski* (2018), pp. 75–91.

<sup>248</sup>*Glinski* (2018), pp. 75–91.

<sup>249</sup>For more information on the case cf. District Court of The Hague *Milieudefensie v Shell* (2021) C/09/571932/HA ZA 19-379, available at <http://climatecasechart.com/climate-change-litigation/non-us-case/milieudefensie-et-al-v-royal-dutch-shell-plc/>, accessed 24 Apr 2022.



of the Shell group are reduced to this level. It is a significant best-efforts obligation with respect to the business relations of the Shell group, including the end-users, in which context RDS may be expected to take the necessary steps to remove or prevent the serious risks ensuing from the CO<sub>2</sub> emissions generated by the business relations.

To assess whether or not RDS has the alleged legal obligation and to decide on the claims, the court interpreted “the unwritten standard of care from the applicable Book 6 Section 162 Dutch Civil Code based on the relevant facts and circumstances, the best available science on dangerous climate change and how to manage it, and the widespread international consensus that human rights offer protection against the impacts of dangerous climate change and that companies must respect human rights.”

In its interpretation of the standard of care, the court included: “(1.) the policy-setting position of RDS in the Shell group, (2.) the Shell group’s CO<sub>2</sub> emissions, (3.) the consequences of the CO<sub>2</sub> emissions for the Netherlands and the Wadden region, (4.) the right to life and the right to respect for private and family life of Dutch residents and the inhabitants of the Wadden region, (5.) the UN Guiding Principles, (6.) RDS’ check and influence of the CO<sub>2</sub> emissions of the Shell group and its business relations, (7.) what is needed to prevent dangerous climate change, (8.) possible reduction pathways, (9.) the twin challenge of curbing dangerous climate change and meeting the growing global population energy demand, (10.) the ETS system and other ‘cap and trade’ emission systems that apply elsewhere in the world, permits and current obligations of the Shell group, (11.) the effectiveness of the reduction obligation, (12.) the responsibility of states and society, (13.) the onerousness for RDS and the Shell group to meet the reduction obligation, and (14.) the proportionality of RDS’ reduction obligation.”

While self-regulation provides orientation for the courts, the relevant private standards do not necessarily delimit a standard of care. Compliance with the relevant standards may be insufficient if these standards are outdated, if they do not address the relevant problem or if the circumstances of the specifics of a given case require a stricter standard of care. Duties of care which refer to widely-accepted standards can also be binding for companies that do not explicitly comply with these standards.

A transnational standard of care finally may evolve dynamically: In principle, compliance with the requirements at the time of the damage is relevant. Changes and new developments in state-of-the-art technology to mitigate risks and detrimental effects have to be taken into account, especially if the risks at hand are high.<sup>250</sup>

<sup>250</sup>Förster (2020), para. 347.

### 6.8.2 *Public vs. Private Responsibility: Constraints in Public Law for a Transnational Standard of Care?*

99 The hazardous activities and facilities which can trigger the evolution of a duty of care and, in case of damage, lead to civil liability, will frequently be regulated by public environmental law. The operation of polluting facilities and other environmentally hazardous conduct is highly regulated and public bodies issue permits for specific activities and facilities. As has been previously indicated, relevant norms of public law may help to concretise a standard of care. For example, the public law provisions of sections 4–6 of the German Environmental Damage Act (USchadG), which stipulate obligations regarding information, prevention and remediation in cases of (imminent) environmental damage, can ‘perform’ an environmental standard of care.<sup>251</sup>

100 Given this relevance of public law for the standard of care, the question may arise as to whether an injuring party, when it complies with the relevant standards of under public environmental law, also necessarily acts in accordance with its duty of care, and thus lawful. It can be argued, however, that the openness and flexibility of the standard of care also hold concerning public law. Legal scholars as well as, for example, the German Supreme Court, have frequently emphasised the autonomy of tortious duties of care from public law.<sup>252</sup> This reflects the traditional idea of tort law as a decentralised mechanism of regulation:<sup>253</sup> According to *Wagner*, tort law is not only intended not to compensate for damage but above all serves to regulate hazardous behaviour in concrete individual cases in a way that goes far beyond public law. Public law, on the other hand, must employ a relatively high degree of generalisation when establishing ‘command and control’ standards because any attempt to regulate private conduct in a comprehensive and detailed manner would either suppress an inordinate number of social activities or inevitably lag behind economic, technological<sup>254</sup> and, given the dynamic development of sector-specific primary norms on many regulatory levels, normative development. Private liability law can also take into account infringements of interests that could have been expected from the perspective of the injuring party but which the legislator did not foresee *a priori*. Public law can only take into account typical situations and is the result of political compromise, whereas civil law provides standards for balancing interests in concrete individual cases.<sup>255</sup> Public law thus needs to be supplemented by private law which, because of its nature and focus, adequately performs the task of controlling behaviour in individual cases in detail.<sup>256</sup> The same principles apply

<sup>251</sup> *Wagner* (2017), sec. 823, para. 887.

<sup>252</sup> *Wilhelmi* (2009), p. 272.

<sup>253</sup> See above, Chap. 2, ¶ 47 *et seq.* (Sect. 2.4.1).

<sup>254</sup> *Wagner* (2017), sec. 823, para. 445.

<sup>255</sup> *Pöttker* (2014), pp. 118–120.

<sup>256</sup> *Wagner* (2017), sec. 823, para. 445.

with respect to public permits and licences: An obliged party must, on its own responsibility, determine the relevant risks and take the safety measures required. It cannot rely on the permit for a facility or certain activities as a green light to proceed without due caution.<sup>257</sup> Permits are only recognised as a justification for violations of legal interests in exceptional cases, namely if the relevant public law provides the official permit with an exclusionary effect vis-à-vis the private rights of third parties. Beyond that, the standards of conduct contained in a permit do not conclusively determine the standard of care of the addressee.<sup>258</sup>

According to these principles, German public law and respective permits may provide important information, but do not definitely determine the limits of a standard of care.<sup>259</sup> This can be relevant in type-one cases: Given that German law is applied in such a case, a German company thus might be liable for a damage that has been directly caused by a facility or an activity on German territory even though this conduct was authorised by means of an administrative permit and the facility/activity complies with local statutory thresholds and other stipulations of the permit.<sup>260</sup>

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### **Differentiated Effects of Administrative Permits in Strict Environmental Liability Regimes**

The German Environmental Liability Act (Umwelthaftungsgesetz—UmwHG) does not fully exonerate the operator of a hazardous installation if its conduct was within the limits set by a permit. The claim under the strict liability regime of the UmwHG can, however, be modified if a permit is given. In principle, Section 6(1) of the Environmental Liability Act contains a substantial facilitation of the general burden of proof for victims of environmental damage by establishing a presumption of causality: If, according to the circumstances of the individual case, an installation is considered capable of causing the damage, it is assumed that the damage was actually caused by this installation. According to Article 6(2) of the Environmental Protection Act, this presumption does not apply if the installation was operated in accordance with the normal operational requirements permitted by the authorities. Section 6(4) (1) of the Environmental Liability Act makes it easier for a plant operator to prove that the plant in question is operating in accordance with this normal operation: the presumption of causation is removed if specific duties of care (Schutzpflichten) are complied with by proving compliance with the relevant monitoring provisions, if inspections are prescribed to monitor the operational

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<sup>257</sup> German Federal Court of Justice VI ZR 65/86 (1986); German Federal Court of Justice VI ZR 270/95 (1996). Wagner (2017), sec. 823, para. 450.

<sup>258</sup> Wagner 2017, sec. 823, paras. 450, 451.

<sup>259</sup> This principle does not always apply, when a claimant seeks injunction, cf. sect. 14 BImSchG.

<sup>260</sup> Cf. Rüppell (2012), p. 103.

obligations and the inspections have revealed no evidence of a breach of an operational obligation or if there is a period of more than 10 years between the environmental impact in question and the claim for damages.

**103** In type-two cases, the situation is more complicated. In those cases—again, given, that German tort law is applied—it also has to be asked, for example, whether and under which conditions a foreign administrative decision can bind a German court at all.<sup>261</sup> This question may arise before a German court when environmental harm caused by a facility abroad for which a local permit has been issued and which complies with local statutory thresholds and other stipulations of the permit violates protected interests located in the issuing country. According to Article 7 Rome II, nevertheless German tort law might be applicable, for example, if the German headquarter of a corporation is considered to be the place of action.<sup>262</sup>

**104** Although this approach is certainly controversial,<sup>263</sup> Article 17 Rome II may provide a viable solution to this problem: Accordingly, a court, in assessing the conduct of the person claimed to be liable, should take into account, as a matter of fact and in so far as is appropriate, of the rules of safety and conduct which were in force at the place and time of the event giving rise to the liability. Permits shall be taken into account as a form of local data, i.e. as foreign local norms, which might shape a legal dispute, be applied irrespective of the applicable law and concretise the relevant national law.<sup>264</sup> Even if direct application of Article 17 may not be feasible,<sup>265</sup> it may be adequate to apply it by analogy: the fundamental rationale of the

<sup>261</sup>This the case, when the foreign permit is ‘functionally equivalent’ to a German permit, cf. Krzymuski (2011), p. 59.

<sup>262</sup>See above, ¶ 48.

<sup>263</sup>According to van Calster (2016), p. 265, an environmental permit, as a much more extensive instrument than merely containing ‘rules of safety and conduct’, is not captured by Article 17. The European Commission however assumed that the rule would apply to permits, cf. KOM (2003) 427 final 2003/0168 (COD), 22.

<sup>264</sup>Krzymuski (2011), p. 59; Leible and Lehmann (2007), p. 725.

<sup>265</sup>Article 17 directly addresses the constellation, where permits of the *lex loci delicti commissi* are given, but the applicable law is the *lex loci damni*; it would directly be applicable in type-one cases in which the law of the country in which the damage occurred is applied. According to the Commission, Article 17 addresses the question of the consequences of an activity authorised in State A and that complies with its legislation (e.g. permitting a certain pollutant emission) but causes damage in State B, having not been authorised there (exceeding the limits applicable in this State), cf. KOM(2003) 427 final 2003/0168 (COD), 22. A type-two case would, as a result of Article 7 Rome II and its potential application, possibly lead to a different situation: The applicable law is then still the *lex loci delicti commissi* (e.g. the law of the home State of a potentially liable corporation, where the latter has taken decisions to be understood as the event giving rise to the damage, see above ¶ 48), whereas relevant permits were granted by the State where the damage occurred (e.g. where the damaging facility is located). According to Article 17 Rome II the court could then consider that only permits issued in the home state can be taken into account to determine the relevant standard of care and potentially limit liability, cf. Weller and Tran (2022), p.10.

norm is to ensure that the relevant public law standards of safety and conduct are predictable for the injuring party. The allegedly liable party's standard of care should not be determined based on rules of which it has no knowledge.<sup>266</sup> The norm could take the permit into account as a matter of fact. To consider a permit as a datum means that it is taken into account and without it, the facts of the case would be incomplete.<sup>267</sup>

According to such proposals, courts might have further leeway in determining the standard of care by reference to those norms and standards that perceptibly delineate the conduct required by the tortfeasor in order to avoid harm in other countries. Notwithstanding such ideas, a clarification of the question on which substantive standards a duty of care directed at the prevention of environmental damage has to deal with a number of difficult legal issues, not confined to only private international law but also, for example, in international law and international economic law. In this regard, Chap. 7 discusses ways to address such challenges in supply chain legislation.

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### 6.8.3 Duties Regarding Risks Caused by Others Abroad

A transnational standard of care may, in certain cases, also entail liability for damage directly caused by third parties. This follows from the general definition of a duty of care, which emerges under two general conditions: An indispensable prerequisite in this respect is the actual and legal possibility of controlling the risk in the specific individual case. In addition, a normative responsibility for the source of the hazard or the interest to be protected is to be established.<sup>268</sup>

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Such a responsibility can be established, if a behaviour of the defendant has actively contributed to the damage or if a facility the defendant directly controls causes the damage. Everyone has to act in such a way and keep his/her property and assets in such a condition that no injuries to third parties occur which could have been avoided with reasonable effort.<sup>269</sup> Active behaviour or direct control can be, as

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Symeonides (2008) emphasises that, if it were to be avoided that the polluter seeks refuge in States with lower standards, an even broader application to transboundary constellations would be required, in which the law of the place of damage is applied, but the safety standards (and, if applicable, corresponding permits) at the place of the event giving rise to the damage are stricter than those at the place of damage. The application of the law of the state of conduct would recognise that state's right to regulate conduct on its territory, even if the consequences of that conduct materialised abroad in the specific case. He sees no legitimate expectation on the part of the tortfeasor not to be subjected to the rules at his place of action because the consequences of this conduct manifest themselves abroad. The key question in such cases should be whether, under these facts, a reasonable person should have foreseen that his conduct in the one state would produce injury in the other state, see Symeonides (2008), pp. 41–42.

<sup>266</sup>Leible and Lehmann (2007), p. 725.

<sup>267</sup>Krzymuski (2011), p. 59.

<sup>268</sup>Wagner (2017), sec. 823, para. 400.

<sup>269</sup>Wagner (2017), sec. 823, para. 400.

*Glinski* has analysed, relevant in extraterritorial liability cases. If, for example, a company exercises influence on production in a developing country by issuing instructions regarding individual activities, but also by providing general instructions in guidelines or manuals, liability may be assumed if these instructions do not meet the necessary standards and lead to damage. In such cases, there exists a connection between an act of the parent company and damage in the developing country which is relevant under tort law. Likewise, if a parent company assumes responsibility for certain tasks within a group of companies, such as the maintenance of systems, it is also responsible under Section 823 of the German Civil Code for carrying out these tasks properly. If the actions of a parent company, or a purchaser and a foreign company jointly cause damage, this leads to joint and several liability.<sup>270</sup>

**108** However, in the framework of claims against corporations or other business enterprises for their involvement in extraterritorial violations of tortious rights or interests, the main issue is liability for omissions, that is, whether a corporation has a duty to prevent a third party, such as a subsidiary or business partner, from causing harm.<sup>271</sup> Under English tort law, as we have seen, a duty of care has been confirmed if a company exercised a sufficiently high level of supervision and control of the activities of the third person, with sufficient knowledge of the propensity of those activities to cause harm or if, in its published materials, it presents itself as exercising that degree of supervision and control of its subsidiaries, even if it does not factually do so.<sup>272</sup>

**109** *Chandler v Cape*

In the case of *Chandler v Cape*, the UK Court of Appeal held that Cape plc. was liable for the harm Mr. Chandler, an employee of Cape's subsidiary in the UK, had suffered due to exposure to asbestos while working for Cape's subsidiary. According to the Court of Appeal, a duty of care owed by the parent company vis-à-vis its subsidiary's employees exists under four conditions: (1) the two companies' businesses are similar in a relevant respect; (2) the parent company has, or ought to have, superior knowledge on relevant aspects of health and safety in the particular industry; (3) the subsidiary's system of work is unsafe and the parent company knew or ought to have known this; and, (4) the parent company knew, or ought to have foreseen, that the subsidiary would rely on its superior knowledge.<sup>273</sup>

<sup>270</sup> Glinski (2004), pp. 32–33.

<sup>271</sup> van Dam (2014), p. 230.

<sup>272</sup> UK Supreme Court *Vedanta Resources PLC and another (Appellants) v Lungowe and others (Respondents)* Judgement of 10 April 2019, UKSC 20 on appeal from UK Court of Appeal *Vedanta Resources PLC and another (Appellants) v Lungowe and others (Respondents)* [2017] EWCA Civ 1528, para. 53, 55.

<sup>273</sup> Cf. Bergkamp (2018), p. 221.

In German law, the doctrine of organisational duties of care could be used to develop group-wide obligations. Relevant case law can be found in particular in the jurisdiction on product liability. It is recognised that the manufacturer must organise his production in such a way that no defective products enter the market. In addition, he is required to verify the condition and possible defects of his products by means of state-of-the-art monitoring equipment.<sup>274</sup> Organisational obligations arise according to criteria similar to those in British law by means of creating and maintaining a source of danger or by controlling it. According to this doctrine, the managers of companies are obliged to structure, organise and monitor their internal processes in such a way that infringements of legal interests are avoided as far as possible and reasonable.<sup>275</sup> The courts have developed the general requirement to organise internal company processes in such a way that damage to third parties is avoided to an appropriate extent. To this end, not only must employees be carefully selected, but they also have to be instructed to an appropriate extent and the careful implementation of the assigned activities must be monitored. These organisational duties are proportionally more demanding the greater the risks, the control of which is left to the other person.<sup>276</sup>

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Many German scholars, however, have to date been reluctant to accept such organisational duties with respect to suppliers and subsidiaries. Accordingly, a principle of legitimate expectations ('*Vertrauensgrundsatz*') is supposed to preclude liability. Consequently, each person may assume, when choosing his or her own level of care, that all other involved persons will behave with due care. Domestic companies would, therefore, not be obliged under tort law to control or manage the conduct of their foreign subsidiaries and business partners.<sup>277</sup> In addition, sceptical lawyers warn that linking liability to violations of duties of care in the exercise of effective control over subsidiaries or suppliers would create a counterproductive incentive for the management of parent companies to remain ignorant of the affairs of their subsidiaries or suppliers.<sup>278</sup>

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However, it is doubtful that the principle of legitimate expectations would categorically prevent the incurrance of liability as it does not apply in cases where information and possibilities of steering and control are asymmetrically distributed between different parties. In hierarchical relationships, organisational duties of care remain a task for the executive level. But also with respect to horizontal relationships, case law concerning the allocation of duties of care in complex and differentiated organisational structures indicates that the "principle of legitimate expectations" is not well-suited as a general argument against liability in transnational corporations and value chains: For example, in medical malpractice cases, courts have emphasised that the principle of legitimate expectations does not apply if

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<sup>274</sup>Cf. Renner (2019), p. 115.

<sup>275</sup>Wagner (2016), p. 767.

<sup>276</sup>Wagner (2017), sec. 823, para. 100. Glinski (2004), pp. 32–33.

<sup>277</sup>Wagner (2016), p. 758.

<sup>278</sup>Wagner (2017), sec. 823, para. 100.

there are clear indications to doubt that the qualification or the concrete behaviour of another person does not meet an appropriate standard of care. When working together, physicians have a duty to critically observe their peers, this is particularly the case when legal rights or interests of great value are at stake.<sup>279</sup>

**113** This indicates that the principle of legitimate expectations would be irrelevant in cases such as *Vedanta* where superior information and control rests with the parent company. In addition, it may be evident in many cases, such as when certain resources are imported from specific areas prone to risk, that there is at least reason to doubt that suppliers or subsidiaries meet a standard of care. Particularly, when the normative openness of the tortious standard of care is taken into account, it seems rather questionable that a principle of legitimate expectations is tenable. The legitimacy of these expectations, i.e. the question of whether the expectation of a diligent affiliate or supplier is justified, concerns normative issues and cannot be determined without looking at transnational norms and evolving societal expectations. Developments on many levels in this context suggest that the weight and value of the rights and interests which may be at risk due to global economic activities trigger a duty to critically observe business partners and subsidiaries. Normative expectations in politics and society thus undoubtedly induce a shift towards greater responsibility for corporate actors concerning their value chains. The pro-active measures required by the UN Guiding principles, particularly regarding the need for risk analyses along the entire value chain and corresponding self-regulatory prevention and mitigation measures, are increasingly considered to be relevant for a tortious standard of care. If such measures are taken, they form the basis for the development of experiences and commercial expectations about managing risks and means of harm prevention. The knowledge on the part of companies about what risks are impending and how they can be avoided may also be considered as a driver to raise what is considered the appropriate standard of care.<sup>280</sup>

**114** The objection that an organisational duty of care, which is primarily based on factual supervision or control, may lead to problematic incentives, however, is based on reasonable concerns. If one of the key elements of proving a duty of care is a high level of parental involvement, it is far from unthinkable that parent companies could then avoid closely supervising their subsidiaries.<sup>281</sup> Such an incentive may factually undermine voluntary initiatives and soft-law standards, such as the UN Guiding Principles. Furthermore, and independent of this problematic incentive, *Grušić* highlights that a liability standard based on a model of a “closely controlled, managerially centralized multinational enterprise” would leave many constellations of extraterritorial damage outside of the scope of protection: “Modern forms of corporate organization [. . .] involve subsidiaries or affiliates with substantially more autonomy. The bonds of ownership are often replaced by purely contractual relations

<sup>279</sup> Cf. Matusche-Beckmann (2001), p. 177, 241. Ballhausen (2013), p. 241. Higher Regional Court of Cologne I-5 U 81/10 (2011), in OLG Köln, VersR 2011, 81 (81 f.).

<sup>280</sup> For all, see Glinski (2018), pp. 75–91.

<sup>281</sup> Cf. Davies (2019).



or even informal alliances.”<sup>282</sup> This is all the more the case in complex value chains. Modern due diligence legislation, therefore, combines a liability norm with statutory obligations regarding risk analysis and prevention to trigger and define a standard of care.<sup>283</sup>

## 6.9 Selected Material Problems IV: Epistemic Complexity and Torts—Causation

Causation is another ‘cardinal problem’ for environmental liability, irrespective of whether strict liability or fault-based liability is concerned.<sup>284</sup> This is a consequence of the complex and uncertain nature of the dynamics which lead to environmental damage and the infringement of protected rights and interests. Environmental damage may evolve as the effects of the cumulative actions of many potential polluters or as a consequence of a complicated interplay of natural events potentially triggered by certain activities.<sup>285</sup> Even if detrimental effects of a certain behaviour are evident, it can be hard to determine that these effects caused the plaintiffs’ particular damage. In many cases, it is not discernible which of several alternative causes has generated the damage. Long time lags between human action and environmental damage also aggravate efforts to prove causation.<sup>286</sup>

Given these problems, the actual Achilles’ heel of environmental liability from the point of view of the injured party is not the precondition of the breach of duty, but the burden of proof regarding the causal connection between the emitting conduct and the infringement of legal rights suffered.<sup>287</sup> According to general principles, the claimant will have to prove, that the conduct or the omission of the defendant has caused the respective damage. Liability statutes as well as case law contain differentiated rules regarding the allocation of the burden of proof.<sup>288</sup> The question of causation however concerns a wide range of complex problems.<sup>289</sup> These issues

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<sup>282</sup> Grušić (2016), p. 27.

<sup>283</sup> See Chap. 7, ¶ 228 (Sect. 7.8).

<sup>284</sup> Cf. Brüggemeier (1989), pp. 217–218.

<sup>285</sup> Frank and Meyerholt (2010), p. 117; cf. Chaps. 6 and 7.

<sup>286</sup> Cf. Underdal (2010).

<sup>287</sup> Wagner (2017), sec. 823, para. 891.

<sup>288</sup> Prominently, for example, causality of the breach of a duty of care for the damage that has occurred can, under certain circumstances, be proven by *prima facie* evidence if the consequences of the breach of duty appear to be typical in the light of the laws of nature and general experience. This also applies if it can be determined that technical standards, such as DIN or ISO norms, have been infringed or if emission limits have been exceeded, cf. Wagner (2017), sec. 823, para. 87–89.

<sup>289</sup> Although the issue whether and to what extent causation refers to simply normative questions or necessarily involves a ‘pre-judicial’, scientific or epistemological concept, is the subject of debate, cf. Pöttker (2014), p. 37.

however cannot be treated in detail in this chapter. Chapters 8 and 9 will examine such problems with respect to specific contexts of environmental damage.

## 6.10 Conclusions

- 117** This chapter has described the preconditions for establishing the liability of companies for transboundary environmental damage under national civil law. In this context, a focus on the provisions of specific national law was unavoidable, particularly substantive legal issues were, therefore, dealt with regard to German law. Furthermore, the chapter focused mainly on fault-based liability and general tort law. More in-depth considerations of the transboundary implications of environmental strict liability regimes remain reserved for future examination.
- 118** From this vantage point, the analysis allows for a mixed but cautiously optimistic assessment of the potential of tort law to deal with cross-border liability issues. Most importantly, the standard of care applied in cases of fault-based liability to substantiate a defendant's breach of duty displays some characteristics that make it appear particularly well suited for legally processing transboundary environmental damage. In fact, in view of these characteristics established in more recent legal discourse and relevant court rulings, it indeed seems reasonable to consider civil liability as a potential catalyst for an emerging transnational environmental standard of care.
- 119** Importantly and first of all, it has to be noted that tort law can not only address such constellations of transboundary environmental damage where harm arises abroad directly as a result of the transboundary effects of a tortfeasor's conduct or facility. It also provides legal solutions for cases in which a defendant's domestic actions only indirectly contribute to damage abroad: According to a still controversial, but increasingly accepted view, tortious duties of care of domestic companies can apply to risks that are directly caused by suppliers or subsidiaries in the company's value chain. Such duties of care have always been intended to specify a standard of care for such cases in which the infringement of a right is not entirely within the direct control of the alleged wrongdoer. Its very purpose is then the attribution and demarcation of complementary responsibilities of various actors who operate together in a division of labour.<sup>290</sup> There is no convincing legal reason to assume that this would not apply to transnational divisions of labour. Importantly, the legal recognition of such duties of care implies specific and independent duties of the buyer or the parent company and does not suggest an attribution of breaches of duty of the supplier or subsidiary and thus does not require a piercing of the corporate veil.
- 120** Secondly, the civil law concretisation of duties of care in liability cases is well suited to reconstruct a transnational normative standard that, on the one hand, reflects the regional and sectoral specificities of transboundary environmental

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<sup>290</sup>Wagner (2017), sec. 823, para. 455 ff.

damage, and on the other hand, meets the characteristics of globalised value chains. Duties of care require actors who create or control risks to take measures deemed objectively reasonable to avoid harm. This also means that the information that is or should be available to these actors about sector-specific, technical, regional or scientific standards needs to be used to avoid risks. A relevant standard of care can thus integrate public law rules and principles of different origins, as well as recognise private technical standards and soft law which are applied in practice and considered appropriate.

An effective liability norm can, in principle, create an incentive for companies to align their prevention and remediation measures with the standards of care recognised in the relevant context. However, a number of obstacles still stand in the way of realising this theoretical potential: First and foremost, the anthropocentric focus of liability law excludes environmental damage that does not also clearly affect defined human interests, such as property, health, life and so forth. Scholarly debates on how the multiple overlaps and interactions between environmental damage and rights protected in tort could be better addressed have not been meaningfully pursued since the early 2000s. As such, it remains to be seen whether the intense current dynamic regarding the recognition of a human right to a healthy environment will have an impact on tort law.

Despite this limitation, there is, in principle, considerable potential for transnational environmental claims against companies in many cases where serious environmental damage affect fundamental human rights and interests. In these cases, victims may refer to violations of environmental duties of care to substantiate their claims. However, even this potential is somewhat limited by disadvantageous, or at least unclear, rules in private international law. Specifically, in cases of liability for environmental damage in value chains, courts will often apply foreign tort law, which can be sub-optimal from the perspective of the injured party. Many lawyers also believe that domestic regulations and standards should only be relevant to the liability of European companies if they exonerate them. These views are at odds with the possibilities and goals of effective transboundary environmental liability, which is supposed to prevent companies from strategically exploiting ‘pollution havens’ abroad.<sup>291</sup> They contradict fundamental principles of the EU’s approach to the conflict of laws, which is intended to raise the overall level of environmental protection by enabling the victims of environmental damage to choose the applicable law and thereby opt for the more ambitious standard of care. Given the global implications of environmental damage caused in transnational value chains, such obstacles to effective transboundary environmental liability should be removed.

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<sup>291</sup> Cf. Levinson and Taylor (2014).

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# Chapter 7

## Environmental Due Diligence Obligations in Home State Law with Regard to Transnational Value Chains



David Krebs

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## 7.1 Introductory Remarks

- 1 The following chapter takes a closer look at transboundary environmental harm caused by business operations in the context of transnational value chains. Here, the transboundary character does not necessarily result from the environmental harm's course but rather from transboundary economic causal links via transnational value chains. Consequently, the situations considered in this chapter are generally those categorised as one of the 'type-two cases' detailed in the previous chapter.<sup>1</sup>
- 2 This chapter explores how, *de lege ferenda*, an environmental due diligence obligation for companies in their home State law can be designed in order to contribute to environmental protection throughout transnational business operations and value chains.<sup>2</sup> This approach would create new obligations that potentially cover the entire value chain and where civil liability would be a conceivable element in an effective mix of enforcement measures.
- 3 After briefly sketching governance gaps in transnational value chains and home State regulation as a strategy to tackle those gaps (Sect. 7.2), this chapter provides some examples of emerging due diligence regimes in transnational value chains and roughly systematises them (Sect. 7.3). The subsequent sections examine three key issues regarding the legislative design of a potential environmental due diligence (hereafter 'EDD') obligation in home State law: due diligence's 'horizontal' and 'vertical scope' in value chains (Sect. 7.4), EDD's material scope (Sect. 7.5) and civil liability as an enforcement mechanism (Sect. 7.6). The final section examines potential legal objections to this type of due diligence laws that stem from their potential 'extraterritorial' impact (Sect. 7.7).

<sup>1</sup>Cf. Chap. 6, ¶ 5 *et seq.* (Sect. 6.2).

<sup>2</sup>Parts of this chapter, in particular Sects. 7.4 and 7.5 have been previously published in an earlier version in German (Krebs et al., Von der menschenrechtlichen zur umweltbezogenen Sorgfaltspflicht, Umweltbundesamt March 2020).

## 7.2 Background: Home State Regulation as a Strategy to Tackle Governance Gaps in Transnational Value Chains

In a global economy, cause and effect are in play given the existence of certain business models, demand and consumption patterns in one State that result in environmental harm or human rights abuses in another State through the operation of transnational value chains.

### Value Chain, Supply Chain, Life Cycle

The terms ‘value chain’ and ‘supply chain’ are more economic than legal. In the realm of economics, an accepted definition of the term supply chain was provided by *Martin Christopher* who stated: “The supply chain is the network of organizations that are involved, through upstream and downstream linkages, in the different processes and activities that produce value in the form of products and services in the hands of the ultimate consumer.”<sup>3</sup> The different stages of the value chain are typically referred to as ‘tiers’, ‘tier 1’ being direct suppliers, ‘tier 2’ the suppliers of ‘tier 1’ and so on.

In the relatively recent political and legal debate on the regulation of transnational business activities, both supply and value chains have become key concepts. However, a universally accepted legal definition has not yet been established.

In 2021, Germany adopted the ‘Act on Corporate Due Diligence Obligations for the Prevention of Human Rights Violations in Supply Chains’ (‘Lieferkettensorgfaltspflichtengesetz’—LkSG),<sup>4</sup> a law that operates exclusively with the term supply chain. The definition in Section 3(5) of the Act<sup>5</sup> is particularly narrow, *inter alia*, because it seems to entail exclusively the upstream chain.

Article 3 point (5) in the Draft ‘Directive on Corporate Due Diligence and Corporate Accountability’, as requested and recommended by the European

(continued)

<sup>3</sup>Christopher (2005), p. 17.

<sup>4</sup>Gesetz über die unternehmerischen Sorgfaltspflichten zur Vermeidung von Menschenrechtsverletzungen in Lieferketten (Lieferkettensorgfaltspflichtengesetz—LkSG), 16. Juli 2021, BGBl. I 2021, Nr. 46 vom 22.07.2021, 2959; an English translation has been published by the Federal Ministry of Labour and Social Affairs and is available at [https://www.bmas.de/SharedDocs/Downloads/DE/Internationales/act-corporate-due-diligence-obligations-supply-chains.pdf?\\_\\_blob=publicationFile&v=3](https://www.bmas.de/SharedDocs/Downloads/DE/Internationales/act-corporate-due-diligence-obligations-supply-chains.pdf?__blob=publicationFile&v=3), last accessed 26 April 2022.

<sup>5</sup>“The supply chain (...) includes all steps in Germany and abroad that are necessary to produce the products and provide the services, starting from the extraction of the raw materials to the delivery to the end customer and includes 1. the actions of an enterprise in its own business area, 2. the actions of direct suppliers and 3. the actions of indirect suppliers.”

Parliament (EP) in its March 2021 resolution,<sup>6</sup> defines value chains significantly broader as “all activities, operations, business relationships and investment chains of an undertaking and includes entities with which the undertaking has a direct or indirect business relationship, upstream and downstream, and which either: (a) supply products, parts of products or services that contribute to the undertaking’s own products or services, or (b) receive products or services from the undertaking”.

The specifications ‘upstream’ and ‘downstream’ refer to the perspective of a given entity in the value chain. Hence, the upstream value chain includes all business operations that take place prior to the given entity’s operations while the downstream value chain includes those business operations that occur subsequent to the given entity’s value-added operations. For example, from a textile manufacturer’s perspective who undertakes so called ‘cut, make, and trim’ (‘CMT’)-operations, the upstream value chain would include cotton production, weaving, dyeing of fabric, design etc., while the downstream value chain would encompass packaging, labelling, distribution, and retail.<sup>7</sup>

A more holistic regulatory approach could go beyond the traditional consideration of the value or supply chain as going from raw material to end-user and include, in particular, the post-use phase. For such an approach the product life-cycle concept can be used as a conceptual point of departure. Indeed, the unofficial outline drafted by the Federal Ministry for Economic Cooperation and Development suggested defining the term value chain with reference to the life-cycle concept. The definition in Section 3 no. 2 incorporates literal parts of the life-cycle concept as defined in Article 2(20) of the public procurement Directive 2014/24/EU. Similarly, in the failed Draft for the US Climate Change Disclosure Act of 2019<sup>8</sup> Section 2(15) defined the term value chain as “the total lifecycle of a product or service, both before and after production of the product or service, as applicable” and that “may include the sourcing of materials, production, and disposal with respect to the product or service”.

- 6 Governance gaps along and within such value chains foster various kinds of environmental harm.<sup>9</sup> Although there are many intertwined and overlapping issues involving transnational business operations’ impacts on human rights and the environment, the early policy and legal debate was dominated by a focus on human rights

<sup>6</sup>European Parliament, Resolution of 10 March 2021 with recommendations to the Commission on corporate due diligence and corporate accountability (2020/2129(INL)), P9\_TA-PROV(2021)0073, including the Annex with recommendations for drawing up a *Directive of the European Parliament and of the Council on Corporate Due Diligence and Corporate Accountability*.

<sup>7</sup>Cf. Christopher (2005), p. 17.

<sup>8</sup>H.R.3623, [Report No. 116–563, Part I]—Climate Risk Disclosure Act of 2019.

<sup>9</sup>Cf. Simons and Macklin (2014), pp. 178 *et seq.*

protection. Paradigmatic for this focus was the development, adoption and subsequent dissemination of the UN Guiding Principles on Business and Human Rights (UNGPs).<sup>10</sup> These have been incrementally accepted as the “global authoritative policy standard”.<sup>11</sup> In contrast, the policy debate on environmental protection in transnational value chains lacks an equally accepted, comprehensive, and influential policy standard. Given this *lacuna*, the concepts and approaches developed for human rights protection are a fruitful source of inspiration when discussing regulatory strategies for environmental protection in transnational value chains.

The Special Representative of the Secretary-General and transnational corporations and other business enterprises, *John Ruggie*, described the phenomenon of governance gaps regarding human rights abuses:

The root cause of the business and human rights predicament today lies in the governance gaps created by globalization - between the scope and impact of economic forces and actors, and the capacity of societies to manage their adverse consequences. These governance gaps provide the permissive environment for wrongful acts by companies of all kinds without adequate sanctioning or reparation. How to narrow and ultimately bridge the gaps in relation to human rights is our fundamental challenge.<sup>12</sup>

*Ruggie*’s evaluation of the “business and human rights predicament” can be equally applied to the analogue ‘business and environment predicament’ in transnational value chains.

Conventionally, the State on whose territory an infringement of rights occurs is the competent and responsible entity to address the issue, the actor that can most readily put in place a suitable legislative framework, establish adequate administrative measures and judicial procedures to both prevent and redress such infringements. However, competitive pressure to attract and facilitate foreign direct inward investment may impede host States’ efforts, particularly in the Global South, to tighten regulatory standards and their enforcement.<sup>13</sup> Therefore, the governance gaps mentioned above may be rooted, *inter alia*, in particular in local regulatory deficits as well as local enforcement deficits. Furthermore, the rationale for the traditional, strictly territorial approach to human rights and environmental protection is being challenged with reference to asymmetrical balance-of-power structures in transnational value chains: Economically potent actors, such as the parent companies of multinational corporate groups or powerful ‘lead firms’ in transnational supply chains, are often domiciled outside the territory where an infringement has occurred

<sup>10</sup>In more detail on the UNGP see Chap. 4, ¶ 16–27 (Sect. 4.2.2).

<sup>11</sup>Sherman (2020), p. 1.

<sup>12</sup>UN HRCComm, John Ruggie (Special Rapporteur), Promotion and Protection of All Human Rights, Civil, Political, Economic, Social and Cultural Rights, Including the Right to Development—Protect, Respect and Remedy: a Framework for Business and Human Rights, Report of the Special Representative of the Secretary-General on the issue of human rights and transnational corporations and other business enterprises, UN Doc. A/HRC/8/5, 7 April 2008, para. 3.

<sup>13</sup>Cf. Krajewski (2018b), p. 23 (with further references); Zerk (2006), pp. 47 *et seq.*

and, therefore, beyond the jurisdiction and regulatory reach of the affected host State.<sup>14</sup>

- 9 Against this backdrop, and in the absence of a sufficiently effective regime of environmental protection through international law, the question arises as to how problems related to issues such as negative environmental or human rights impacts in transnational value chains may be tackled by means of home State regulation.<sup>15</sup>

## 10 Home State Regulation

The concept of home State regulation covers regulatory concepts that assert jurisdiction based on companies' incorporation, headquarters or principal place of business within the jurisdiction of the regulating State.<sup>16</sup> In this sense, the companies that are being regulated are domiciled or 'at home' in the regulating State. Home State regulation, in a broader sense, may also assert jurisdiction based on a company's business operations on the home State's territory, even if the company is incorporated elsewhere and does not have any headquarters or principal place of business within its territory. Typically, home State regulation seeks to influence locally-domiciled companies' conduct abroad. Therefore, home State regulation is designed to have extraterritorial impacts, even if its scope of application is strictly limited to the home State's territory.<sup>17</sup>

- 11 Home State regulation is neither a magic potion<sup>18</sup> nor a silver bullet<sup>19</sup> to easily close governance gaps and solve all the problems that occur along transnational value chains. Even though a healthy scepticism towards regulatory instruments relying on home State control may be justified,<sup>20</sup> home State regulation can arguably work when used as a complement to the regulatory efforts of host States<sup>21</sup> and related undertakings at the international level.<sup>22</sup> There is a controversial debate whether home States may be obliged to follow such approaches of regulation with extraterritorial effects, in particular with regard to the positive human rights

<sup>14</sup>Cf. Krajewski (2018b), p. 23.

<sup>15</sup>Cf. on the shortcomings and limited effectiveness of international law solutions, see Chaps. 3 and 4; Krisch (2020), p. 11.

<sup>16</sup>Cf. e.g., LeBaron and Rühmkorf (2017); Simons and Macklin (2014), *passim*.

<sup>17</sup>Cf. on the legal objections that such a legislative approach may trigger ¶ 162 *et seq.*

<sup>18</sup>Cf. Bernaz (2012).

<sup>19</sup>Ruggie (2013), pp. 37 *et seq.*

<sup>20</sup>Cf. Morgera (2009), pp. 30–34.

<sup>21</sup>Below (¶ 103) will be specified why, technically speaking, the ubiquitous term "host state" is rather unfortunate for the purposes of the present debate.

<sup>22</sup>Cf. regarding alternative regulatory approaches to home/host state control and other traditional legal solutions: Morgera (2009).

obligation ‘to protect’.<sup>23</sup> Recent case law of the German Federal Constitutional Court (FCC) suggests such an obligation for Germany could be based on constitutional rights in the German Constitution.<sup>24</sup> However, even if such a human rights obligation for some kind of regulatory intervention by home States can be established, it would still be more challenging to make a case for such an obligation with regard to environmental protection beyond its overlap with human rights.<sup>25</sup> Regardless of the debate whether home States must adopt this kind of legislation, it is less controversial that they may do so under specific circumstances.<sup>26</sup> Whereas the idea to harness home State law with some extraterritorial effects to achieve certain regulatory goals is not new in the realm of environmental regulation,<sup>27</sup> in recent years the approach has gained new traction with the ‘Duty of Vigilance Act’ in France (2017),<sup>28</sup> the law against child labour in the Netherlands (2019), the German ‘Corporate Supply Chain Due Diligence Act’ (2021), the Norwegian ‘Act relating to enterprises’ transparency, work on fundamental human rights and decent working conditions’ (‘Transparency Act’) (2021),<sup>29</sup> and some pieces of legislation at the EU level (Timber Regulation, Conflict Minerals Regulation, Non-Financial Reporting Directive).

This chapter explores how EDD obligations could be established in national law as means of home State regulation to improve conditions of business operations in transnational value chains. Given the topic of this study, the focus of such obligations would be to prevent harm to the environment, including through precautionary obligations. Furthermore, how a law could be designed to give rise to liability in

12

<sup>23</sup> Cf. Chap. 3, ¶ 57 *et seq.* (Sect. 3.3.3) and Krajewski (2018b); Augenstein and Dziedzic (2017); particularly critical: O’Brien (2018).

<sup>24</sup> In German Federal Constitutional Court ‘*BND-Gesetz*’ 1 BvR 2835/17 (2020), the FCC basically argued that *at least* the State’s duty to *respect* certain constitutional rights (confidentiality of telecommunication (‘Fernmeldegeheimnis’) enshrined in Article 10(1) of the German Basic Law (‘Grundgesetz’, hereafter ‘GG’) and the freedom of press guaranteed in Article 5(1) Sentence 2 GG) is not limited to German territory. Rather, *German* authorities are always bound by these rights no matter *where* they act. The Court limited its line of argumentation explicitly to the *duty to respect* the mentioned fundamental rights (“Abwehrdimension der Grundrechte”). However, the Court’s line of argument may be transferred to the *duty to protect* fundamental rights (“Schutzpflichtdimension”) and all other fundamental rights. Cf. Krebs (2020). A home State obligation for Germany to extraterritorially protect the *environment* could possibly be based on Article 20a GG (Protection of the natural foundations of life and animals).

<sup>25</sup> Cf. Chap. 3, ¶ 57 *et seq.* (Sect. 3.3.3).

<sup>26</sup> Cf. in some detail, ¶ 162 *et seq.*

<sup>27</sup> Cf. Francioni (1996).

<sup>28</sup> Cf. ¶ 21 *et seq.*

<sup>29</sup> Original title: “Lov om virksomheters åpenhet og arbeid med grunnleggende menneskerettigheter og anstendige arbeidsforhold (åpenhetsloven)”, LOV-2021-06-18-99. An official translation is accessible at <https://www.regjeringen.no/contentassets/c33c3faf340441faa7388331a735f9d9/transparency-act-english-translation.pdf>, last accessed 26 April 2022. For an overview cf. Krajewski et al. (2021b).



cases where a violation of the due diligence obligation occurred will also be examined.

### 7.3 Emerging Due Diligence Regimes for Transnational Value Chains

- 13** This section outlines some of the emerging due diligence regimes regarding human rights and environmental concerns in transnational value chains—concepts that can already be identified in national, EU and international soft law.<sup>30</sup> In the relatively recent history of human rights and environmental due diligence (hereafter ‘HREDD’) by means of home state regulation, a number of national statutes have entered into force and various draft bills have emerged. Most approaches are based on the concept of due diligence as originally spelled out in the UNGPs<sup>31</sup> (¶ 14 *et seq.*). The pursued approaches can be broadly grouped into two categories: Comprehensive approaches on the one hand (¶ 20 *et seq.*) and narrowly-focused ones which tackle a limited range of issues on the other (¶ 68 *et seq.*). Both categories may be applied at the national, EU or international level (¶ 71 *et seq.*).

#### 7.3.1 Due Diligence in Transnational Value Chains: History and Terminology

- 14** Due diligence has been established as a legal concept for decades in quite disparate legal fields, ranging from business law, where it is traditionally used to describe a risk management tool in the context of corporate or real-estate transactions, through to public international law<sup>32, 33</sup>. However, the UNGPs’ ‘second pillar’ has adopted the term but established its own constitutive construct.<sup>34</sup> Although non-binding, the ‘second pillar’ suggests that every business enterprise—regardless of its size, sector, operational context, ownership and structure (UNGP no. 14)—should respect human rights and, to this end, carry out human rights due diligence (UNGP no. 15(b)). The underlying human rights due diligence (HRDD) concept is distinguished by a particularly broad scope, covering in principle all adverse impacts of an enterprise’s business activity, not only when such impacts are directly caused or contributed to by the enterprise (UNGP no. 13(a), even when such impacts are caused by third

<sup>30</sup>Cf. for a comprehensive analysis of human rights and environmental due diligence concepts as means for enhancing a sustainable economy: Scherf et al. (2019).

<sup>31</sup>Cf. Chap. 4, ¶ 16 *et seq.* (Sect. 4.2.2).

<sup>32</sup>Cf. for the use in public international law, Chap. 3, ¶ 21 *et seq.* (Sect. 3.3.2)

<sup>33</sup>Cf. Bonnitcha and McCorquodale (2017), Koivurova (2012), and Krieger et al. (2020).

<sup>34</sup>Ruggie and Sherman (2017), p. 921.

parties, as long as the impacts are “directly linked” to an enterprise’s operations, products or services through its business relationships (UNGP no. 13(b)). Hence, HRDD’s scope could potentially cover any given enterprise’s entire value chain.

Since the UNGPs’ adoption in 2011, the concept has been tremendously influential regarding both other soft law approaches<sup>35</sup> as well as hard law legislation.<sup>36</sup>

15

### Human Rights Due Diligence

The concept of human rights due diligence was originally developed within the UNGPs’ ‘second pillar’, i.e. the corporate responsibility to respect human rights.

Human rights due diligence’s core elements consist of a series of subsequent steps of

- identifying,
- preventing,
- mitigating, and
- accounting for

relevant risks that actually or potentially have adverse human rights impacts with which the company conducting due diligence may be involved. Sometimes, the adoption of a relevant corporate policy statement and a complaints mechanism are also considered as elements of due diligence<sup>37</sup> as these steps are a part of the UNGPs’ ‘second pillar’ even though not technically part of human rights due diligence. In particular, if a company voluntarily creates a self-obligation to exercise HRDD, this can be a mechanism that creates legally binding obligations. In contrast, if exercising due diligence is mandatory under law, rather than the result of a voluntary decision, the imperative to make such a policy commitment may be reduced to it simply serving as means of a company communicating its compliance policy and expectation to its staff and business partners.

The UNGPs have obviously been strongly influenced by drawing on the transactional concept of due diligence taken from the business law. However, in doing so, *John Ruggie* insisted that the Guiding Principles “establish their

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<sup>35</sup>Most prominently, the concept was immediately adopted by the OECD Guidelines for Multinational Enterprises in their 2011 revised 2nd edition (cf. section II.A.10 *et seq.* and section IV of the Guidelines) and spelled out later in more detail by the 2018 OECD Due Diligence Guidance for Responsible Business Conduct.

<sup>36</sup>Cf. ¶ 20 *et seq.*

<sup>37</sup>Cf. e.g. Section 3(1) no. 3 and Section 6(2) of the German ‘Supply Chain Due Diligence Act’, similarly already the German Federal Government’s National Action Plan: Implementation of the UN Guiding Principles on Business and Human Rights 2016–2020, Sept. 2017, p. 8, [https://www.csr-in-deutschland.de/SharedDocs/Downloads/EN/UN-guiding-principles-business-human-rights.pdf?\\_\\_blob=publicationFile&v=2](https://www.csr-in-deutschland.de/SharedDocs/Downloads/EN/UN-guiding-principles-business-human-rights.pdf?__blob=publicationFile&v=2), last accessed 26 April 2022.

own scheme for corporate human rights due diligence” and “stipulate their own constitutive construct of human rights due diligence”.<sup>38</sup>

Due diligence in this sense generally defines a behavioural standard of conduct, rather than one of result, and provides a procedurally structured mode for dealing with certain risks. However, it is not a mere tick-boxing process as it can result in substantive obligations. If certain risks are detected or could be detected, certain obligations come into play that require those risks to be pre-emptively mitigated as far as possible.

Due diligence in this sense is neither a civil law nor a public or administrative law concept but a much broader, cross-cutting approach that can be relevant in all legal fields where risks to human rights are linked to business operations in transnational value chains. In the context of civil liability, due diligence obligations may be considered as the determinants of the relevant standard of care required.

The UN Guiding Principles on Business and Human Rights have become the global authoritative policy standard for business and human rights,<sup>39</sup> with the ‘second-pillar’ clearly setting the current benchmark in HRDD. It has served as a blueprint for, or at least largely inspired, a number of soft law instruments<sup>40</sup> as well as hard laws<sup>41</sup> and legislative drafts around the world.

Ten years after the original endorsement of the UNGPs by the UN Human Rights Council in 2011, a strong global and quite consolidated consensus on which elements should be included in corporate HRDD-concepts can be observed.<sup>42</sup> Although the concept was originally designed with the exclusive focus on human rights protection, it has been increasingly transferred to other issues of sustainability in the wider sense in transnational value chains.

- 17 Although such due diligence obligations that are currently ‘under construction’ in legislative attempts around the world feature strong procedural elements, they typically also amount to substantive obligations.<sup>43</sup> Given its procedural character, the due diligence concept, as it has been developed with a view to human rights

<sup>38</sup>Ruggie and Sherman (2017), p. 921.

<sup>39</sup>Sherman (2020).

<sup>40</sup>Cf. OECD Guidelines for MNE, 2nd ed., 2011 and various OECD Due Diligence Guidances; item 2.4 of ISO 26000.

<sup>41</sup>Cf. below the examples from France (‘Duty of Vigilance Act’), Germany (‘Supply Chain Due Diligence Act’), and the EU (NFRD, Timber Regulation).

<sup>42</sup>Sherman (2020), p. 1: “global authoritative standard”.

<sup>43</sup>Cf. for a differentiated approach of distinguishing procedural and substantive elements of supply chain due diligence: Gailhofer (2020), pp. 3–8, distinguishing between “autonomous and concrete procedural obligations” (“selbständige und konkrete Verfahrenspflichten”) on the one hand and “preventive obligations related to protected goods on the other” (“schutzgutbezogene Präventionspflichten”).

protection, can be transferred to the protection of virtually any type of legal interest or object of protection, including the environment in transnational value chains.<sup>44</sup> This is true of course for organisational requirements that have been proposed to supplement a binding HRDD-regulation, namely documentation requirements, organisational compliance obligations, whistle-blower protection and a non-judicial grievance mechanism. However, it is also true for the substantive core elements of risk analysis, prevention (including effectiveness control) and remedy.<sup>45</sup>

The line between exclusively procedural obligations, such as nominating a compliance officer, and substantive due diligence obligations, such as specific prevention measures, is blurry. Arguably, undertaking a risk analysis could be seen as falling between meeting either a simple procedural or clear-cut substantive obligation. Nevertheless, both types of obligations can be sharply distinguished from a third category that may be referred to as ‘direct commands or prohibitions’ and bind the obliged party to specifically do or not do something, e.g. not to import seal products or illegally logged timber.<sup>46</sup> Although such commands or prohibitions can be regulated with regard to value chains, they do not necessarily constitute due diligence obligations. While both types of obligations may be combined, a clear distinction can be crucial to the legal evaluation of several issues related to the design of EDD. Generally speaking, legal requirements regarding such direct commands and prohibitions can be more demanding in terms of their material scope,<sup>47</sup> requirements with regard to legal certainty,<sup>48</sup> the exercise of extraterritorial jurisdiction<sup>49</sup> and potential incompatibility with WTO law<sup>50</sup> than due diligence obligations.

If a due diligence obligation potentially covering an entire value chain was established, it would have legal consequences not only for the so called ‘arm’s-length’ value chains, linked by chains of contracts, but would extend even more so to the value chains between parent companies and their subsidiaries within corporate groups (*argumentum a fortiori*<sup>51</sup>). Therefore, the issue of corporate group liability is not specifically addressed here.<sup>52</sup>

<sup>44</sup> Cf. Krebs et al. (2020), pp. 33 *et seq.*; cf. also the approaches similar to this due diligence concept in various areas of regulatory compliance: Articles 22 *et seq.* Delegated Regulation (EU) 2017/565, in German law: Sections 4 *et seq.* of the German Anti-Money-Laundering-Act (Geldwäschegesetz), Section 25a of the German Banking Act (Kreditwesengesetz), and Section 80 of the German Securities Trading Act (Wertpapierhandelsgesetz).

<sup>45</sup> Cf. e.g. Sections 5–7 ‘Supply Chain Due Diligence Act’.

<sup>46</sup> Cf. Gailhofer (2020), p. 7.

<sup>47</sup> Cf. ¶ 87–131.

<sup>48</sup> Cf. on this issue from a German constitutional perspective Krebs et al. (2020), pp. 48–52; Zimmermann and Weiß (2020), pp. 440 *et seq.*

<sup>49</sup> Cf. ¶ 173 *et seq.*

<sup>50</sup> Cf. ¶ 198 *et seq.*

<sup>51</sup> Cf. explicitly Weller and Nasse (2020), p. 110.

<sup>52</sup> Cf. however on some of the issues, Chap. 6, ¶ 81 (Sect. 6.7).

### 7.3.2 *Comprehensive HREDD Approaches in Home State Law*

20 Comprehensive due diligence concepts try to tackle all or most of the human rights issues, sometimes complemented by environmental matters, through a single, comprehensive set of due diligence rules, without limiting its scope in particular to specific industries or objects of protection. A number of examples for this type of due diligence legislation in national home State law will be outlined below, namely the French ‘Duty of Vigilance Act’ of 2017, a Swiss popular initiative (narrowly failed 2020), and the German ‘Supply Chain Due Diligence Act’ of 2021. At European level, the European Parliament’s proposal for a ‘Directive on Corporate Due Diligence and Corporate Accountability’ and the EU-Non-Financial Reporting Directive will be briefly presented. Other more recent examples from 2021, such as the Norwegian ‘Transparency Act’<sup>53</sup> and the Dutch Draft Bill for a ‘Responsible and Sustainable International Business Conduct Act’<sup>54</sup> could not be discussed here for reasons of practicality.

#### **France: ‘Duty of Vigilance Act’ (2017)**

21 After a lengthy and highly controversial legislative procedure which culminated in a constitutional review by the Constitutional Council,<sup>55</sup> the ‘Duty of Vigilance Act’<sup>56</sup> finally came into force in France on 29 March 2017.<sup>57,58</sup>

<sup>53</sup> Above fn. 30; for an overview see Krajewski et al. (2021b).

<sup>54</sup> The draft bill is “providing for rules regarding due diligence in value chains to combat violations of human rights, labour rights and the environment in the conduct of foreign trade”, an unauthorized translation is provided by the Dutch NGO ‘MVO Platform’, available at: <https://www.mvoplatform.nl/en/wp-content/uploads/sites/6/2021/03/Bill-for-Responsible-and-Sustainable-International-Business-Conduct-unofficial-translation-MVO-Platform.pdf>, last accessed 26 April 2022; original title of the document containing the draft bill: Kamerstuk 35761, nr. 2, Voorstel van wet van de leden Voordewind, Alkaya, Van den Hul en Van den Nieuwenhuijzen houdende regels voor gepaste zorgvuldigheid in productieketens om schending van mensenrechten, arbeidsrechten en het milieu tegen te gaan bij het bedrijven van buitenlandse handel (Wet verantwoord en duurzaam internationaal ondernemen).

<sup>55</sup> Constitutional Council of France (2017) 2017-750.

<sup>56</sup> The official title is ‘LAW No. 2017-399 of March 27, 2017 on the duty of vigilance of parent companies and ordering companies’ (LOI n° 2017-399 du 27 mars 2017 relative au devoir de vigilance des sociétés mères et des entreprises donneuses d’ordre, JORF n°0074 du 28 mars 2017; <https://www.legifrance.gouv.fr/eli/loi/2017/3/27/ECFX1509096L/jo/texte>, last accessed 26 April 2022).

<sup>57</sup> According to Article 1 of the French Civil Code new statutes enter into force the day after publication in the *Journal officiel de la République française* unless a differing date is stipulated explicitly. The Act has been published on March 28th, 2017 (JORF n°0074, <https://www.legifrance.gouv.fr/eli/loi/2017/3/27/ECFX1509096L/jo/texte>), last accessed 26 April 2022.

<sup>58</sup> For a more detailed overview of the Act cf. Savourey (2020), pp. 56 *et seq.*; Savourey and Brabant (2021); Grabosch (2020), pp. 30 *et seq.*

### **French Constitutional Council, Decision No. 2017-750 DC of 23 March 2017**

Immediately after the ‘Duty of Vigilance Act’ had been adopted by the French National Assembly and the Senate but before its promulgation in the Official Journal, 60 Senators and 60 Deputies referred the Act to the Constitutional Council (Conseil Constitutionnel) requesting the law be declared incompatible with the Constitution and therefore void.<sup>59</sup>

On 23 March 2017, the Council ruled that the Act was constitutional for the most part.<sup>60</sup> Only the sanction with punitive character was considered unconstitutional and therefore declared void. In the Council’s view, the last paragraph of Article 1 of the adopted Act violated the principle of the “legality of crimes and punishments” (principe de légalité des délits et des peines). The Article stated: “The judge may order the company to pay a civil fine of up to 10 million euros. The judge shall set the amount of this fine in proportion to the seriousness of the breach and take into account the circumstances of the breach and the personality of the perpetrator.”<sup>61</sup>

The Constitutional Council based its verdict on a wide array of arguments, including the ‘generality’ of the terms human rights and fundamental freedoms without mentioning the other cited terms (health, safety of persons and the environment),<sup>62</sup> the wide scope with regard to certain sub-contractors and suppliers,<sup>63</sup> and that effective measures of ‘reasonable’ oversight must be capable of “mitigating risks or of preventing serious breaches”.<sup>64</sup> A fourth argument was the fact that the adopted draft did not specify whether the civil

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<sup>59</sup>The procedure is stipulated in Article 60(2) of the French Constitution. To some degree it is comparable to the “abstract judicial review” of laws (abstrakte Normenkontrolle) that can be undertaken by the FCC pursuant to Section 76 Act on the Federal Constitutional Court (Bundesverfassungsgerichtsgesetz) and Article 93(1) no. 2 GG.

<sup>60</sup>Constitutional Council of France (2017) 2017-750, <https://www.conseil-constitutionnel.fr/decision/2017/2017750DC.htm>, last accessed 26 April 2022; an English courtesy translation has been provided by the Constitutional Council: <https://www.conseil-constitutionnel.fr/en/decision/2017/2017750DC.htm>, last accessed 26 April 2022; for a review of the decision cf. Krebs (2017).

<sup>61</sup>Article 225-102-4-II para. 3 of the Code de Commerce as amended by the originally adopted draft; original wording: “Le juge peut condamner la société au paiement d’une amende civile d’un montant qui ne peut être supérieur à 10 millions d’euros. Le juge fixe le montant de cette amende en proportion de la gravité du manquement et en considération des circonstances de celui-ci et de la personnalité de son auteur. (...)”.

<sup>62</sup>Constitutional Council of France (2017) 2017-750, <https://www.conseil-constitutionnel.fr/decision/2017/2017750DC.htm>, last accessed 26 April 2022, paras. 10 and 13.

<sup>63</sup>Constitutional Council of France (2017) 2017-750, para. 11.

<sup>64</sup>Constitutional Council of France (2017) 2017-750, para. 9.

fine could be imposed for each breach or only once, irrespective of the number of breaches.<sup>65</sup>

However, even in the light of these findings, the Council deemed that neither the substantive obligations as such nor the remaining enforcement mechanisms through reporting, civil liability and the court-ordered penalty payment (*astreinte*) were unconstitutional.

- 23 The ‘Duty of Vigilance Act’ amends the French Commercial Code’s chapter regarding public limited companies (*société anonyme*) by introducing a “duty of vigilance” for certain corporations in Article L. 225-102-4 and -5.

24 **Duty of Vigilance vs. Due Diligence**

The French law is clearly inspired by the UNGPs’ due diligence concept.<sup>66</sup> Given that there is a literal equivalent to the English word diligence in French (*diligence*), the choice of the term “*vigilance*” must be seen as a deliberate deviation from the terminology of the UNGPs’ ‘second pillar’. However, it is not easy to identify any clear reason for this choice, as the conceptual commonalities with the UNGPs’ due diligence approach certainly outweigh the differences. However, legal practice and academic writing on the French law conventionally stick to the French term rather than adopting the internationally established term “due diligence”.<sup>67</sup>

- 25 The personal scope of application covers any corporation that has at least 5000 employees on French territory or at least 10,000 employees around the world (Article L. 225-102-4 para. I subpara. 1 Commercial Code). Several questions regarding the personal scope of the law are unclear and await clarification by the French courts, particularly regarding the required corporate form and the location of a corporation’s registration.<sup>68</sup>

<sup>65</sup> Constitutional Council of France (2017) 2017-750, para. 12.

<sup>66</sup> Cf. e.g. the explanatory memorandum (*exposé des motifs*) of the very first draft of the ‘Duty of Vigilance Act’ in 2015: Proposition de loi de M. Bruno LE ROUX et plusieurs de ses collègues relative au devoir de vigilance des sociétés mères et des entreprises donneuses d’ordre, n° 2578, déposée le 11 février 2015, <https://www.assemblee-nationale.fr/14/propositions/pion2578.asp>, last accessed 26 April 2022.

<sup>67</sup> Cf. Savourey (2020).

<sup>68</sup> The systematic location of the provision in chapter 5 (*‘sociétés anonymes’*) of Book II, Title II of the Commercial Code, indicates that the provision could be applicable only to *sociétés anonymes*, that is, public limited companies. However, by virtue of cross-references in Article L. 226-1 para. 2 Commercial Code, the new law could equally apply to partnerships limited by shares (*Sociétés en Commandite par Actions (SCA)*). Whether for the law extends to include simplified joint stock companies (*Société par action simplifiée (SAS)*) and *European companies (SE)* remains contested. Cf. Brabant and Savourey (2017), pp. 3 *et seq*

According to the plain wording, the provision could be applied to *any* corporation with at least 10,000 employees anywhere throughout the world, regardless of whether or not its registered seat is in French territory. However, according to the interpretation by the Constitutional Council and most commentators, the parent company having a registered office in French territory is required.<sup>69</sup> As such, current estimates suggest that a fairly small number of only 150–300 companies falls within the personal scope of this law.<sup>70</sup> Indeed, a study conducted by a civil society project, identified, as of June 2020, a total number of 265 companies that were within the scope.<sup>71</sup>

The amended Commercial Code now obliges the corporations within its scope to establish and effectively implement a vigilance plan.<sup>72</sup> Such a plan must include reasonable vigilance measures able to identify risks and prevent “severe violations” of human rights, “fundamental freedoms”, the health and safety of persons as well as environmental damage resulting directly or indirectly from the operations of the corporation and its subsidiaries.<sup>73</sup>

Moreover, even violations and damage resulting from the operations of sub-contractors or suppliers with whom the duty holder maintains an “established commercial relationship” must be included, provided that such operations are connected to this relationship. The legal concept of an “established commercial relationship” (“*relation commerciale établie*”) has been entrenched in French commercial law (cf. Article L. 442-1 II Commercial Code<sup>74</sup>) for more than 20 years.<sup>75</sup> Traditionally, the concept is meant to protect smaller businesses in particular from an abuse of power where they are economically dependent on larger business partners which can threaten to suddenly terminate the relationship.<sup>76</sup> The use of this recognised legal concept may be motivated by the legislature’s intention to avoid the creation of new, and perhaps not sufficiently precise, legal terms.<sup>77</sup> However, it

<sup>69</sup>Cf. Brabant and Savourey (2017), p. 2.

<sup>70</sup>Savourey (2020).

<sup>71</sup>Terre Solidaire and Sherpa (2020).

<sup>72</sup>Article L. 225-102-4.-I. Code de Commerce: “Toute société (...) établit et met en œuvre de manière effective un plan de vigilance”.

<sup>73</sup>Controlled within the sense of Article L.233-16.-II of the Commercial Code.

<sup>74</sup>Before 26 April 2019, Article L. 442-6 I Nr. 5 Commercial Code.

<sup>75</sup>Introduced by the *Loi sur la loyauté et l'équilibre des relations commerciales: Loi n° 96-588 du 1er juillet 1996 parue au JO n° 153 du 3 juillet 1996*.

<sup>76</sup>Cf. from the *travaux préparatoires*: Rapport n° 336 (1995–1996) de M. Jean-Jacques Robert, fait au nom de la commission des affaires économiques, déposé le 30 avril 1996 . . . Projet de loi sur la loyauté et l'équilibre des relations commerciales, modifiant le titre IV de l'ordonnance n° 86-1243 du 1er décembre 1986 modifiée relative à la liberté des prix et de la concurrence, <https://www.senat.fr/rap/195-336/195-336.html>, last accessed 26 April 2022.

<sup>77</sup>The original draft proposed to include the “the activities of the sub-contractors or suppliers over which the corporation exercises decisive influence” (“les activités de leurs sous-traitants ou fournisseurs sur lesquels elle exerce une influence déterminante”), cf. Article 1 of N° 2578 Assemblée Nationale, Enregistré à la Présidence de l'Assemblée nationale le 11 février 2015, proposition de loi relative au devoir de vigilance des sociétés mères et des entreprises donneuses

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appears to be a rather unfortunate legislative choice to ‘transplant’ the term to a concept that is meant to protect third parties, in particular employees and local communities, so it is now applicable in the context of environmental issues within transnational value chains. Arguably, a broader and better fitting interpretation of “established commercial relationship” seems possible in the light of the UN Guiding Principles’ concept of a direct link formed by business relationships, relevant adverse impacts on the ground and the addressee of the norm’s business operations or products.<sup>78</sup> However, the Constitutional Council’s ruling seems to indicate that it favours a rather narrow interpretation in the light of its original meaning in Article L. 442-6 I Nr. 5 Commercial Code (now Article L. 442-1 II Commercial Code).<sup>79</sup> As a result, this interpretation seems to lead to a relatively limited scope regarding supply chains. Against the backdrop of these doubts arising from the terminological history in French law, the EU Commission’s proposal to ‘transplant’ the term *once again* into a future EU Corporate Sustainability Due Diligence Directive (Art. 3 lit. f and g of the Commission’s Proposal, cf. below ¶ 63)—thereby creating a kind of ‘second-degree legal transplant’—may cause even more confusion.

**29** Regarding its purpose and object of protection, the French ‘Duty of Vigilance Act’ goes beyond human rights<sup>80</sup> and specifically includes the protection of the environment against “severe impacts”. However, the statute does not specify its notion of ‘human rights’ nor what is included in its use of the word ‘environment’. A more explicit listing of norms of reference had been considered, however, this was ultimately not adopted.<sup>81</sup>

**30** Under the Act, the required vigilance plan needs to be developed in cooperation with relevant stakeholders, preferably within the framework of a multi-stakeholder initiative. It must include at least the following five elements (Article L. 225-102-4.-I- para. 4 no. 1–5 Commercial Code):

1. a ‘risk map’ (‘cartographie des risques’) that identifies, analyses and prioritises the risks for the mentioned objects of protection,<sup>82</sup>

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d’ordre, <http://www.assemblee-nationale.fr/14/pdf/propositions/pion2578.pdf>, last accessed 26 April 2022.

<sup>78</sup>Cf. Brabant et al. (2017), pp. 4 *et seq.*

<sup>79</sup>The French Constitutional Council seems to argue that the term “established commercial relationship” is sufficiently precise, *because* it has previously been used in Article L. 420-2 et L. 442-6 Code de Commerce; cf. Constitutional Council of France (2017) 2017-750, [https://www.legifrance.gouv.fr/affichTexte.do;jsessionid=27E51C83FF57F2CD7B5709DBA8ED3073.tplgfr43s\\_1?cidTexte=JORFTEXT000034290632&categorieLien=id](https://www.legifrance.gouv.fr/affichTexte.do;jsessionid=27E51C83FF57F2CD7B5709DBA8ED3073.tplgfr43s_1?cidTexte=JORFTEXT000034290632&categorieLien=id), last accessed 26 April 2022.

<sup>80</sup>The mentioning of “fundamental freedoms” in addition to human rights may be inspired by the title of the European Convention of Human Rights and *Fundamental Freedoms*, however, this does not introduce any further substantial meaning according to Brabant et al. (2017), pp. 6 *et seq.* Interestingly though, while nominally overlapping with human rights’ normative content, the duty of vigilance also explicitly mentions “the health and safety of persons”.

<sup>81</sup>Cf. Brabant et al. (2017), p. 6.

<sup>82</sup>For a corporate law readership, it may be worth mentioning that use of the word ‘risk’, in this context, is given a much broader meaning and differs from the traditional understanding presented

2. evaluations of subsidiaries, subcontractors and suppliers with which the corporation maintains an “established commercial relationship”,
3. appropriate action to mitigate risks and prevent serious harm,
4. a whistle-blowing mechanism established in cooperation with relevant trade unions, and
5. a system to monitor the effectiveness of the implemented measures.

A decree providing more specifications for the required elements of the vigilance plan (Article L. 225-102-4-I para. 5<sup>83</sup>) may be issued by the government after consultation of the Council of State (Conseil d’État).

The French law contains a threefold enforcement mechanism: First, the corporation is obliged to publish the vigilance plan and a report on its effective implementation as part of its non-financial reporting obligations under Article 225-102 Commercial Code.<sup>84</sup> Second, anyone who can justify a legitimate interest in the corporation’s compliance has standing to file a motion for non-compliance/injunction to comply. Three months after an unsuccessful formal notice (‘mise en demeure’) the competent court may, according to Article L. 225-102-4.-II, compel the corporation in question to comply if necessary, by imposing a periodic penalty payment (‘astreinte’). This procedure is an interesting enforcement mechanism as a complementary approach to civil liability for damages which, unlike the latter, does not require that any damage has already occurred. Rather, this periodic penalty payment approach may be viewed as more of a preventive measure applied as soon as the duty of vigilance as such has been violated.

Finally, Article L. 225-102-5 Commercial Code provides for liability for any damage caused by non-compliance with the obligation imposed by its Article L. 225-102-4. However, the pressing issue of the conflict of laws is not addressed. This may lead to practical problems when suing based on the French ‘Duty of Vigilance Act’ because, in the paradigmatic case of damage occurring in a third country, it will be the third country’s tort law, rather than France’s, that would be applicable pursuant to Article 4(1) Rome II Regulation as a basic rule (*lex loci damni*).<sup>85</sup> The

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in corporate law: Just as in the UNGPs, it explicitly goes beyond risks for the company itself, its existence and economic value. Instead, it includes, *inter alia*, risks of harm to third parties, in particular employees along the value chain, local communities and the environment.

<sup>83</sup>Article L. 225-102-4-I para. 5 Commercial Code reads: A decree by the *Conseil d’Etat* may supplement the vigilance measures provided for in 1° to 5° of this article. It may specify the methods of elaboration and implementation of the vigilance plan, where appropriate within the framework of multipartite initiatives within sectors or at the territorial level. [“Un décret en Conseil d’Etat peut compléter les mesures de vigilance prévues aux 1° à 5° du présent article. Il peut préciser les modalités d’élaboration et de mise en œuvre du plan de vigilance, le cas échéant dans le cadre d’initiatives pluripartites au sein de filières ou à l’échelle territoriale.”]

<sup>84</sup>Non-financial reporting obligations have been established in French corporate law in 2001—years before the EU NFR-Directive adopted the same approach—by LOI n° 2001-420 du 15 mai 2001 relative aux nouvelles régulations économiques, JORF n° 113 du 16 mai 2001 p. 7776 that added Article 225-102-1 to the Code de Commerce.

<sup>85</sup>Cf. Chap. 6, ¶ 44 *et seq.* (Sect. 6.5.1) and below ¶ 156 *et seq.* (Sect. 7.6.4).

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French liability provision can and should be interpreted as an overriding mandatory provision within the sense of Article 16 Rome II Regulation resulting in the application of French law, however, in absence of an explicit clarification, such an interpretation does not appear to be compelling. Although the issue was considered during the deliberation in the French National Assembly,<sup>86</sup> a motion to clarify this point was dismissed.<sup>87</sup> This could be interpreted as the legislator's intention not to make the liability rule an overriding mandatory provision.<sup>88</sup> Nevertheless, the National Assembly's intention to hold French companies liable pursuant to the French duty of vigilance standard, especially in cases such as *Rana Plaza*, was very clear. The most appropriate way to achieve this is the interpretation that the liability aspect of the law should be viewed as an overriding mandatory provision.

**34** Article L. 225-102-5 para. 1 Commercial Code refers to the general tort rule stipulated in Article 1240 (formerly Article 1382) *et seq.* Civil Code.<sup>89</sup> Thus, traditional tort law, both substantive and procedural, would apply to claims under Article L.255-102-5 Commercial Code. Generally speaking, tortious liability simply requires three elements: some form of damage ('dommage'), intention/negligence/breach of a duty ('faute') and a causal link ('lien de causalité') between the two aforementioned elements.<sup>90</sup> The burden of proof for all of these elements rests with the claimant.

**35** It has been pointed out that the duty of vigilance in the new Act is conceptualised as a duty of conduct and not one of result.<sup>91</sup> Hence, any breach of the duty of vigilance cannot simply be inferred by establishing the occurrence of damage.<sup>92</sup> Therefore, the plaintiff needs to prove all three elements cited above to establish tortious liability. While proving that there has been a breach of the duty of vigilance may not be easy, given that all the relevant information is in the possession of the obliged corporation, proving the necessary causal link is likely to be even more difficult. This becomes apparent when one considers that the plaintiff must prove that the damage would not have occurred if the defendant had duly complied with his

<sup>86</sup> Assemblée Nationale, N° 2628, 11 mars 2015, Rapport (. . .) sur la proposition de loi (n° 2578), relative au devoir de vigilance des sociétés mères et des entreprises donneuses d'ordre, par M. Dominique Potier, <http://www.assemblee-nationale.fr/14/pdf/rapports/r2628.pdf>, last accessed 26 April 2022.

<sup>87</sup> Assemblée Nationale, Article 2 amendement No. 71, 26 mars 2015, sociétés mères et entreprises donneuses d'ordre (N° 2628), <http://www.assemblee-nationale.fr/14/amendements/2628/AN/71.pdf>, last accessed 26 April 2022.

<sup>88</sup> Cf. on the issue in more detail: Krebs (2017); briefly also: Spitzer (2019), pp. 106 *et seq.*

<sup>89</sup> Article 1240 Civil Code: "Any act of man, which causes damage to another, obliges the one by whose fault it occurred to compensate it." ["Tout fait quelconque de l'homme, qui cause à autrui un dommage, oblige celui par la faute duquel il est arrivé à le réparer"], Article 1241: "Everyone is responsible for the damage he has caused not only by his own actions, but also by his negligence or carelessness." ["Chacun est responsable du dommage qu'il a causé non seulement par son fait, mais encore par sa négligence ou par son imprudence."].

<sup>90</sup> van Dam (2013), p. 57.

<sup>91</sup> Savourey (2020), p. 73.

<sup>92</sup> Savourey (2020).

duty of vigilance. Shifting the burden of proof onto the corporation,<sup>93</sup> which had been considered in the initial stages of the first legislative procedure on the matter,<sup>94</sup> was discarded at later stages of the procedure. Interestingly, just as in the case of injunctive relief, any person showing an interest in acting for this purpose has standing to bring the lawsuit for damages (Article L. 225-102-5 para. 2 Commercial Code).

Pursuant to Article L. 225-102-5, para. 3 Commercial Code, the adjudicating court may order its ruling on civil liability to be published, disseminated or displayed at the cost of the losing party.

To date, very few cases have been brought alleging a violation of the duty of vigilance and, as of December 2020, there were only a total of seven procedures ongoing (against TOTAL (two cases), EDF,<sup>95</sup> TELEPERFORMANCE,<sup>96</sup> XPO Logistics Europe,<sup>97</sup> SUEZ,<sup>98</sup> and Casino Guichard-Perrachon<sup>99</sup>). All seven of these are based on the procedure pursuant to Article L. 225-102-4.-II (formal notice and subsequent injunction with penalty payment). No civil liability claim for compensating damages has yet been filed. Only four cases have passed the preliminary procedure of a formal notice (*mise en demeure*) and progressed to the point of having been filed in court: The two lawsuits against TOTAL, the one against EDF and the one against Casino Guichard-Perrachon: The first case was brought by Friends of the

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<sup>93</sup>Cf. on this issue ¶ 144.

<sup>94</sup>Cf. the original draft proposed a new Article 1386-19 in the French Civil Code which should have read: “Est présumée responsable la personne morale, qui dans le cadre de ses activités, de celles de ses filiales ou de celles de ses sous-traitants, ne démontre pas avoir pris toutes les mesures nécessaires et raisonnablement en son pouvoir en vue de prévenir ou d’empêcher la survenance d’un dommage ou d’un risque certain de dommage notamment sanitaire, environnemental ou constitutif d’une atteinte aux droits fondamentaux et dont elle ne pouvait préalablement ignorer la gravité.”, N° 1519, ASSEMBLÉE NATIONALE, 6 novembre 2013, PROPOSITION DE LOI relative au devoir de vigilance des sociétés mères et des entreprises donneuses d’ordre, <http://www.assemblee-nationale.fr/14/propositions/pion1519.asp>, last accessed 26 April 2022.

<sup>95</sup>Cf. the case report issued by the European Center for Constitutional and Human Rights (ECCHR): <https://www.ecchr.eu/en/case/wind-park-in-mexico-french-firm-disregards-indigenous-rights/>, last accessed 26 April 2022.

<sup>96</sup>Cf. the case summary and time line published by the Business & Human Rights Resource Centre, <https://www.business-humanrights.org/en/latest-news/france-formal-notice-sent-to-teleperformance-re-compliance-with-duty-of-vigilance-law-amid-reports-of-human-rights-violations-incl-co-response/>, last accessed 26 April 2022.

<sup>97</sup>Cf. the formal notice of October 2019 by the International Transport Workers’ Federation (ITF): <https://www.etf-europe.org/wp-content/uploads/2019/10/Letter-XPO-Devoir-de-Vigilance-EN-final.pdf>, last accessed 26 April 2022.

<sup>98</sup>Cf. the case summary and time line published by the Business & Human Rights Resource Centre, <https://www.business-humanrights.org/en/latest-news/suez-sent-formal-request-to-comply-with-its-duty-of-vigilance-under-french-law-or-face-potential-litigation-following-sanitary-crisis-in-chile/>, last accessed 26 April 2022.

<sup>99</sup>Cf. the formal notice (“mise en demeure”) of October 2020, published by the French NGO Notre Affaire à Tous: <https://notreaffaireatous.org/wp-content/uploads/2020/09/210920-Courrier-mise-en-demeure-Casino.pdf>, last accessed 26 April 2022.

Earth France ('Les Amis de la Terre') and other NGOs against TOTAL. In this case, the claimants allege that TOTAL failed to comply with its duty of vigilance obligations, in particular, that the vigilance plan is insufficient with regard to its business activities in Uganda.<sup>100</sup> The case was brought at the Nanterre High Court, however, the Court declared itself incompetent to hear the case and referred it to the Nanterre Commercial Court,<sup>101</sup> a decision that was upheld by the Court of Appeals of Versailles,<sup>102</sup> but finally overturned by the Court of Cassation.<sup>103</sup> Another case against TOTAL was brought by *Notre Affaire à Tous* and other NGOs as well as fourteen municipalities ('communes') regarding issues concerning climate change.<sup>104</sup> A third case, that involving EDF, concerns an alleged violation of indigenous peoples' rights in the context of the construction of a major wind farm in Mexico. The claim was filed in October 2020 by individual members of the affected communities with the support of a local NGO (ProDESC), the European Center for Constitutional and Human Rights (ECCHR) and a number of other French and international NGOs.<sup>105</sup> It was dismissed by a civil court in Paris in December 2021.<sup>106</sup> A fourth case was brought against the Casino group,<sup>107</sup> a global retailer with a special focus on the Latin American market, claiming that Casino's business activities contribute to deforestation and land-grabbing in Latin America.<sup>108</sup>

**38** As is obvious from the foregoing, the 'flood' of lawsuits for damages or injunctions and penalty payments, often invoked by the corporate lobby opposing a liability mechanism, is not in sight.

<sup>100</sup>Cf. the case summary and time line published by the Business & Human Rights Resource Centre, <https://www.business-humanrights.org/en/latest-news/total-lawsuit-re-failure-to-respect-french-duty-of-vigilance-law-in-operations-in-uganda/#timeline>, last accessed 26 April 2022.

<sup>101</sup>Tribunal judiciaire de Nanterre, 30 janv. 2020, n° 19/02833, [https://www.dalloz-actualite.fr/sites/dalloz-actualite.fr/files/resources/2021/02/ord\\_jme\\_tj\\_nanterre\\_11022021\\_vigilance.pdf](https://www.dalloz-actualite.fr/sites/dalloz-actualite.fr/files/resources/2021/02/ord_jme_tj_nanterre_11022021_vigilance.pdf), last accessed 26 April 2022.

<sup>102</sup>Court of Appeal of Versailles *Les Amis de la Terre France et al v TOTAL* (2020) 20/01692, <https://www.dalloz-actualite.fr/sites/dalloz-actualite.fr/files/resources/2021/01/2001692.pdf>, last accessed 26 April 2022.

<sup>103</sup>Cour de Cassation, 15 dec. 2021, Pourvoi n° 21-11.882, ECLI:FR:CCASS:2021:CO00893.

<sup>104</sup>Cf. Chap. 8, ¶ 47 (Sect. 8.2.2).

<sup>105</sup>Cf. the information provided by the Business & Human Rights Resource Centre: <https://www.business-humanrights.org/en/latest-news/devoir-de-vigilance-edf-assigne-en-justice-pour-ses-activites-au-mexique/>, last accessed 26 April 2022.

<sup>106</sup>Cf. the press release by ECCHR of 1 December 2021: <https://www.ecchr.eu/en/press-release/edf-mexico-wind-park-decision/>, last accessed 26 April 2022.

<sup>107</sup>Cf. the *Assignment* at the Tribunal de Justice de Saint-Etienne published by Notre Affaire à Tous (undated): <https://notreaffaireatous.org/wp-content/uploads/2021/03/02-03-2021-Assignment-Casino-Seattle-avocats.pdf>, last accessed 26 April 2022.

<sup>108</sup>Cf. the report June 2020 issued by *Envol Vert*: <http://envol-vert.org/wp-content/uploads/2020/06/Rapport-Casinoecoresponsable-de-la-deforestation.pdf>, last accessed 26 April 2022.

**Germany: Corporate Supply Chain Due Diligence Act: ‘LkSG’ (2021)**

Four years after the pioneering French law was enacted, Germany adopted a similar piece of legislation: The ‘Act on Corporate Due Diligence Obligations for the Prevention of Human Rights Violations in Supply Chains’<sup>109</sup> (hereafter: ‘Supply Chain Due Diligence Act’) was passed by the German Bundestag on 11 June 2021, at the very last moment of its 19th legislative term and in the penultimate week of the parliamentary session.<sup>110</sup>

The passage of this bill signalled something of an preliminary end to the policy debate that had been triggered at the national level in 2015 by the Federal Government’s consultation procedure for a National Action Plan for Business and Human Rights. Civil society had been calling for binding HRDD-legislation in Germany and four NGOs (Amnesty, Bread for the World, Germanwatch and Oxfam) commissioned a proposal on how a statutory HRDD-obligation could be set out and enforced in German law. The proposal for a draft ‘Bill on the Obligation of Companies to Exercise Due Diligence in the Protection of Human Rights’ (in the following ‘HRDD Bill-proposal’ or simply ‘NGO-proposal’) was published in 2016.<sup>111</sup> It was largely based on the UNGPs’ ‘second pillar’ and also draws on early draft versions of the French ‘Duty of Vigilance Act’ and the Swiss Coalition for Corporate Justice’s proposal.<sup>112</sup> The NGO proposal focused strictly on human rights due diligence and did not include any specific obligations with respect to the protection of the environment as such. Nevertheless, in February 2019, a classified draft outline (‘internal memo’<sup>113</sup>) by the Federal Ministry for Economic Cooperation

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<sup>109</sup>Gesetz über die unternehmerischen Sorgfaltspflichten zur Vermeidung von Menschenrechtsverletzungen in Lieferketten (Lieferkettensorgfaltspflichtengesetz—LkSG), 16. Juli 2021, BGBl. I 2021, Nr. 46 vom 22.07.2021, 2959; an English translation has been published by the Federal Ministry of Labour and Social Affairs and is available for download at [https://www.bmas.de/SharedDocs/Downloads/DE/Internationales/act-corporate-due-diligence-obligations-supply-chains.pdf?\\_\\_blob=publicationFile&v=3](https://www.bmas.de/SharedDocs/Downloads/DE/Internationales/act-corporate-due-diligence-obligations-supply-chains.pdf?__blob=publicationFile&v=3), last accessed 26 April 2022.

<sup>110</sup>Cf. on the political development and the path to the adoption of the Act: Schmidt-Räntsch (2021), p. 387.

<sup>111</sup>Disclaimer: The author of this chapter co-authored the draft-proposal for a ‘Gesetz über die unternehmerische Sorgfaltspflicht zum Schutz der Menschenrechte’, published in: Klinger et al. (2016), pp. 40–44; an English courtesy translation by James Patterson and Darrell Wilkins can be found in Amnesty International et al. (2017), pp. 8 *et seq.*; cf. for an explicit parliamentary endorsement: BT-Drs. 18/10255 of 9 November 2016, Zukunftsfähige Unternehmensverantwortung—Menschenrechtliche Sorgfaltspflichten im deutschen Recht verankern, <https://dserver.bundestag.de/btd/18/102/1810255.pdf>, last accessed 26 April 2022 and BT-Drs. 19/16061 of 18 December 2019, Jetzt liefern—Lieferkettengesetz gegen Menschenrechtsverletzungen und Umweltzerstörung in internationalen Lieferketten vorlegen, <https://dserver.bundestag.de/btd/19/160/1916061.pdf>, last accessed 26 April 2022.

<sup>112</sup>For a brief overview and summary cf. Amnesty International et al. (2017).

<sup>113</sup>Official references to the document differ (cf. BT-Drs. 19/14514, 1 (“interne Überlegungen”) and Plenarprotokoll 19/88 of 20 March 2019, 10431 (C) (“Eckpunktetpapier”).

and Development (BMZ) became publicly known after it was leaked to the press<sup>114</sup> (hereafter: the BMZ draft<sup>115</sup>). Some parts of it were obviously inspired by or literally taken from the 2016 NGO proposal. However, unlike the NGO proposal, the BMZ draft also contains a comprehensive set of rules regarding EDD in its Section 4 (3) and Section 3 no. 8 and 9. A third and more recent proposal was commissioned in November 2020 by the German Green Party and published in June 2021.<sup>116</sup> Given the highly contentious political battles that ensued regarding the proposed legislation, it is no surprise that the ‘Supply Chain Due Diligence Act’ eventually fell short of these early drafts in several respects, as will be outlined below.

41 The ‘Supply Chain Due Diligence Act’ generally applies to enterprises regardless of their legal form that have their central administration, principal place of business, administrative headquarters or statutory seat in Germany and that have at least 3000 employees (from 1 January 2024 this will be reduced to 1000 employees) in Germany (Section 1(1) of the Act). The threshold criterion is less restrictive than in the French law,<sup>117</sup> however, it still appears somewhat arbitrary. It would have had more been more consequent, especially with regard to the principle of the protection of legitimate expectations (‘Vertrauensschutz’),<sup>118</sup> if the threshold criterion had not

<sup>114</sup>The leaked document is accessible on the website of the Business & Human Rights Resource Centre: [https://www.business-humanrights.org/sites/default/files/documents/SorgfaltGesetzentwurf\\_0.pdf](https://www.business-humanrights.org/sites/default/files/documents/SorgfaltGesetzentwurf_0.pdf), last accessed 26 April 2022; parts of it have been printed in Weller and Nasse (2020), p. 133; the full title of the document in can be translated as: “Options of an omnibus bill for the sustainable design of global value chains and for the amendment of business regulations (Sustainable Value Chain Act – NaWKG) including a principle law for regulating human rights and environmental due diligence obligations in global value chains (Due Diligence Act – SorgfaltspflichtenG)” (original full title: German: “Gestaltungsmöglichkeiten eines Mantelgesetzes zur nachhaltigen Gestaltung globaler Wertschöpfungsketten und zur Änderung wirtschaftsrechtlicher Vorschriften (Nachhaltige Wertschöpfungskettengesetz – NaWKG) einschließlich eines Stammgesetzes zur Regelung menschenrechtlicher und umweltbezogener Sorgfaltspflichten in globalen Wertschöpfungsketten (Sorgfaltspflichtengesetz – SorgfaltspflichtenG)”), a non-authorised English translation with unclear sources has been published by *Hannes Koch*, the journalist, who originally obtained the leaked document: [https://die-korrespondenten.de/fileadmin/user\\_upload/die-korrespondenten.de/DueDiligenceLawGermany.pdf](https://die-korrespondenten.de/fileadmin/user_upload/die-korrespondenten.de/DueDiligenceLawGermany.pdf), last accessed 26 April 2022.

<sup>115</sup>The document, which contains only the plain draft language for a new principal Act without any explanatory memorandum or other formalities, does not represent any kind of official ‘Referentenentwurf’ (draft bill prepared by ministerial staff). However, in order to avoid confusion with the more recently leaked draft outline for key issues of a supply chain law (“Entwurf für Eckpunkte eines Lieferkettengesetzes”) the commonly used colloquial title “BMZ draft” (“BMZ-Entwurf”) is used here, too.

<sup>116</sup>Krajewski et al. (2021a).

<sup>117</sup>¶ 25 *et seq.*

<sup>118</sup>Cf. Krajewski, written statement of May 12th, 2021, Deutscher Bundestag, Ausschuss für Arbeit und Soziales, Ausschussdr. 19(11)1118, pp. 2 and 10. <https://www.bundestag.de/resource/blob/841632/4c6b698f0e58c870881366c27645f315/19-11-1118-SN-ESV-Krajewski-data.pdf>, last accessed 26 April 2022.



exceeded the recommendation from the German National Action Plan for Business and Human Rights of 2016<sup>119</sup> (500 employees).

Enterprises that fall within the scope of the Act are obliged to exercise due regard for the human rights and environment-related due diligence obligations pursuant to ‘Division 2’ (“Due diligence obligations”) of the Act (Section 3(1) s. 1). The core elements of these due diligence obligations include establishing a risk management system (Section 4(1) of the Act), performing risk analyses (Section 5), taking preventive measures, which includes making a policy statement (Section 6) and taking remedial action (Section 7). Those core elements are flanked by supplementary, organisational obligations, such as designating a compliance officer (Section 4 (3)) as well as documenting (Section 10(1)) and reporting (Section 10(2)) requirements. These basic elements of due diligence can all be traced back to the UNGPs’ ‘second pillar’ and, therefore, were barely contested in the legislative procedure.

A major area of criticism<sup>120</sup> in the ‘Supply Chain Due Diligence Act’ relates to its general limitation of scope regarding the affected companies “own business area” and “direct suppliers”, i.e. ‘tier 1’ (cf. Section 5(1) s. 1, Section 6(3) and (4), Section 7(1) and (2) ‘Supply Chain Due Diligence Act’). Hence, the entire downstream value chain is categorically excluded from the due diligence obligation’s scope. The upstream value chain beyond direct suppliers (‘tier 1’) is subject to the due diligence only exceptionally if an enterprise obtains “substantiated knowledge” (“substantiierte Kenntnis”) of potential human rights-related or environment-related issues in the supply chain. ‘Substantiated knowledge’ is defined as having “actual indications” that “suggest” a violation of a human rights-related or an environment-related obligation by an indirect supplier may be possible (Section 9(3) ‘Supply Chain Due Diligence Act’). This approach is problematic, firstly, because it is inconsistent with the UNGPs which are, as previously notes, accepted as the global authoritative standard, secondly, it creates an undesirable and unpalatable reward for ignorance; indeed, those companies which responsibly and voluntarily ‘did their homework’ on their supply chain to examine and monitor their specific problems; in contrast, their competitors that simply ignored these issues could be better off.<sup>121</sup> It remains to be seen, whether avoiding such contradictory results can be achieved by means of an extensive interpretation of the term “substantiated knowledge”.

In contrast, the earlier alternative drafts by the NGOs and by the BMZ made attempts to include the entire value chain and avoid a fixed limitation to a certain tier in the value chain. The practical challenges associated with imposing such a

<sup>119</sup>The Federal Foreign Office on behalf of The Interministerial Committee on Business and Human Rights (ed), National Action Plan: Implementation of the UN Guiding Principles on Business and Human Rights 2016–2020, September 2017.

<sup>120</sup>Krebs (2021b), p. 394; Krebs (2021a); written statements for the hearings in the parliamentary procedure conducted by the Committee for Labour and Social Affairs (*Ausschuss für Arbeit und Soziales*), Ausschussdrucksache 19(11)1136, 12 May, 2021, by Löning (p. 10), Krajewski (p. 93), Grabosch (p. 111), Zach/DGB (p. 53), by the *Bundesrechtsanwaltskammer* (pp. 159 *et seq.*), and *Initiative Lieferkettengesetz* (p. 78).

<sup>121</sup>Krebs (2021b), p. 397.

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far-reaching obligation on value chains were addressed by an ‘adequacy test’ (“Angemessenheit”) that looked at all the substantive obligations related to the entire value chain and any human rights abuse to which a company potentially contributes (cf. Section 6(4) HRDD Bill-proposal). However, all obligations in this context are limited by an adequacy criterion. The company is obliged to carry out a risk analysis and to adopt preventive and remedial measures only to the extent that make the given measures adequate (“angemessen”) (cf. Section 6(2), Section 7 sentence 3, and Section 8 sentence 2 HRDD Bill-proposal). Section 6(2) sentence 2 HRDD Bill-proposal further defines the ‘adequacy test’ by explicitly mentioning certain criteria, namely the country- and sector-specific risks, the severity and likelihood of possible human rights abuses, how directly the company is contributing to such abuses as well as the size of the company and the actual economic leverage the company can exert on the actor directly causing the abuse. This catalogue of criteria is inspired by UNGP no. 17(b) and a version of this proposal for an adequacy-criterion list was eventually adopted in Section 3(2) ‘Supply Chain Due Diligence Act’.<sup>122</sup>

45 Unlike the French ‘Duty of Vigilance Act’ and the BMZ draft, the ‘Supply Chain Due Diligence Act’ touches upon environmental issues merely in passing and rather puts a clear focus on human rights. The Act’s official title—‘The Act on Corporate Due Diligence Obligations for the Prevention of Human Rights Violations in Supply Chains’—does not even mention environmental protection.<sup>123</sup> Nevertheless, the Act does contain some elements on environmental aspects.

46 Firstly, its catalogue of “human rights risks” contains a clause relating to certain environmental impacts. Section 2(2) no. 9 ‘Supply Chain Due Diligence Act’ reads as follows:

A human rights risk within the meaning of this Act is a condition in which, on the basis of factual circumstances, there is a sufficient probability that a violation of one of the following prohibitions is imminent: (. . .) no. 9. the prohibition of causing any harmful soil change, water pollution, air pollution, harmful noise emission or excessive water consumption that a) significantly impairs the natural bases for the preservation and production of food, b) denies a person access to safe and clean drinking water, c) makes it difficult for a person to access sanitary facilities or destroys them or d) harms the health of a person;

Hence, a human rights risk pursuant to Section 2(2) no. 9 of the Act always requires an impairment of one of the human rights goods listed in items a) through d). Purely environmental damage, such as a loss of biodiversity, is not covered. Climate change issues are not addressed explicitly; if and to what extent Section 2(2) no. 9 of the Act could nevertheless fuel climate change litigation remains to be seen.<sup>124</sup> Environmental issues are addressed in Section 2(3) of the Act, irrespective of any human

<sup>122</sup>In German, the NGO and the BMZ drafts, as well as the ‘Supply Chain Due Diligence Act’, use the term “angemessen”/“Angemessenheit”; however, the terminology in the respective English translations differ: “adequate” is used in the courtesy translation of the NGO-HRDD-Bill while “appropriate” appears in the official translation of the ‘Supply Chain Due Diligence Act’.

<sup>123</sup>Cf. Krebs (2021b), p. 399.

<sup>124</sup>Cf. cautiously in this direction: Gailhofer and Verheyen (2021), p. 404.

rights implications, by referencing the quite narrow prohibitions in the Minamata, the POPs and the Basel Conventions.

The BMZ draft went further as it explicitly set the protection of the environment in global value chains as a core purpose (cf. Section 1 sentence 1 BMZ draft). Section 4(3) BMZ draft recommended a stipulation that the object of EDD is compliance with fundamental environmental protection requirements on the one hand and the prevention of environmental damage on the other. Both terms were defined in BMZ draft Section 3 no. 8 and 9. The draft also went on to create an overarching concept of violations, which were defined as “human rights abuses” or “not insignificant” violations of fundamental environmental protection requirements or not insignificant environmental damage (Section 3 no. 10 BMZ draft). Consequently, the three due diligence core elements (risk analysis, preventive and remedial measures) relate to this broad concept of ‘violation’ (cf. Sections 5 and 6 BMZ draft).

The core enforcement mechanism of the ‘Supply Chain Due Diligence Act’ consists of monitoring and enforcement by the Federal Office for Economic Affairs and Export Control (Bundesamt für Wirtschaft und Ausfuhrkontrolle—BAFA) (Division 4 of the Act). Means for administrative enforcement include financial penalties (“Zwangsgeld”) and administrative fines (‘Bußgeld’, Section 24 of the Act).

A legal basis for any civil liability claims for damages caused by a violation of the due diligence obligations is not included. On the contrary, Section 3(3) s. 1 ‘Supply Chain Due Diligence Act’ specifically states that: “A violation of the obligations under this Act does not give rise to any liability under civil law.” However, civil liability claims pursuant to the *lex lata* remain unaffected (Section 3(3) s. 2 of the Act). The Act does, however, presuppose the existence of legal grounds for civil liability claims, as is highlighted by the civil procedural rule in Section 11 of the Act pursuant to which victims of certain human rights abuses may authorise a domestic trade union or NGO to bring proceedings to enforce his or her rights in its own capacity. The inclusion of this rule was a compromise intended to account for the lack of an explicit enforcement measure for civil liability and make the Act acceptable to the needed majority within the Federal Government. However, this rule is rather unlikely to have much impact on litigation practice.

In contrast, both the NGO proposal from 2016 and the BMZ draft from 2019 advocated for the inclusion of an explicit liability clause. However, Section 15 of the NGO proposal did not recommend creating a new legal basis for civil liability, rather, it simply elucidated the behavioural standard as set out by the due diligence obligations in its part 2 to be the applicable standard of care. By stipulating its applicability irrespective of any extraneous laws otherwise applicable to the non-contractual liability under private international law, the NGO proposal declared the due diligence obligation explicitly as an ‘overriding mandatory provision’ pursuant to Article 16 Rome II Regulation.<sup>125</sup> As a result, claims for damages relating to human rights abuses would still have been adjudicated based on the *lex loci damni*. Only when determining the relevant duty of care standard would the

<sup>125</sup>Cf. Klinger et al. (2016), pp. 70–76; Hartmann (2018), p. 281.

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potentially stricter due diligence obligations pursuant to the NGO proposal need to be consulted.

51 The public administrative enforcement aspect of the Act is flanked by the rules on public procurement (Section 22), stipulating that any enterprise that has been fined pursuant to Section 24 for a violation of its due diligence obligations shall be, under certain circumstances, excluded from the award of public contracts.

52 Overall, the enforcement mix in the ‘Supply Chain Due Diligence Act’ does contain some rather innovative approaches with a strong focus on public administrative oversight instruments. However, a more comprehensive mix, such as one that included the elements of civil liability and criminal liability as suggested in the BMZ draft, would have provided the Act with ‘more teeth’.

### Switzerland: A Narrowly Failed Popular Initiative (2015–2020)

53 After a legislative proposal was narrowly defeated in the Swiss National Council in March 2015 following a turbulent and somewhat dubious voting procedure,<sup>126</sup> the so-called ‘Swiss Coalition for Corporate Justice’ (‘Konzernverantwortungsinitiative’, hereafter: ‘Initiative’) launched an initiative text<sup>127</sup> containing a draft for a new Article 101a (“Responsibility of Business”) of the Swiss Federal Constitution (hereafter: BV-E). The initiative text proposed to impose a legal obligation on companies with a registered office, central administration or principal place of business in Switzerland to respect “internationally recognised human rights” and “international environmental standards” even in their overseas operations. On 29 November 2020, the Initiative secured the necessary majority (‘Volksmehr’, ‘majorité du peuple’); however, according to Article 142 (3) of the Swiss Constitution it would have also required the majority of cantons (‘Ständemehr’, ‘majorité des cantons’). The Initiative failed to clear this hurdle (8.5 canton-votes in favour and 12.5 votes against).<sup>128</sup> Nevertheless, the Initiative triggered a piece of HRDD legislation, albeit a rather weak one, focusing on conflict

<sup>126</sup>On 11 March 2015, a proposal (Motion 14.3671 der Aussenpolitischen Kommission des Nationalrates vom 1.09.2014, Umsetzung des rechtsvergleichenden Berichtes des Bundesrates über die Verantwortung von Unternehmen bezüglich Menschenrechten und Umwelt) was passed at the first vote with just a one-vote majority, cast by the president as a tie-breaker (91 yes, 90 no, 8 abstentions; cf. vote 14.3671/11553, Amtliches Bulletin 2015 N 297, <https://www.parlament.ch/de/ratsbetrieb/amtliches-bulletin/amtliches-bulletin-die-verhandlungen?SubjectId=35080>, last accessed 26 April 2022); however, an opposing council member demanded to repeat the vote claiming that some members had cast their vote “wrong”; in the subsequent second vote the originally adopted proposal was defeated (95 no, 86 yes, Amtliches Bulletin 2015, N 307 *et seq.*, <https://www.parlament.ch/de/ratsbetrieb/amtliches-bulletin/amtliches-bulletin-die-verhandlungen?SubjectId=35082>, last accessed 26 April 2022).

<sup>127</sup>The German initiative text with brief explanations can be downloaded at: [https://www.publiceye.ch/fileadmin/doc/Konzernverantwortung/Konzernverantwortungsinitiative\\_Factsheet\\_Initiativtext\\_mit\\_Erklarungen.pdf](https://www.publiceye.ch/fileadmin/doc/Konzernverantwortung/Konzernverantwortungsinitiative_Factsheet_Initiativtext_mit_Erklarungen.pdf), last accessed 26 April 2022, a courtesy translation of the initiative text with basic explanations can be found at: [https://corporatejusticecoalition.org/wp-content/uploads/2021/06/KVI\\_Factsheet\\_5\\_E.pdf](https://corporatejusticecoalition.org/wp-content/uploads/2021/06/KVI_Factsheet_5_E.pdf), last accessed 26 April 2022.

<sup>128</sup>Cf. the official results published by the Swiss Federal Chancellery, available at <https://www.bk.admin.ch/ch/d/pore/va/20201129/can636.html>, last accessed 26 April 2022.

minerals and child labour that relied solely on reporting obligations as an enforcement mechanism but which did not create any new legal liabilities.<sup>129</sup>

Although the Initiative's draft was ultimately not adopted, it may serve as reference material for the examination and development of HREDD legislation. The proposal contains two core elements: a substantive due diligence obligation with regard to human rights and environmental standards throughout the value chain and a corporate liability mechanism for harm caused by the company itself or undertakings it controls.

The first core element of the proposal is a HREDD obligation that shall be regulated by law (Article 101a(2)(b) BV-E). This element is largely based on the concept of HRDD according to UNGPs and OECD Guidelines. Beyond the duty bearer's own operations, the due diligence obligation's scope includes undertakings that the entity legally or economically and factually controls and all business relationships (Article 101a(2)(b) s. 3 BV-E). The due diligence obligation includes (1) the duty to investigate actual and potential impacts on the environment and internationally recognised human rights issues, (2) the duty to take appropriate measures to prevent violations of internationally recognised human rights and international environmental standards as well as putting an end to existing violations, and (3) to account for the measures taken (Article 101a(2)(b) half-sentence 2 BV-E).

The phrase "international environmental standards" is not explained in detail in the Initiative's draft, however, the explanatory remarks in the official communication of the Swiss Federal Council indicated that they include both standards under international law (such as the United Nations Framework Convention on Climate Change, the Vienna Convention for the Protection of the Ozone Layer and the ambient air quality standards of the World Health Organization) as well as private standards of NGOs (e.g. technical norms or standards of the International Organization for Standardization [ISO]).<sup>130</sup>

By mentioning "international environmental standards", the Initiative's proposal references international environmental treaty law on the one hand and to non-specified soft law standards on the other. This referral to two fundamentally different categories of legal sources may raise questions, especially given that the text is supposed to define a binding legal standard. However, it should be borne in mind that the wording is designed as a proposal for a, typically broadly formulated, constitutional norm. A constitutional norm requires further implementation and concretisation by laws below the constitutional level. The underlying reason is that according to Articles 138 and 139 of the Swiss Federal Constitution, only an amendment to the Constitution may be the subject matter of a 'popular initiative' ('Volksinitiative'). Consequently, the Swiss legislature will have to specify more

<sup>129</sup>Cf. for an overview of the new legislation Bueno and Kaufmann (2021).

<sup>130</sup>Schweizerischer Bundesrat (ed.), Botschaft zur Volksinitiative "Für verantwortungsvolle Unternehmen – zum Schutz von Mensch und Umwelt", 17.060, BBl. 2017, 6335 (6357), <https://www.admin.ch/opc/de/federal-gazette/2017/6335.pdf>, last accessed 26 April 2022.

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precisely what is to be considered an “international environmental standard” within the meaning of the Constitution.<sup>131</sup>

**58** The second core element of the Initiative’s proposal is a civil liability regime for damage resulting from “violations of internationally recognised human rights or international environmental standards in the course of their business activities”. This regime includes instances where the damage in question is directly caused by third-party companies to the extent that these are “controlled” by the obliged company. The liability regime is modelled on the concept of the principal’s liability (“Geschäftsherrenhaftung”<sup>132</sup>) pursuant to Article 55 of the Swiss Code of Obligations (‘Obligationenrecht’, hereafter ‘OR’). The plaintiffs in such cases must prove the occurrence of a damage, wrongfulness, and an adequate causal link. However, the company may exculpate itself by observing due diligence as required by law or by the fact that the breach of due diligence was not causal for the damage (Article 101a(2)(c) s. 2 half-sentence 1 BV-E). *Werro* considered the proposal based on Article OR to be a reserved and rather business-friendly regulation by international comparison.<sup>133</sup>

**59** In contrast to the due diligence obligation, which can essentially cover the entire value chain (‘all business relationships’), the liability regime is limited to causation by the company itself and causation contributions stemming from controlled companies.<sup>134</sup> The notion of control is explicitly intended to include the simple and factual economic exercise of power and, as such, is not limited to corporate group structures under company law (Article 101a(2)(a) half-sentences 3 and 4 BV-E). According to *Gregor Geisser*, the leading counsel behind the Initiative, this is to be interpreted as a broad concept of a corporate group, which goes beyond the concept of a group under accounting law and its formal concept of control according to Article 963 sentence 2 OR.<sup>135</sup> However, in his understanding, this broad concept encompasses the outer limit of liability where liability for damage in pure supply and value-added chains without at least de facto economic control over the direct causer is ruled out.<sup>136</sup>

**60** Thus, it must be noted that while the Initiative advocates a broad conceptualisation of what constitutes a corporate group, it limits liability strictly to the outer edges of the group. The substantive due diligence obligation explicitly encompasses “all business relations” i.e. even those beyond the company’s own control.<sup>137</sup> However, the company can only be held liable for those portions of the

<sup>131</sup> Cf. the Initiative’s legal counsel Geisser (2017), p. 962.

<sup>132</sup> Similar to the “Gehilfenhaftung” in German law (Section 831 BGB) and vicarious liability in common law, cf. Schweizerisches Institut für Rechtsvergleichung (2019).

<sup>133</sup> *Werro* (2018), para. 9–12; cf. also: Schweizerisches Institut für Rechtsvergleichung (2019).

<sup>134</sup> Cf. Geisser (2017), pp. 951 *et seq.*

<sup>135</sup> Geisser (2017), pp. 955 *et seq.*

<sup>136</sup> Geisser (2017), p. 956.

<sup>137</sup> Cf. ¶ 59.

business relations that it controls, i.e. basically only for events within its own corporate group in the wider sense as described above.

At first glance, liability pursuant to the German proposals by NGOs in 2016 and the BMZ in 2019 seems to go further than the Swiss Initiative's draft. While the latter strictly requires full control over the entity that directly caused damage, the mentioned German proposals do not explicitly do so. As the due diligence obligation pursuant to these proposals potentially covers the entire value chain, even those parts of the chain beyond the obliged company's sphere of control, it thereby creates (via Section 15 HRDD Bill-proposal) a tortious duty of care that provides for liability without necessarily requiring the obliged company to control the entity that directly caused the damage. Nevertheless, it is likely that the outcomes of cases based on either the Swiss draft or the German proposals would not differ fundamentally. This is because pursuant to the German proposals, a company may be held liable only to the extent that the damage can be causally attributed to a breach of due diligence obligations, i.e. if it could have been prevented by careful conduct on the part of the obligor. In the absence of any possibility of control over the direct perpetrator, it is difficult to imagine a situation where a breach of due diligence obligations may cause specific damage: If an obliged company does not have any control whatsoever or at least potential influence on a third-party tortfeasor in the value chain, the obliged company cannot prevent damage caused by the third-party even with the highest could not have been prevented and therefore liability is equally ruled out in such cases under the 2016 NGO-concept.

Article 101a(2)(d) BV-E solves the problem of the conflict of laws, an issue that also arises under Swiss international private law. Just as under the Rome II Regulation (Article 4), generally foreign tort law is applicable (Article 133 IPRG) in relevant cases where the damage occurs somewhere abroad.<sup>138</sup> Therefore, the duty of care pursuant to Initiative's proposal shall apply "irrespective of the law applicable under private international law" (Article 101a(2)(d) BV-E).

### **European Union: EP Resolution on a Corporate Due Diligence and Corporate Accountability-Directive (2021)**

In March 2021, the EP adopted a resolution calling for a Corporate Due Diligence and Corporate Accountability Directive (hereafter: "Draft Directive").<sup>139</sup> A Commission-draft for such a directive that had been announced by the Commissioner for Justice in 2020 was, after a public consultation for the Commission's

<sup>138</sup>Swiss Federal Law on International Private Law (Bundesgesetz über das Internationale Privatrecht (IPRG) of 18 Dezember 1987), <https://www.admin.ch/opc/de/classified-compilation/19870312/index.html>, last accessed 26 April 2022. Although Article 133 IPRG focuses primarily on the place of action and not on the 'place of effect'; if the two places differ, however, the 'place of effect' is decisive if the infringer had to expect that success would occur in the State of the 'place of effect'. In the context of global value chains, this can be regularly assumed to be the case.

<sup>139</sup>European Parliament, Resolution of 10 March 2021 with recommendations to the Commission on corporate due diligence and corporate accountability (2020/2129(INL)), P9\_TA-PROV(2021)0073, including the Annex with recommendations for drawing up a *Directive of the European Parliament and of the Council on Corporate Due Diligence and Corporate Accountability*.

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‘Sustainable Corporate Governance Initiative’ in early 2021,<sup>140</sup> finally published on 23 February 2022<sup>141</sup> (after the editorial deadline for this book). It may differ significantly from what Parliament requested, and it will shape the further legislative procedure decisively. As such, the EP’s proposal will be mentioned only very briefly<sup>142</sup> here:

- 64 As is the case with other national HRDD acts, such as those in France and Germany, the Draft Directive adopts a concept of due diligence which is inspired by the UNGPs’ ‘second pillar’. Indeed, in many ways, the EP-Draft is significantly more in line with the UNGPs’ concept than legislation such as the German ‘Supply Chain Due Diligence Act’.<sup>143</sup> This particularly is true with respect to the due diligence obligation’s scope which potentially covers the entire value chain—explicitly including even its downstream part (cf. Article 1(1) and (2), Article 3 (5) Draft Directive). The Draft Directive also provides for a quite robust and comprehensive enforcement regime, including public administrative oversight (Article 12 Draft Directive) by an independent authority endowed with sufficient investigative powers to be an effective tool (Article 13 Draft Directive). It furthermore includes Member States’ obligation to provide for “effective, proportionate and dissuasive” sanctions, in particular fines and temporary or permanent exclusion from public procurement, state aid etc. (Article 18 Draft Directive). Unlike the German ‘Supply Chain Due Diligence Act’, the Draft Directive explicitly requires Member States to also provide for a civil liability regime under which undertakings may “be held liable and provide remediation for any harm arising out of potential or actual adverse impacts on human rights, the environment or good governance that they, or undertakings under their control, have caused or contributed to by acts or omissions” (Article 19 Draft Directive).<sup>144</sup>

### European Union: Non-financial Reporting-Directive (2014)

- 65 Directive 2014/95/EU regarding the disclosure of non-financial and diversity information (dubbed: the “Non-financial reporting Directive” or NFRD),<sup>145</sup> which is currently being revised,<sup>146</sup> may be added to the category of ‘comprehensive approaches’. Nevertheless, it does potentially cover, *inter alia*, all human rights

<sup>140</sup>Cf. European Commission, DG Justice and Consumers (ed.), Sustainable corporate governance initiative, Summary report—public consultation, Ares(2021)3297206, 18 May 2021.

<sup>141</sup>Proposal for a Directive on Corporate Sustainability Due Diligence and amending Directive (EU) 2019/1937, 23 February 2022, COM(2022) 71 final; ANNEX to the Proposal, COM(2022) 71 final ANNEX.

<sup>142</sup>For a more detailed analysis see: Krebs (2021c); Krebs (2021b), p. 394.

<sup>143</sup>See Krebs (2021b), p. 394.

<sup>144</sup>Cf. on the issue of the EU’s competence regarding civil liability: Krebs (2021c), pp. 41 *et seq.*

<sup>145</sup>Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014 amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups, OJ L 330, 15.11.2014, pp. 1–9.

<sup>146</sup>Cf. the Commission’s Proposal for a Directive amending Directive 2013/34/EU, Directive 2004/109/EC, Directive 2006/43/EC and Regulation (EU) No 537/2014, as regards corporate sustainability reporting, COM/2021/189 final.



and environmental matters in transnational value chains of EU companies. Therefore, its material scope can be considered as rather comprehensive, notwithstanding certain weaknesses and limitations. These weaknesses result particularly from the lack of any kind of defined normative behavioural standard as the Directive barely mentions the issues that should be dealt with in the reporting process. Having said that, even a more ambitious Reporting Directive, one that establishes such substantive behavioural standards, can still have only limited impacts as all the transparency mechanisms are based on the assumption that the information published by a company will be relevant for the transaction decisions other market participants.<sup>147</sup>

The NFRD's personal scope is rather limited and covers only undertakings that have more than 500 employees and are so-called 'public-interest entities'<sup>148</sup> (Article 19a(1) sentence 1 Directive 2013/34/EU).<sup>149</sup> The covered undertakings are obliged, in addition to their mandatory financial management report, to include a "non-financial statement containing information to the extent necessary for an understanding of the undertaking's development, performance, position and impact of its activity, relating to", *inter alia*, environmental matters and respect for human rights. This shall include, in particular,

- "a description of the policies pursued by the undertaking in relation to those matters, including due diligence processes implemented" (item b),

<sup>147</sup> Cf. on certain shortcomings also the Commission's Inception Impact Assessment for the revision of the Directive: European Commission (ed.), Inception Impact Assessment, Revision of the Non-Financial Reporting Directive, Ref. Ares(2020)580716—30/01/2020, p. 2, available at: <https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12129-Revision-of-Non-Financial-Reporting-Directive>, last accessed 26 April 2022 and the recent Summary Report of the Public Consultation on the Review of the Non-Financial Reporting Directive, Ref. Ares(2020) 3997889—29/07/2020, which found, *inter alia*: "Problems for users of non-financial information: The majority of respondents believe that the non-financial information reported by companies is deficient in terms of comparability (71% of respondents), reliability (60%) and relevance (57%). Looking just at respondents who identified themselves as users of non-financial information, those figures rise to 84%, 74% and 70% respectively."

<sup>148</sup> Article 2 point (1) of the Accounting Directive 2013/34/EU defines 'public-interest entities' as "undertakings which are: (a) governed by the law of a Member State and whose transferable securities are admitted to trading on a regulated market of any Member State within the meaning of point (14) of Article 4(1) of Directive 2004/39/EC of the European Parliament and of the Council of 21 April 2004 on markets in financial instruments; (b) credit institutions as defined in point (1) of Article 4 of Directive 2006/48/EC of the European Parliament and of the Council of 14 June 2006 relating to the taking up and pursuit of the business of credit institutions (13), other than those referred to in Article 2 of that Directive; (c) insurance undertakings within the meaning of Article 2(1) of Council Directive 91/674/EEC of 19 December 1991 on the annual accounts of insurance undertakings (14); or (d) designated by Member States as public-interest entities, for instance undertakings that are of significant public relevance because of the nature of their business, their size or the number of their employees".

<sup>149</sup> The Commission's proposal for the Revision of the Directive entails an extension of its personal scope to small and medium-sized undertakings as of 2026, cf. Article 1 point (3) of the Proposal for a Directive amending Directive 2013/34/EU, Directive 2004/109/EC, Directive 2006/43/EC and Regulation (EU) No 537/2014, as regards corporate sustainability reporting, COM/2021/189 final.



- “the outcome of those policies” (item c), and
- the “principal risks related to those matters linked to the undertaking’s operations including, where relevant and proportionate, its business relationships, products or services which are likely to cause adverse impacts in those areas, and how the undertaking manages those risks” (Article 19a Directive 2013/34/EU).

The reference to “business relationships” includes, notwithstanding the limitation through the criteria of relevance and proportionality, the potential to cover the entire value chain.<sup>150</sup>

**67** If an undertaking does not pursue policies in relation to the enumerated matters, it must provide an explanation for not doing so (a so-called ‘comply-or-explain’-approach, Article 19a(1) subpara. 2 Directive 2013/34/EU). Hence, the Directive does not define any substantive standard of conduct and it barely mentions a number of matters which must be covered in the non-financial statement. Therefore, the transparency approach of the Directive appears to a certain extent as a rather soft enforcement mechanism that lacks any kind of substantive behavioural obligations whatsoever. The underlying rationale, however, presumes that investors and other market participants do have a significant preference for investing in or doing business with undertakings that comply voluntarily with high human rights and environmental standards. While this may be true for some market participants, concerns arise that substantial steering effects can be expected beyond the niche for ‘sustainable products’ in the overall market. Not surprisingly, it remains contested whether a transparency mechanism that attempts to operate without any substantive benchmark or behavioural standards will have any significant or even measurable real-world effect.<sup>151</sup>

### **7.3.3 Isolated Approaches Regarding Specific Industries and Objects of Protection**

**68** In contrast to comprehensive approaches, isolated or stand-alone approaches seek to tackle some environmental and human rights issues only in a specific industry, stage of a value chain or with respect to a limited set of objects of protection.

<sup>150</sup>Cf. EU Commission (ed.), Communication from the Commission—Guidelines on non-financial reporting (methodology for reporting non-financial information), C/2017/4234, OJ C 215, 5.7.2017, pp. 10, 16 *et seq.*

<sup>151</sup>Cf. Eickenjäger (2017), pp. 109 *et seq.*; surprisingly, the Commission’s Inception Impact Assessment does not question whether non-financial reporting has any impact on business practice in the real economy but deplores the insufficiency of current reporting (*inter alia*: non-financial information is not sufficiently comparable or reliable), cf. European Commission (ed.), Inception Impact Assessment, Revision of the Non-Financial Reporting Directive, Ref. Ares(2020)580716—30/01/2020, available at: <https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12129-Revision-of-Non-Financial-Reporting-Directive>, last accessed 26 April 2022.

One example of an isolated approach is the European Timber Regulation (EUTR)<sup>152</sup> which prohibits to place illegally harvested timber and derived timber products on the internal market (Article 4(1) EUTR). Its personal scope includes operators who place timber and timber products on the internal market for the first time and, with a restricted set of obligations, traders who sell or buy timber or timber products already placed on the internal market (Article 1 and Article 2(c) and (d) EUTR). Hence, with regard to the obliged entity's size or place of incorporation, the Regulation does not contain any restrictions of the personal scope. In this regard, the EUTR is not actually an example of a home State regulation *sensu stricto*. The EUTR obliges operators to exercise due diligence when placing timber or timber products on the internal market (Article 4(2) and Article 6 EUTR) and traders are obliged to ensure the traceability of traded timber and timber products (Article 5 EUTR). The classification of products as legal or illegal is based on the applicable local legislation in the country of harvest (Article 2(f) to (h) EUTR).<sup>153</sup> This exclusive reference to compliance with local laws and regulations can lead to unsatisfactory results, for example, when governments and local authorities undermine or even blatantly disregard internationally accepted protection standards.<sup>154</sup> The due diligence requirements are detailed in Article 6 EUTR. They include providing certain information, risk assessment and risk mitigation procedures.<sup>155</sup>

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<sup>152</sup>Regulation (EU) No 995/2010 of the European Parliament and of the Council of 20 October 2010 laying down the obligations of operators who place timber and timber products on the market, OJ L 295, 12.11.2010, p. 23; on 17 November 2021 the Commission proposed to replace the Regulation by a new 'Regulation on deforestation-free products', COM(2021) 706 final.

<sup>153</sup>The Commission-proposal for a new Regulation on deforestation-free products (COM(2021) 706 final) continues this approach: cf. Article 3(b) of the proposal that states: "Relevant commodities and products may be placed or made available on the Union market, or exported from the Union market only if (...) they have been produced in accordance with the relevant legislation of the country of production (...)".

<sup>154</sup>An example of this can be seen in the current Brazilian government's policies on legalising "cleared land" (of up to 1650 hectares) without any prior inspection by the competent authority; cf. European Commission (ed.), Briefing Note for the Competent Authorities (CA) implementing the EU Timber Regulation December 2019–January 2020, [https://ec.europa.eu/environment/forests/pdf/EUTR\\_Briefing\\_note\\_Dec\\_2019-Jan\\_2020.pdf](https://ec.europa.eu/environment/forests/pdf/EUTR_Briefing_note_Dec_2019-Jan_2020.pdf), last accessed 26 April 2022; Reuters reported a similar development regarding export authorizations: after customs officials from Europe and the US alerted the Brazilian government of the exportation of large amounts of wood from an Amazonian port without authorization from the federal environment agency, the agency (IBAMA) changed its regulations in order to authorize those exportations ex post (Reuters, March 4, 2020, Exclusive: Brazil exported thousands of shipments of unauthorized wood from Amazon port, <https://www.reuters.com/article/us-brazil-environment-lumber-exclusive/exclusive-brazil-exported-thousands-of-shipments-of-unauthorized-wood-from-amazon-port-idUSKBN20R15X>, last accessed 26 April 2022).

<sup>155</sup>For a more detailed brief regarding the timber regulation cf. Grabosch (2020), p. 22.

70 Another prominent example in the category of isolated industry-specific value chain legislation can be found in the EU Conflict Minerals Regulation;<sup>156</sup> other regulatory approaches focus on specific issues or objects of protection, for example the Dutch Child Labour Due Diligence Act of 2019<sup>157</sup> and the steadily growing body of legislation tackling ‘modern slavery’.<sup>158</sup>

### 7.3.4 *Level of Legislation: National, EU or International Law?*

71 An EDD obligation that binds private companies regarding their transnational value chains is conceivable at the level of national, European and international law. Of course, given the ‘global’ character of the issues at stake (the protection of human rights and the environment in transnational value chains), a multilateral standard in international law would be the first choice from a conceptual-legal point of view. However, it seems rather unlikely that a treaty on environmental protection in transnational value chains will enter into force in the foreseeable future. The ongoing negotiations for a ‘legally binding instrument to regulate, in international human

<sup>156</sup> Regulation (EU) 2017/821 of the European Parliament and of the Council of 17 May 2017 laying down supply chain due diligence obligations for Union importers of tin, tantalum and tungsten, their ores, and gold originating from conflict-affected and high-risk areas, OJ L 130, 19.5.2017, pp. 1–20. For a brief overview cf. Grabosch (2020), p. 55.

<sup>157</sup> *Wet van 24 oktober 2019 houdende de invoering van een zorgplicht ter voorkoming van de levering van goederen en diensten die met behulp van kinderarbeid tot stand zijn gekomen (Wet zorgplicht kinderarbeid)* [Act of 24 October 2019, introducing a due diligence to prevent the supply of goods and services created with the aid of child labour (Child Labour Due Diligence Act); translation by the author] Staatsblad 2019 no. 401 of November 13, 2019, <https://www.eerstekamer.nl/9370000/1/j9vkvfvj6b325az/v13khw8f3a00/f=y.pdf>, last accessed 26 April 2022. A courtesy translation was commission by the law firm Ropes & Gray [https://www.ropesgray.com/-/media/Files/alerts/2019/06/20190605\\_CSR\\_Alert\\_Appendix.pdf?la=en&hash=9CC818B6E223F53A01F9FF709209FB160DDA82CF](https://www.ropesgray.com/-/media/Files/alerts/2019/06/20190605_CSR_Alert_Appendix.pdf?la=en&hash=9CC818B6E223F53A01F9FF709209FB160DDA82CF), last accessed 26 April 2022.

<sup>158</sup> Lawmakers from common law jurisdictions in particular seem to have a growing appetite for anti-slavery legislation: cf. California Transparency in Supply Chains Act of 2010 (Senate Bill No. 657, CHAPTER 556, [https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=200920100SB657](https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=200920100SB657)), UK Modern Slavery Act 2015, c. 30, <http://www.legislation.gov.uk/ukpga/2015/30>, more recently the Australian Modern Slavery Act 2018, No. 153, 2018, <https://www.legislation.gov.au/Details/C2018A00153>, the New South Wales Modern Slavery Act 2018 No 30, <https://www.legislation.nsw.gov.au/#/view/act/2018/30>. Cf. furthermore the Bills in Tasmania (Supply Chain (Modern Slavery) Bill 2020, [https://www.parliament.tas.gov.au/bills/Bills2020/pdf/18\\_of\\_2020.pdf](https://www.parliament.tas.gov.au/bills/Bills2020/pdf/18_of_2020.pdf), Canada (Bill S-211, An Act to enact the Modern Slavery Act and to amend the Customs Tariff, <https://www.parl.ca/DocumentViewer/en/43-1/bill/S-211/first-reading>, and the older Bill C-423, <https://openparliament.ca/bills/42-1/C-423/>, and Hong Kong (<https://www.legco.gov.hk/yr17-18/chinese/panels/se/papers/se20180605cb2-1480-5-ec.pdf>); all online sources in this footnote last accessed 26 April 2022.

rights law, the activities of transnational corporations and other business enterprises',<sup>159</sup> do not suggest that such a treaty can be expected any time soon as many issues remain controversial.<sup>160</sup> The initiative for the 'Draft Global Pact for the Environment'<sup>161</sup> seems to have failed, at least for the time being.<sup>162</sup>

In its resolution of March 2021, the EP agreed on an ambitious Draft Directive on Corporate Due Diligence and Corporate Accountability<sup>163</sup> and it is still expected that the Commission, after several postponements, will launch a corresponding legislative process with its own proposal. It remains to be seen how the German 'Supply Chain Due Diligence Act' will impact the Commission's draft and the negotiations in the Council. On the one hand, the fact that now Germany and France, the EU's two biggest Member States, have comprehensive national value chain due diligence legislation in place creates momentum for an agreement on a similar piece of legislation at the EU level, although the weaknesses in the German law could lower the bar for any resultant EU law.<sup>164</sup>

An international treaty may be the first choice to tackle environmental and human rights problems in transnational value chains. However, the adoption of the French 'Duty of Vigilance Act', the German 'Supply Chain Due Diligence Act' and other national due diligence acts, as well as possibly a future EU directive in this area, would certainly bolster the prospects for international consensus on a legally binding instrument.

### 7.3.5 Assessment

The examples above illustrate that two quite different design models, namely isolated approaches and relatively comprehensive solutions, can be employed to introduce a due diligence obligation across value chains. While these approaches

<sup>159</sup>Cf. on the issue in more detail, Chap. 4, ¶ 40 *et seq.* (Sect. 4.2.3). In 2014, the Human Rights Council adopted resolution 26/9 ("Elaboration of an international legally binding instrument on transnational corporations and other business enterprises with respect to human rights", A/HRC/RES/26/9) with the purpose "to elaborate an international legally binding instrument to regulate, in international human rights law, the activities of transnational corporations and other business enterprises." The original 'Zero Draft' was published in 2018, followed by revised versions in 2019, in 2020, and a 3rd revised draft on 17.08.2021 (<https://www.ohchr.org/Documents/HRBodies/HRCouncil/WGTransCorp/Session6/LBI3rdDRAFT.pdf>, last accessed 26 April 2022).

<sup>160</sup>Subasignhe (2021).

<sup>161</sup>Cf. in detail Chap. 4, ¶ 44 *et seq.* (Sects. 4.2.3 and 4.3).

<sup>162</sup>The Resolution 73/333 adopted by the UN General Assembly on August 30, 2019 (A/RES/73/333), aims at a mere "political declaration for a United Nations high-level meeting, subject to voluntary funding"; cf. furthermore, Chap. 4, ¶ 44 *et seq.* (Sects. 4.2.3 and 4.3).

<sup>163</sup>Cf. ¶ 63.

<sup>164</sup>Cf. Krebs (2021b), p. 394.

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differ in particular regarding their material scope and objects of protection, they both ultimately strive to achieve the same overall goal.

75 Isolated approaches have a fairly limited scope regarding certain topics or objects of protection, such as illegal logging, deforestation, conflict minerals, child labour, forced labour and so forth. These limitations in scope provide certain advantages as they can afford to be less abstract and more specific, thereby providing the norm addressee with clearer guidance regarding what to do to comply with the obligation.<sup>165</sup> Furthermore, relatively specific and detailed rules can also facilitate the norm's practical application.<sup>166</sup> However, one disadvantage of using isolated approaches is that the process will ultimately result in the proliferation of countless individual regulations with more or less diverging due diligence concepts, an issue that is avoided by comprehensive approaches. Moreover, the advantages that isolated approaches have by employing specific and detailed rules and having an easier application can be, at least to some degree, achieved by comprehensive approaches through the use of concretising supplements. This allows the rather abstract requirements of a general due diligence obligation to be spelled out in more detail regarding specific industries, objects of protection and so forth, in effect getting 'the best of both worlds'.<sup>167</sup>

76 Overall, taking a comprehensive approach seems the preferable option, although it would need to be based on a largely uniform regulatory approach for all relevant environmental damage and human rights abuses along the entirety of value chains. This has the advantage of ensuring a high degree of coherence across various sectors, value creation stages and objects of protection. This in turn enables norm addressees, standard setters, enforcement authorities and courts to benefit from synergies and thus reduce both transaction and enforcement costs.<sup>168</sup>

77 The following three sections will address selected issues when designing environmental value chain due diligence obligations in national home State law: due diligence's scope in a value chain (Sect. 7.4), *environmental* due diligence's material scope (Sect. 7.5) and its enforcement by means of civil liability (Sect. 7.6).

## 7.4 Designing Due Diligence's Scope in the Value Chain

78 The present section<sup>169</sup> sets out how due diligence's scope in transnational value chains can be designed and limited. In this regard, two aspects need to be distinguished: First, the question of which parts of a value chain should be covered

<sup>165</sup> Krebs et al. (2020), p. 31.

<sup>166</sup> Cf. van Dam et al. (2020), p. 36.

<sup>167</sup> Krebs et al. (2020), pp. 31 *et seq.*

<sup>168</sup> Krebs et al. (2020), pp. 30–33.

<sup>169</sup> An earlier and more detailed version of the this section has previously been published in German (Krebs et al. 2020, pp. 23 *et seq.*).

(hereafter: ‘horizontal scope’); second, the question of what degree of efforts for different parts of a value chain is required to discharge the obligation (hereafter: ‘vertical scope’).

Human rights abuses and environmental impacts can occur at any point along the entirety of a value chain. The discussed type of EDD legislation aims at tackling environmental harm in the entire value chain or life cycle, regardless of how production is organised and divided between legally independent companies. Consequently, the ‘horizontal scope’ should cover potentially an entire value chain, including its downstream part.<sup>170</sup> A largely unlimited ‘horizontal scope’ settles the question of attribution by grace of the fact that generally any harm or detriment occurring anywhere in the value chain can potentially be traced and attributed to almost any company anywhere in the value chain.<sup>171</sup> Every company subject to the due diligence obligation could potentially be solely or jointly responsible for harm occurring anywhere in its value chain. An unlimited ‘horizontal’ and ‘vertical scope’ of the due diligence obligation, regardless of a company’s connection to the harm, in particular its ability to prevent it, would result in joint and several no-fault responsibilities for the entire value creation process.<sup>172</sup> Such results, however, could give rise to constitutional concerns regarding the principle of proportionality and,<sup>173</sup> moreover, such outcomes may be questionable from a development policy perspective.<sup>174</sup> Hence, a due diligence obligation limited in neither its ‘horizontal’ nor ‘vertical scope’ is not a viable option.<sup>175</sup>

A rather simple solution could consist of rigidly limiting the ‘horizontal scope’ to individual stages (‘tiers’) of a value chain, for example direct suppliers (‘tier 1’) or the corporate group. Indeed, a variation of this approach was chosen by German lawmakers in the ‘Supply Chain Due Diligence Act’: As a general rule, due diligence obligations are limited to an enterprise’s own operations and “tier 1” of the upstream supply chain and only exceptionally, in the case of “substantiated knowledge” of certain issues in the upstream supply chain will due diligence obligations extend

<sup>170</sup>Krebs et al. (2020), pp. 23 *et seq.*

<sup>171</sup>However, it is noteworthy that only certain ‘effects’, such as environmental harm, will be attributed to the duty holder. In contrast, the actions of third parties in the value chain that may have caused or contributed to those effects will not be attributed. From the perspective of this legislative approach, harm resulting from activity in a value chain is only relevant if it occurs as a result in the sense of a cause-and-effect-relation of a violation of the duty holders own due diligence obligation.

<sup>172</sup>Cf. Krebs et al. (2020), p. 25.

<sup>173</sup>Cf. Hübner (2022), pp. 503 ff; Zimmermann and Weiß (2020), pp. 460 *et seq.*; Henn and Jahn (2020), p. 24.

<sup>174</sup>Cf. Krebs et al. (2020), p. 25: Many kinds of division of labour between legally independent corporations could be rendered impossible, even where such business models may be desirable.

<sup>175</sup>Krebs et al. (2020), p. 25; Zimmermann and Weiß (2020), pp. 460 *et seq.*

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beyond “tier 1”.<sup>176</sup> However, one weakness of this approach is that it inadequately addresses certain high-risk operations in areas such as extractive industries.<sup>177</sup>

81 To reconcile the conflicting objectives of proportionality of the regulation, coverage of particularly problematic stages of a value chain while simultaneously avoiding unintended and undesirable side effects, a more flexible and customised approach to limiting the scope of due diligence appears the most viable option. Customised limitations to both the ‘horizontal’ and ‘vertical scope’ can be designed in different ways. The various conceivable models can be broadly categorised as either ‘graduated models’ with a limited number of fixed levels of involvement or flexible ‘sliding models’ that employ a fluid continuum of involvement intensity.

### ‘Graduated Model’: Fixed Levels of Involvement

82 The UNGPs, as the most influential reference norms, fall into the category of a ‘graduated model’. They draw a quite rigid distinction between three levels of corporate involvement in human rights abuses: causation of, contribution to and a direct link to an abuse.<sup>178</sup>

83 Indeed different levels of involvement can be distinguished in a graduated manner. However, to be of practical relevance, different levels of involvement should be coupled with different legal consequences.<sup>179</sup> This seems clear in theory but may prove problematic in practice as the dividing lines between the different categories are not clear cut. While distinguishing direct causation from a mere contribution to causation by third parties may generally be feasible, however, distinguishing contributions from direct links is less straightforward.<sup>180</sup> Regarding environmental harm, even making the distinction between causation and contribution may be challenging as environmental harm is often caused by multiple actors and factors. The question then arises, is such cumulative causation to be regarded as causation or is it merely contribution? According to the prevalent but-for test/condition sine qua non-causation theory, any contribution necessary for a result to occur represents a cause of the result. This seems to support the view of not distinguishing sharply between the different levels of involvement but rather

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<sup>176</sup> Cf. ¶ 43.

<sup>177</sup> Krebs (2021a).

<sup>178</sup> Cf. UNGP no. 17(a): “Human rights due diligence: (...) [s]hould cover adverse human rights impacts that the business enterprise may cause or contribute to through its own activities, or which may be directly linked to its operations, products or services by its business relationships;” cf. further the same terminology for human rights impacts in the OECD Guidelines for MNE Chapter IV. no. 2 and 3 for human rights different concepts and terminology for environmental harm in Chapter VI. of the Guidelines which refers to “the environmental, health, and safety impacts of *their* activities” (no. 1 item a, emphasis added), “potential environment, health and safety impacts of the activities of *the enterprise*” (no. 2 item a), emphasis added), but also to “foreseeable environmental, health, and safety-related impacts *associated* with the processes, goods and services of the enterprise over their *full life cycle*” (no. 3, emphasis added).

<sup>179</sup> Cf. Krebs et al. (2020), p. 27.

<sup>180</sup> Cf. Krebs et al. (2020), p. 27.

pursuing the necessary differentiation, particularly with regard to the ‘vertical scope’ of the obligation in a more flexible manner.

### ‘Sliding Model’: A Flexible Adequacy Criterion

Instead of the somewhat rigid set of levels of involvement (cause/contribution/link) of the ‘graduated model’, a more flexible design could be based on a rather broad concept of involvement or causal contribution what results a rather broad ‘horizontal scope’ of due diligence in the value chain. In particular with regard to the principle of proportionality,<sup>181</sup> the ‘vertical scope’ of the required due diligence efforts would need to be limited more along a value chain depending, e.g. on the degree of proximity of the duty bearer’s business activity to the point where actual harm occurred in the value chain.

Such an approach was suggested by the afore-mentioned<sup>182</sup> German NGOs’ 2016 proposal (‘HRDD Bill-proposal’). According to Section 6(4) sentence 1 number 1 HRDD Bill-proposal, a company may be considered to be contributing to a human rights abuse if third parties are contributing to a human rights abuse ‘as a consequence of the company’s business activities’. In order to nevertheless achieve an appropriate limitation of the obligations’ ‘vertical scope’, the required due diligence measures must take into account the specifics of the individual situation. To this end, the HRDD Bill-proposal stipulates an ‘adequacy test’. The elements relevant for determining adequacy include:

- The proximity of the duty bearer to the incident in the value chain
- The size and leverage of the duty bearer vis-à-vis the actor directly causing the abuse or violation
- The country-specific risks
- The industry-specific risks
- The severity of violations and
- The likelihood of violations occurring.<sup>183</sup>

Similar catalogues of criteria have been proposed by *Andreas Zimmermann* and *Norman Weiß* in an article based on their legal opinion written for the German Federal Ministry of Labour and Social Affairs<sup>184</sup> and by *Sophie Nordhues* in her PhD-thesis.<sup>185</sup> The ‘appropriateness’ criterion defined in Section 3(2) of the German

<sup>181</sup> Cf. Hübner (2022), p. 504.

<sup>182</sup> Cf. ¶ 45 and 48.

<sup>183</sup> Cf. Section 6(2) sentence 2 HRDD Bill-proposal (“What an adequate [risk] analysis requires shall be determined with regard to the country- and sector-specific risks, the severity and likelihood typically to be expected of possible human rights abuses, and how directly the company is contributing to such abuses, as well as the size of the company and the actual and economic leverage the company can exert on the actor directly causing them.”) and referrals in Section 6 (5) sentence 2, Section 7 sentence 3 and Section 8 sentence 2 HRDD Bill-proposal.

<sup>184</sup> Cf. Zimmermann and Weiß (2020), pp. 460 and 424 with the reference to the legal opinion in the asterisk footnote.

<sup>185</sup> Nordhues (2018), p. 323.

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‘Supply Chain Due Diligence Act’<sup>186</sup> also features a number of similarities. Such an approach allows for a high degree of flexibility to best ensure that justice is done in each case despite the diversity of circumstances possible in a broad spectrum of situations that would fall within the scope of a cross-industry regulation that seeks to encompass entire value chains. However, the above-outlined approaches do not exclude each other. For example, the flexible ‘adequacy test’ may be combined with a more rigid differentiation between the direct causation of harm by the duty bearer’s actions and those of its subsidiaries’ on the one hand and only indirect contributions in the value chain via third parties on the other.<sup>187</sup> In cases involving direct contributions, the legal consequences could, or indeed should, be more severe. For example, a reversal of the burden of proof could be limited to such case constellations.<sup>188</sup>

## 7.5 Designing Environmental Due Diligence’s Material Scope

- 87** The most challenging part in designing a statutory ‘environmental’ due diligence obligation consists of determining its ‘material scope’. This requires a linkage of the due diligence procedure with a relevant substantive environmental target standard or level of protection.<sup>189</sup> A clear answer to this question is particularly important with regard to the effectiveness of the obligation and, moreover, it could have repercussions regarding the constitutional principle of legal certainty.<sup>190</sup>
- 88** Two major avenues of approach are conceivable when pursuing this goal of determining the material scope of an EDD obligation. Firstly, the obligation may refer to substantive environmental provisions (§ 89 *et seq.*). Secondly, as an alternative or as a supplement to the first avenue, the material scope could be more broadly expanded by means of a general or catch-all clause (§ 115 *et seq.*). However,

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<sup>186</sup>“The appropriate manner of acting in accordance with the due diligence obligations is determined according to 1. the nature and extent of the enterprise’s business activities, 2. the ability of the enterprise to influence the party directly responsible for a risk to human rights or environment-related risk or the violation of a human rights-related or environment-related obligation, 3. the severity of the violation that can typically be expected, the reversibility of the violation, and the probability of the occurrence of a violation of a human rights-related or an environment-related obligation as well as 4. the nature of the causal contribution of the enterprise to the risk to human rights or environment-related risk or to the violation of a human rights-related or environment-related obligation.”

<sup>187</sup>Cf. Krebs et al. (2020), p. 29.

<sup>188</sup>Cf. Krebs et al. (2020), p. 29.

<sup>189</sup>An earlier version of this section has been published in German (Krebs et al. 2020, pp. 35 *et seq.*); cf. also with regard to the EP-draft for a EU directive: Krebs (2021c), pp. 24 *et seq.*; cf. furthermore on the issue briefly Smit et al. (2020), pp. 277 *et seq.*; more extensively: Mackie (2020), pp. 4–23; Mackie (2021).

<sup>190</sup>Cf. Krebs et al. (2020), pp. 48–52; Zimmermann and Weiß (2020), pp. 440 *et seq.*

these approaches are not clear-cut, distinguishable and well-established categories, rather they are frameworks that only basically delimit what could conceivably be done. Indeed, the category a particular regime falls into may depend on its specific wording. As a final point note at this introductory stage, both of these major avenues and their sub-elements may be combined (§ 126 *et seq.*).

### 7.5.1 Reference to Substantive Environmental Provisions

Reference to pre-existing substantive environmental provisions to define due diligence's material scope (hereafter 'referencing approach') has the advantage of providing a relatively high level of clarity and legal certainty while requiring relatively little new legislative work. At least four variations of such a 'referencing approach' are conceivable: (1) referencing international treaties, (2) referencing international soft law, referencing (3) host State and (4) home State law. These variations of the 'referencing approach' will be outlined in the following:

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#### International Environmental Treaties

Regarding the determination of human rights due diligence's material scope, referencing international human rights treaties is a broadly-established approach. Examples of explicit references to human rights treaties can be found in the UNGPs,<sup>191</sup> the German NGO proposal of 2016 (Section 3 no. 1 and Annex), the US discussion draft entitled 'Corporate Human Rights Risk Assessment, Prevention and Mitigation Act of 2019'<sup>192</sup> and, more recently, in both the Norwegian 'Transparency Act'<sup>193</sup> of 2021 and, in a limited way, in the German 'Supply Chain Due

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<sup>191</sup>Cf. UNGP no. 12 (cf. commentary: "An authoritative list of the core internationally recognized human rights is contained in the International Bill of Human Rights (consisting of the Universal Declaration of Human Rights and the main instruments through which it has been codified: the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social and Cultural Rights), coupled with the principles concerning fundamental rights in the eight ILO core conventions as set out in the Declaration on Fundamental Principles and Rights at Work.").

<sup>192</sup>Section 3(3)(A) of the discussion draft (<https://docs.house.gov/meetings/BA/BA16/20190710/109770/BILLS-116pih-corphuman.pdf>, last accessed 26 April 2022) which was discussed in the Subcommittee on Investor Protection, Entrepreneurship, and Capital Markets (Committee on Financial Services) on 10 July 2019: "The term 'human rights risk' means an adverse impact that an action of the issuer has had on the enjoyment of human rights, including those rights encompassed in—(i) the Universal Declaration of Human Rights"; (ii) "the International Covenant on Civil and Political Rights"; (iii) "the International Covenant on Economic, Social, and Cultural Rights"; and (iv) "the 8 core conventions of the International Labor Organization".

<sup>193</sup>Section 3(b) of the Norwegian 'Transparency Act' (fn. 30) states: "Fundamental human rights means the internationally recognised human rights that are enshrined, among other places, in the International Covenant on Economic, Social and Cultural Rights of 1966, the International Covenant on Civil and Political Rights of 1966 and the ILO's core conventions on fundamental principles and rights at work.").

Diligence Act’ (Section 2(1)<sup>194</sup> and the Annex to the Act). Therefore, it may seem somehow natural to pursue an ‘analogue’ approach to shape environmental due diligence’s material scope by reference to international environmental agreements. However, simply transferring the ‘human rights model’ to environmental due diligence raises a number of questions and caveats.<sup>195</sup>

**91** Firstly, an EDD obligation whose material scope relies exclusively on referencing international environmental treaties would lead to an inadequate result riddled with gaps and loopholes. Two recent examples from Switzerland and Germany may illustrate this: The Swiss National Council’s ‘indirect counterproposal’ wanted to adopt this approach by referencing exclusively the international provisions that are binding on Switzerland.<sup>196</sup> The explanatory memorandum<sup>197</sup> mentions the following treaties as a illustrative listing:

- The Montreal Protocol on Substances that Deplete the Ozone Layer,
- The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal,
- The International Convention on Civil Liability for Oil Pollution Damage, the Cartagena Protocol on Biosafety to the Convention on Biological Diversity,
- The 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972, and
- The Stockholm Convention on Persistent Organic Pollutants.

**92** The second example can be found in the new German ‘Supply Chain Due Diligence Act’ where Section 2(3) defines the term ‘environment-related risk’ exclusively with reference to a few specific and rather narrow prohibitions pursuant to the Minamata, POPs and Basel Conventions.

**93** Both examples illustrate that this approach is suitable to address environmental issues only in a rather limited and selective manner. Following this approach, only a fraction of the cases that are likely to arise over time will be covered if environmental due diligence’s material scope is defined exclusively with reference to international

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<sup>194</sup>Section 2(1) ‘Supply Chain Due Diligence Act’ reads: “Protected legal positions within the meaning of this Act are those arising from the conventions on the protection of human rights listed in nos. 1 to 11 of the Annex.”

<sup>195</sup>Krebs et al. (2020), pp. 36 *et seq.*

<sup>196</sup>The Swiss National Council’s first indirect counter proposal for a new Article 716a<sup>bis</sup> 2a Obligationenrecht (in the version as adopted on 14 June 2018) reads: “Where the law refers to the provisions for the protection of human rights and the environment, including abroad, this refers to the corresponding international provisions that are binding on Switzerland.” (original: “Wo das Gesetz auf die Bestimmungen zum Schutz der Menschenrechte und der Umwelt auch im Ausland hinweist, sind damit die entsprechenden für die Schweiz verbindlichen internationalen Bestimmungen gemeint.”).

<sup>197</sup>Swiss National Council (ed.), Zusatzbericht der Kommission für Rechtsfragen vom 18. Mai 2018 zu den Anträgen der Kommission für einen indirekten Gegenentwurf zur Volksinitiative “Für verantwortungsvolle Unternehmen – zum Schutz von Mensch und Umwelt” im Rahmen der Revision des Aktienrechts, <https://www.parlament.ch/centers/documents/de/bericht-rk-n-16-077-2018-05-18-d.pdf>, last accessed 26 April 2022.

environmental agreements. In the realm of environmental protection, and unlike that of human rights, there is no comprehensive canon of international agreements that would cover most or even all of the relevant issues of harm.<sup>198</sup> Despite a large number of international environmental agreements, international environmental treaty law is characterised by its rather fragmentary character.<sup>199</sup> Fundamental principles, such as the precautionary approach prevailing in EU environmental law, risk being insufficiently reflected if the material scope of EDD is determined using this approach.<sup>200</sup>

Secondly, a translation of international environmental norms that directly bind only State parties into individual obligations for private companies may be more challenging than the analogue task regarding human rights treaties.<sup>201</sup> Generally,<sup>202</sup> human rights protect individual rights of natural persons, therefore, it seems generally feasible to establish how private persons can impair the interests and goods protected by individual human rights.<sup>203</sup> Translating the contents of some types of international environmental norms is equally feasible, for example, in the case of substance-related bans,<sup>204</sup> activity-related prohibitions and technical regulations.<sup>205</sup> However, other types of international environmental norms, such as fundamental target standards, reduction targets, cooperation obligations<sup>206</sup> and procedural provisions,<sup>207</sup> are more challenging if not impossible to translate into individual standards or obligations for private companies. However, in this dynamically evolving field, first attempts to translate even broadly phrased environmental agreements into concrete, individual obligations such as a duty of care for companies can already be observed in practice.<sup>208</sup>

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<sup>198</sup>Cf. Krebs et al. (2020), p. 36.

<sup>199</sup>Cf. Sand (2018), p. 124; Grosz (2017), p. 656.

<sup>200</sup>Cf. Mackie (2020), p. 32.

<sup>201</sup>Cf. Krebs et al. (2020), p. 37.

<sup>202</sup>Collective human rights (cf. e.g. Article 1(1) and (2) ICCPR/ICESCR) remain an exception to human right's generally individual character.

<sup>203</sup>Cf. Monash University Castan Centre for Human Rights Law (2017), and Commentary on UNGP no. 12. Such a 'translation' of States' human rights obligations is possible notwithstanding the ongoing doctrinal debate as to whether and, if so, how private companies as non-State actors are bound to and can violate international human rights norms (cf. in detail, Chap. 4, ¶ 7 (Sect. 4.2.1) and Schmalenbach (2001), pp. 63 *et seq.*; Muchlinski (2014).

<sup>204</sup>Such as such as those in the *Stockholm Convention on Persistent Organic Pollutants* (POPs Convention) or the Minamata Convention, cf. Buck and Verheyen (2018), para. 48.

<sup>205</sup>Cf. Buck and Verheyen (2018), paras. 52 *et seq.*, 60 *et seq.*

<sup>206</sup>Cf. Wolfrum (2010b), paras. 28 *et seq.*

<sup>207</sup>Cf. Buck and Verheyen (2018), paras. 45 *et seq.*, 56 *et seq.*, 68 *et seq.*, 72 *et seq.*

<sup>208</sup>Cf. for a prominent recent example where a private company's duty of care is argued for, *inter alia*, on the basis of the Paris Agreement: District Court of The Hague *Milieudefensie v Shell* (2021) C/09/571932/HA ZA 19-379, paras. 4.4.26 *et seq.* arguing that the "goals of the Paris Agreement represent the best available scientific findings in climate science" (para. 4.4.27); National Contact Point OECD Guidelines for Multinational Enterprises, Final Statement, Oxfam Novib and others

- 95 A third question concerns the referral technique. Two options are conceivable: an explicit listing of specified environmental agreements or even specific norms from those agreements on the one hand or a ‘general’ reference to the entire body of binding international environmental law on the other. The Ecolex Database lists 116 multilateral international environmental agreements with global scope in force.<sup>209</sup> An explicit listing technique may not, at first glance, seem to be particularly viable, however, an annex listing all the relevant agreements would enhance the usability of such a technique and make it easier to navigate the relevant obligations for the duty bearers. A second-best solution could be an illustrative list that explicitly enumerates, as a minimum, the particularly important agreements, meaning such a list would not need to be exhaustive.<sup>210</sup> A general reference to all international environmental law to which a home State is bound may minimise the risk of creating loopholes and need to add long annexures to relevant new laws. However, compiling such references will be more challenging in practice and may face legal objections with regard to the principle of legal certainty.
- 96 Fourthly, when environmental treaties are explicitly enumerated, the question arises whether an entire treaty can be referred to in general terms or whether an explicit reference to specific provisions is required. It has been argued that a general reference to environmental agreements would be largely inadmissible for constitutional reasons because such a reference would lack the necessary legal certainty.<sup>211</sup> Following this view, a reference can be made only to sufficiently clear individual obligation in a specific manner and not to the entirety of an international agreement in a general manner.<sup>212</sup> However, this view does not consider the characteristic feature of due diligence primarily as an obligation of conduct rather than result. Unlike a ‘directly binding command or prohibition’, a due diligence obligation does not directly bind the duty bearer to the referenced standard.<sup>213</sup> Consequently, according to the view presented here, even a general reference to an entire treaty that includes broadly phrased target standards and so forth can be designed in a sufficiently certain manner.<sup>214</sup>
- 97 The fifth question that arises from transferring the ‘human rights model’ to environmental due diligence is: When referencing international environmental treaty law how should agreements that do not bind the State on whose territory

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versus ING, final statement of April 19, 2019, pp. 4 *et seq.*, <https://www.oecdguidelines.nl/documents/publication/2019/04/19/ncp-final-statement-4-ngos-vs-ing>, last accessed 26 April 2022.

<sup>209</sup>As of 13 October 2021, [https://www.ecolex.org/result/?q=&type=treaty&xcountry=Germany&xdate\\_min=&xdate\\_max=&tr\\_status=In+force](https://www.ecolex.org/result/?q=&type=treaty&xcountry=Germany&xdate_min=&xdate_max=&tr_status=In+force), last accessed 26 April 2022.

<sup>210</sup>Cf. Treutner (2018), pp. 17–22, who lists a number of relevant treaties; cf. furthermore the selection by Augenstein et al. (2010), para. 70.

<sup>211</sup>Henn and Jahn (2020), p. 43.

<sup>212</sup>Henn and Jahn (2020), p. 43.

<sup>213</sup>Cf. ¶ 18 and Gailhofer (2020).

<sup>214</sup>Cf. ¶ 162 *et seq.* and with regard to references to human rights treaties: Zimmermann and Weiß (2020), pp. 448 *et seq.*

environmental damage occurs be dealt with? Such a situation may potentially cause a conflict with the ‘prohibition of intervention’ under international law. However, such conflict can only be expected if the rule of international law prescribes conduct that is prohibited under the domestic law of the State in which the environmental damage occurs and the prohibition itself is not contrary to international law. This seems to be a rather unlikely scenario (cf. ¶ 192).

In summary then, referencing environmental agreements is feasible to define EDD’s material scope. However, for this design approach to the material scope to be both comprehensive and effective, it should be complemented by other approaches. This minimises the prospects of producing an inadequate result riddled with gaps and loopholes where many important issues would not be covered.<sup>215</sup>

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### International Soft Law Provisions

The second variation of the ‘referencing approach’ to determine the material scope of EDD consists in referencing international soft law. In a previous publication, with *Peter Gailhofer* and *Remo Klinger*, the present author argued that national German law cannot directly incorporate international soft law standards, i.e. non-binding norms outside the domestic legal system, by simply making a general, dynamic reference to ‘international environmental soft law’. Rather, that publication suggested the German legislature could make reference to an exact set of soft law norms.<sup>216</sup> Failing to do so risks raising the objection that a parliament has delegated its legislative powers to private parties, a scenario that could potentially infringe the democratic principle enshrined in Article 20 of the German Constitution.<sup>217</sup> However, a ‘static reference’ to individual, precisely designated soft law standards does not raise constitutional objections.<sup>218</sup> Such specific references could be included in sector-specific supplementary regulations rather than in a cross-sectoral umbrella regulation.<sup>219</sup> An example of this regulatory approach can be found in the reference of the EU Conflict Minerals Regulation<sup>220</sup> to the ‘OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas’ (Second Edition, OECD 2013), including all its Annexes and Supplements.

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However, a more differentiated assessment of a dynamic and general reference to international soft law standards may be justified for four reasons: Firstly, referring to a substantive environmental standard as a target or reference norm for conducting

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<sup>215</sup> Krebs et al. (2020), p. 38.

<sup>216</sup> Krebs et al. (2020), pp. 41 and 51 with reference to Federal Ministry of Justice (2008), para. 242.

<sup>217</sup> Krebs et al. (2020), pp. 41 and 51 with reference to Federal Ministry of Justice (2008), para. 247 and BVerfGE 143, 38 [56]; similar Henn and Jahn (2020), pp. 43 *et seq.*

<sup>218</sup> Krebs et al. (2020), pp. 41 and 51.

<sup>219</sup> Krebs et al. (2020), p. 41.

<sup>220</sup> Regulation (EU) 2017/821 of the European Parliament and of the Council of 17 May 2017 laying down supply chain due diligence obligations for Union importers of tin, tantalum and tungsten, their ores, and gold originating from conflict-affected and high-risk areas, OJ L 130, 19.5.2017, pp. 1–20; cf. *inter alia* Article 2(o), Article 4(b) and (d), Article 5(1)(a) and (b)(ii) of the Regulation.

due diligence obligations should not be confounded with directly binding someone to the referred standards.<sup>221</sup> Therefore, the constitutional requirements developed for externally referencing norms issued by other legislators cannot be directly transferred to the question of determining the material scope of a due diligence obligation. Secondly, due diligence primarily creates an obligation of conduct rather than one of result.<sup>222</sup> Thirdly, whether a reference to soft law is constitutional or not depends very much on its exact wording. As such, there may be ways to dynamically refer to international soft law standards in a constitutionally legitimate manner. For example, it could be acceptable to combine a general or catch-all clause with the requirement that ‘internationally accepted soft law standards’ be ‘taken into consideration’ when determining the required level of environmental protection the due diligence obligation is designed to provide. Such wording would make it sufficiently clear that the company subject to the due diligence obligation does have a certain amount of discretion when deciding which standard is relevant and how it should be taken into consideration. In terms of legal certainty, such wording would still be an improvement in comparison to simply having a general clause. Finally, the extent to which a dynamic, external reference to soft law is lawful also depends upon the enforcement mechanism. A due diligence obligation that is only enforced ‘privately’ by means of civil liability can include a dynamic reference with less constitutional restrictions than an obligation that is enforced by a more comprehensive regime, in particular, if it includes administrative enforcement measures or criminal sanctions.

**101** Consequently, general and dynamic references to international soft law standards cannot be completely excluded as inadmissible as a detailed examination of the exact wording of the proposed rule is required. From a public international law and, in particular WTO law perspective, referencing international soft law standards has the advantage of invoking a spirit of multilateralism similar to referencing international binding law.<sup>223</sup>

#### ‘Host State’- or ‘Place of Effect’-Standards

**102** A third, relatively straightforward variation of the ‘referencing approach’ consists of references to the domestic law of the State on whose territory a specific value creation stage and the related infringement occurs.<sup>224</sup>

<sup>221</sup> Cf. ¶ 18 and Gailhofer (2020), pp. 3–8.

<sup>222</sup> Cf. ¶ 16.

<sup>223</sup> Cf. ¶ 162 *et seq.*

<sup>224</sup> Cf. Krebs et al. (2020), pp. 38 *et seq.*; Henn and Jahn (2020), p. 40.

### Terminology: Home State, Host State, Business-Activity State, Place of Effect

In the scholarly debate on regulating multinational/transnational enterprises, a focus is typically put on the dichotomy between home and host State law.<sup>225</sup> However, the concept of the host State is, in particular, inadequately narrow for the present regulatory purpose and legal context.<sup>226</sup> Literally, the term refers to a country that ‘hosts’ a foreign company as a ‘guest’ in the sense that the company may set up a subsidiary on the host State’s territory, acquire an interest in a local company or otherwise invest locally.<sup>227</sup> However, to create a transnational EDD obligation that covers entire value chains, it is not so important whether a foreign company has its own, locally incorporated subsidiary in a third country which could be considered a host State to the foreign parent company or foreign investor.<sup>228</sup> If a foreign company directly or indirectly purchases goods or services from an independent (so called ‘arm’s-length’) supplier in a third country, this country is technically not a host State. However, to regulate transnational value chains, this business operation may create a relevant transnational chain of causation. Hence, in both of the above scenarios, environmental risks may occur as a consequence of the operations in a third country as a consequence of the activities of a foreign company. However, in the political and scholarly debate on corporate value chain regulation, the term host State is often used in a much broader and rather untechnical way, which includes the mere presence of parts of a value chain on a country’s territory without entailing any corporate ties to a local company whatsoever.<sup>229</sup>

Irrespective of this, and notwithstanding the aforementioned widespread untechnical use of the term host State, drafting an actual legal norm will require a more precise term to be considered. This term should make clear that the only decisive criterion is that a value-creation activity in a company’s value chain is carried out or an infringement occurs on a third country’s territory. For this purpose, it would be more accurate to speak of the ‘business-activity State’ to reflect that it refers to the State on whose territory a certain business activity takes place.<sup>230</sup> Another suitable alternative could be the term ‘place of effect’. The advantage of the latter is that it is a well-

(continued)

<sup>225</sup> Cf. e.g. Muchlinski (2007), pp. 125 *et seq.* and 177 *et seq.*; Krajewski (2018b), pp. 16 *et seq.*

<sup>226</sup> Cf. Krajewski (2018b), pp. 16 *et seq.*

<sup>227</sup> Cf. for an overview of the various business and legal forms of creating and designing multinational enterprises: Muchlinski (2007), pp. 51 *et seq.*

<sup>228</sup> Krebs et al. (2020), p. 38.

<sup>229</sup> Cf. Krajewski (2018b), pp. 16 *et seq.*

<sup>230</sup> Cf. Winter (2005), p. 28; Krajewski (2018b), pp. 16 *et seq.*; Krebs et al. (2020) p. 38.



established concept in private international law: For example, the general rule in Article 4(1) Rome II Regulation refers to the law of the country in which the damage occurs (i.e. *lex loci damni*). In this sense, EDD could be aimed at complying with the material environmental standards applicable at the ‘place of effect’.<sup>231</sup>

**104** The approach of referencing the local law at the ‘place of effect’ in the context of transnational value chain regulation has already been established in practice. For example, Article 2(f) and (g) EU Timber Regulation, when referring to the status of timber state: “legally harvested” means harvested in accordance with the applicable legislation in the country of harvest; conversely, timber is “illegally harvested” if it has been harvested in contravention of the applicable legislation in the country of harvest. Illegality within the meaning of the prohibition to place such timber on the market (Article 4 EUTR) consequently differs depending on the place of harvest. In the terminology discussed above, the term “place of harvest” could be translated as the ‘place of effect’. Similar approaches may be found in the IUU Regulation<sup>232</sup> on Illegal, Unreported and Unregulated fishing and in the European Commission’s “EMAS Global” guidelines.<sup>233</sup>

**105** However, the approach of referencing ‘host State’ or ‘place of effect’-norms has a weakness: It is only suited to address an enforcement deficit of the local law at the ‘place of effect’; in contrast, regulatory deficits with local law at the ‘place of effect’ cannot be tackled by this approach.<sup>234</sup> Therefore, a simple reference to the local law applicable at the ‘place of effect’ could be a rather flawed approach with limited effect;<sup>235</sup> nevertheless, it will be less controversial and potentially easier to accept for the business community and host States. Having said that, referencing local law in

<sup>231</sup> Cf. Section 3 no. 8(a) BMZ draft; Krebs et al. (2020), p. 38; Henn and Jahn (2020), p. 40.

<sup>232</sup> Cf. Article 2(2)(a) of Council Regulation (EC) No 1005/2008 of 29 September 2008 establishing a Community system to prevent, deter and eliminate illegal, unreported and unregulated fishing, amending Regulations (EEC) No 2847/93, (EC) No 1936/2001 and (EC) No 601/2004 and repealing Regulations (EC) No 1093/94 and (EC) No 1447/1999, OJ L 286, 29.10.2008, pp. 1–32.

<sup>233</sup> Guide on EU corporate, third country and global registration under EMAS (Regulation (EC) No 1221/2009), published in the annex of Commission Decision of 7 December 2011 concerning a guide on EU corporate registration, third country and global registration under Regulation (EC) No 1221/2009 of the European Parliament and of the Council on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS), OJ L 330, 14.12.2011, p. 25: 4.1.1. reads: “Organisations must always be in compliance with the respective national legal requirements of the third countries where the sites included in the EMAS registration are located.”

<sup>234</sup> Krebs et al. (2020), p. 38.

<sup>235</sup> Krebs et al. (2020), p. 38; Henn and Jahn (2020), p. 41.

this manner may raise legal concerns with regard to WTO law<sup>236</sup> and a home State's constitutional law as far as the due diligence obligation is not exclusively enforced by means of private law, in particular civil liability, but also via administrative or criminal law mechanisms.<sup>237</sup>

In summary, referencing local law at the 'place of effect' is a feasible approach to determining EDD's material scope; it becomes insufficient though if and to the extent that local law contains obvious loopholes or the level of protection is blatantly weak (e.g. if 'land grabbing' is being legalised<sup>238</sup>) or even contradicts international law. Overall, it is an approach that is particularly easy to implement and involves comparatively little compliance effort for the duty bearer, however, it is only effective to the extent that there is adequate local enforcement and no regulatory deficit.<sup>239</sup>

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### Home State Standards

A fourth conceivable variation of the 'referencing approach' to determining the material scope of EDD in transnational value chains consists of referencing the typically stricter<sup>240</sup> German or European environmental law as the law of the home State of companies domiciled there.<sup>241</sup> Ideally, such a mechanism could provide incentives to 'export' higher levels of environmental protection from a company's home State to its production sites abroad and possibly even to the sites of its foreign suppliers. The approach aims to remove existing incentives to outsource production to countries with lower environmental standards and thus lower costs. However, the approach entails more difficulties and pitfalls than a more straightforward reference to the local law at the 'place of effect'.

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Despite it being more challenging, there are a few examples where this approach has been explored in practice. The most obvious example may be the European

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<sup>236</sup> Cf. ¶ 213 and Hadjiyianni (2019), p. 233, who argues that requiring compliance with third country law could potentially give rise to most-favoured-nation (MFN)-discrimination, due to the different local standards which need to be met.

<sup>237</sup> Cf. ¶ 215.

<sup>238</sup> Cf. the legislation pending in the Brazilian Congress—often dubbed the 'land grabbing bill' ("PL da grilagem")—*Projeto de Lei n° 510, de 2021*, <https://www25.senado.leg.br/web/atividade/materias/-/materia/146639>, last accessed 26 April 2022, which aims at legalising 'land grabbing'; cf. also previous reports on the policies and measures put in practice by the Bolsonaro administration in the European Commission (ed.), Briefing Note for the Competent Authorities (CA) implementing the EU Timber Regulation December 2019–January 2020 Developed by UNEP-WCMC as a consultant of the European Commission in close cooperation with the EU Member States Competent Authorities, p. 4, [https://ec.europa.eu/environment/forests/pdf/EUTR\\_Briefing\\_note\\_Dec\\_2019-Jan\\_2020.pdf](https://ec.europa.eu/environment/forests/pdf/EUTR_Briefing_note_Dec_2019-Jan_2020.pdf), last accessed 26 April 2022, which refers to a provisional measure signed by Brazil's president on 10 December 2019, aimed at regularising cleared land without any prior inspection by the land reform agency.

<sup>239</sup> Krebs et al. (2020), p. 40.

<sup>240</sup> It may be assumed that environmental law in industrialised home States tend to be stricter than those in the Global South, cf. Anderson (2002), pp. 415–418.

<sup>241</sup> Krebs et al. (2020), p. 39.

Commission's "EMAS Global" guidelines.<sup>242</sup> This piece of soft law requires that EMAS-certified organisations in third countries should align their operations to comply "as closely as possible" with not only local law but also with EU standards and where reference to EU standards in the environmental statement is "desirable".<sup>243</sup> The example may illustrate that referencing home State norms is, to some degree, already part of corporate compliance practice. However, it is obviously a non-binding, voluntary guideline and therefore cannot simply be transferred as is to a binding due diligence obligation.

**109** Examples for a similar approach taken in binding law can be drawn from EU animal-protection law regarding the transportation of livestock and the killing of animals: Pursuant to Article 21(2)(b)(i) of the Official Controls Regulation (EU) 2017/625,<sup>244</sup> in cases involving long journeys for livestock, including those from the territory of the Union to third countries, official controls shall verify compliance with the rules laying down the welfare requirements for animals in the event of their transport. This includes checks of journey logs to determine whether the journey is planned in a manner that facilitates compliance with Regulation (EC) No 1/2005. According to the case law of the ECJ, the substantive provisions of Regulation (EC) no. 1/2005 must be complied with even on those portions of a

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<sup>242</sup>Guide on EU corporate, third country and global registration under EMAS (Regulation (EC) No 1221/2009), published in the annex of Commission Decision of 7 December 2011 concerning a guide on EU corporate registration, third country and global registration under Regulation (EC) No 1221/2009 of the European Parliament and of the Council on the voluntary participation by organisations in a Community eco-management and audit scheme (EMAS), OJ L 330, 14.12.2011, p. 25.

<sup>243</sup>Cf. 4.1.2. of the EMAS global guideline: "In order to ensure that the EMAS scheme maintains its high level of ambition and credibility, it is enviable that the environmental performance of a third country organisation achieves a level as close as possible to the level that EU organisations are required to meet by the relevant European and national legislation. Therefore it is desirable for organisations outside the Community, on top of the references made to the applicable national environmental requirements, to make reference in the environmental statement also to the legal requirements relating to the environment applicable to similar organisations in the Member State where the organisation intends to apply for registration (Article 4(4) of the EMAS Regulation). The environmental requirements on that list should be used as a reference when setting eventual higher additional performance targets, but they are not binding for the assessment of the organisation's legal compliance."

<sup>244</sup>Regulation (EU) 2017/625 of the European Parliament and of the Council of 15 March 2017 on official controls and other official activities performed to ensure the application of food and feed law, rules on animal health and welfare, plant health and plant protection products, amending Regulations (EC) No 999/2001, (EC) No 396/2005, (EC) No 1069/2009, (EC) No 1107/2009, (EU) No 1151/2012, (EU) No 652/2014, (EU) 2016/429 and (EU) 2016/2031 of the European Parliament and of the Council, Council Regulations (EC) No 1/2005 and (EC) No 1099/2009 and Council Directives 98/58/EC, 1999/74/EC, 2007/43/EC, 2008/119/EC and 2008/120/EC, and repealing Regulations (EC) No 854/2004 and (EC) No 882/2004 of the European Parliament and of the Council, Council Directives 89/608/EEC, 89/662/EEC, 90/425/EEC, 91/496/EEC, 96/23/EC, 96/93/EC and 97/78/EC and Council Decision 92/438/EEC (Official Controls Regulation), OJ L 95, 7.4.2017, pp. 1–142.

route that are outside of EU territory.<sup>245</sup> A second example can be identified in Council Regulation (EC) No 1099/2009 of 24 September 2009 on the protection of animals at the time of killing.<sup>246</sup> This Regulation requires live stock to be killed in compliance with certain animal protection standards to be eligible for importation to the EU.<sup>247</sup>

Against the backdrop of the above-mentioned State practice, references to specific EU standards for certain operations or stages of a value chain should not be immediately discarded as an option for determining EDD's material scope in transnational value chains. Indeed, the EP's Corporate Due Diligence and Corporate Accountability Draft Directive suggested defining the phrase "potential or actual adverse impact on the environment" *inter alia* with reference to EU environmental standards (Article 3(7) Draft Directive). However, it was suggested that the referenced standards be explicitly enumerated in an 'Annex xxx' the Directive. However, a proposal for the actual wording of the mentioned 'Annex xxx' was not included in the Draft Directive and, therefore, it is difficult to conclusively assess the proposal.<sup>248</sup>

In contrast, a general reference to all environmental regulations of a home State for an entire value chain is more likely to face legal objections as well as generate unintended side effects: In particular companies domiciled in the Global North may refrain from investing in places with lower standards, in particular in the Global South, if production sites lose the advantages they had because they were regulated by the more lenient local environmental laws. Such repercussions can be problematic from a development-policy perspective but even from an environmental one: Theoretically, the foreign direct investment could improve the environmental performance of industries and operations in third countries even if the production site that received the investment does not fully meet European environmental standards. Such incremental improvements to the environmental performance of local industries may be desirable, however, their operation may be impeded or put at risk if the EDD's target standard is raised too much too quickly. However, this issue could be eased by adding some form of deviation clause (cf. below).

The most obvious legal objection against this approach could stem from world trade law. It needs to be clarified whether and to what extent such an approach could infringe WTO law.<sup>249</sup>

Both legal and development policy concerns will be less pressing if the reference to home State law is combined with an opening or deviation clause to provide

<sup>245</sup> ECJ *Zuchtvieh-Export GmbH v Stadt Kempten* [2015] ECLI:EU:C:2015:259, para. 56 and ECJ *Vion Livestock BV v Staatssecretaris van Economische Zaken* [2017] ECLI:EU:C:2017:783, para. 41. For a critical analysis of this case law cf. Blattner (2019), pp. 169 *et seq.*

<sup>246</sup> OJ L 303, 18.11.2009, p. 1.

<sup>247</sup> Regarding this and further examples cf. Scott (2019), p. 22.

<sup>248</sup> Cf. for an analysis of the Draft Directive: Krebs (2021c).

<sup>249</sup> Cf. for an overview regarding some critical issues with regard to public international law ¶ 173 *et seq.* and regarding WTO law ¶ 198.

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justified leeway, for legal or policy reasons, from the referenced home State standard. Such an approach was proposed by the German Supply Chain Initiative<sup>250</sup> and is advocated by *Roda Verheyen*,<sup>251</sup> who proposed the following wording for a statutory EDD obligation:

...are obliged to identify, assess and prioritize the actual and potential effects of their business activities on the environment (Section 2(1) no. 1-3 UVPG) on an annual basis (risk analysis).<sup>2</sup> If there is reasonable evidence of significant environmental damage or its probable realization, a violation of environmental law at the place of operation or of requirements resulting from international agreements, as well as *unjustifiable deviations from the application of EU environmental regulations* relevant to the specific situation or industry, in particular from the best available technology for plants and processes, these must be verified on site (...) (duty to investigate).<sup>252</sup> (emphasis added)

**114** Arguably, an opening clause allowing justifiable deviations from home State standards would be acceptable from a host State's perspective if it provided sufficient flexibility to make the due diligence's target standard viable for local conditions. An advantage of this approach is that may allow swifter enforcement of the due diligence obligation in the home State: Obligated companies, authorities, courts and lawyers can determine their relevant home State standard much easier than the relevant foreign standard at the 'place of effect'.

### 7.5.2 *General Clause or Catch-All Clause*

**115** The second basic avenue for determining the material scope of EDD, in addition to the variations of the 'referencing approach' outlined above, would be a general clause or 'catch-all clause'.<sup>253</sup> *Elisabeth Henn* and *Jannika Jahn* have convincingly argued that the environmental 'integration principle' may support such an approach.<sup>254</sup> This principle requires consideration of environmental matters in an

<sup>250</sup>Initiative Lieferkettengesetz (2020), p. 50.

<sup>251</sup>Verheyen (2020), p. 12.

<sup>252</sup>Verheyen (2020), p. 13, translation by the author; original wording: "... sind verpflichtet, die tatsächlichen und potenziellen Auswirkungen ihrer Geschäftstätigkeit auf die Umwelt (§ 2 Abs. 1 Nr. 1–3 UVPG) jährlich zu ermitteln, zu bewerten und zu priorisieren (Risikoanalyse).<sup>2</sup> Liegen Anhaltspunkte für einen erheblichen Umweltschaden oder dessen wahrscheinliches Eintreten, eine Verletzung von umweltbezogenem Recht am Tätigkeitsort, oder von sich aus internationalen Abkommen ergebenden Anforderungen, sowie nicht zu rechtfertigende Abweichungen von der Anwendung der für den konkreten Sachverhalt oder Branche relevanten umweltbezogenen Vorschriften der EU, insbesondere der besten verfügbaren Technik bei Anlagen und Prozessen vor, sind diese anhand der konkreten Umstände des Einzelfalls vor Ort zu überprüfen und dabei die Betroffenen sowie Gewerkschaften und relevante Nichtregierungsorganisationen vor Ort einzubeziehen (Ermittlungspflicht)."

<sup>253</sup>Cf. Krebs et al. (2020), p. 43.

<sup>254</sup>Henn and Jahn (2020), p. 40.

‘integrated’ and a rather comprehensive way instead of a fragmented and isolated approach to deal with single-issue problems.<sup>255</sup> There are two readily-conceivable approaches to design a general clause: The first employs a negative definition aimed at preventing harm to certain protected goods while the second employs a positive definition aimed at compliance with a certain standard of conduct. Both variations will be outlined in the following.

### Negative General Clause Related to the Object of Protection

A general clause relating to a legal object of protection would basically create an obligation to exercise due diligence to avoid harming ‘the environment’.<sup>256</sup> The most prominent example of this approach can be found in the French ‘Duty of Vigilance Act’.<sup>257</sup> Article L. 225-102-4, paragraph 1, subparagraph 3, of the amended French Commercial Code states that the ‘plan of vigilance’ required by subparagraph 1 must include appropriate monitoring measures to identify and prevent “risks of serious harm to the environment”.<sup>258</sup> The rather open term ‘environment’ is not defined in the law nor further elaborated in the legislative materials. In this regard, it may raise questions concerning its sufficiency in terms of legal certainty. The French Constitutional Council focused its ruling<sup>259</sup> on the general nature of the terms ‘human rights’ and ‘fundamental freedom’,<sup>260</sup> however, it did not mention the word environment. Moreover, only the norm providing for sanctions was declared void, not the substantive due diligence obligation as such. Finally, the sanctioning norm was worded in a very open manner that left broad leeway for the judge to exercise discretion.<sup>261</sup> It remains to be seen how effective simply mentioning ‘the environment’ as the object protected by the duty of vigilance will prove in practice.<sup>262</sup>

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<sup>255</sup>Cf. Henn and Jahn (2020), p. 40.

<sup>256</sup>Cf. Krebs et al. (2020), pp. 43–48; Krebs (2021c), pp. 26 *et seq.*

<sup>257</sup>Cf. in more detail on the French law ¶ 21–37.

<sup>258</sup>Article L. 225-102-4-I subpara. 3 Code de Commerce reads: “The [vigilance] plan shall include reasonable vigilance measures to identify risks and prevent serious harm to (...) the environment resulting from the corporation’s activities (...)” (“Le plan comporte les mesures de vigilance raisonnable propres à identifier les risques et à prévenir les atteintes graves envers (...) l’environnement, résultant des activités de la société (...)”).

<sup>259</sup>Cf. on the judgment (Constitutional Council of France (2017) 2017-750) ¶ 22.

<sup>260</sup>Constitutional Council of France (2017) 2017-750, para. 13.

<sup>261</sup>Article L. 225-102-4.-II subpara. 3 of the Code de Commerce, cf. on this ¶ 26.

<sup>262</sup>A first litigation case with regard to the environmental aspect has recently been initiated by some French mayors and four NGOs against the oil company TOTAL because of the latter’s insufficient consideration of climate change in its risk analysis published for the years 2018 and 2019. The *Tribunal judiciaire de Nanterre* summons was served on TOTAL on 28 January 2020. On 11 February 2021 the court rejected the procedural objections raised by TOTAL against the civil courts competence to hear the case (TJ Nanterre, ord., 11 févr. 2021, n° 20/00915, [https://www.dalloz-actualite.fr/sites/dalloz-actualite.fr/files/resources/2021/02/ord\\_jme\\_tj\\_nanterre\\_11022021\\_vigilance.pdf](https://www.dalloz-actualite.fr/sites/dalloz-actualite.fr/files/resources/2021/02/ord_jme_tj_nanterre_11022021_vigilance.pdf), last accessed 26 April 2022.

**117** Ideally, if drafting an EDD general clause from scratch, it should go beyond simply mentioning ‘the environment’ in a generic way.<sup>263</sup> As a minimum, such a draft should specify the object of protection in more detail to increase the regulatory impact of the clause and improve its practical applicability. One conceivable approach to describe the object of protection more precisely in this context would be to use the list of different environmental objects of protection in established regulations as a reference model.<sup>264</sup> Such catalogues can be found in places such as texts that cite the list of factors that need to be considered when carrying out an environmental impact assessment in accordance with Article 3 of EIA Directive 2011/92/EU.<sup>265,266</sup> The list in Article 3 EIA Directive reads:

- (a) population and human health;
- (b) biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC;
- (c) land, soil, water, air and climate;
- (d) material assets, cultural heritage and the landscape;
- (e) the interaction between the factors referred to in points (a) to (d).

**118** While it is a solid starting foundation, the above catalogue could be revised to better suit the focus of this chapter by, for example, omitting the protected elements of cultural heritage and landscape and adding more contextually appropriate objects of protection. In this regard, it could be desirable to explicitly include the issue of deforestation, even if this seems closely related to the already-mentioned aspect of climate. Similarly, an alteration to the catalogue in Article 3 of the EIA Directive to clarify the phrase “adverse environmental impact” was suggested by *Colin Mackie*, who recommends defining the word “environment” for the purpose of a cross-sectoral EU due diligence duty as “including (i.e. not a closed list) (. . .):

- (a) all fauna and flora;
- (b) land, soil, water, air; and
- (c) the atmosphere;”<sup>267</sup>

<sup>263</sup> Krebs et al. (2020), p. 43.

<sup>264</sup> Cf. for a similar approach: Mackie (2020).

<sup>265</sup> Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment, OJ L 26, 28.1.2012, p. 1, as last amended by Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment, OJ L 124, 25.4.2014, p. 1.

<sup>266</sup> Cf. Krebs et al. (2020), p. 44, referring to the German UVPG, that transposes the EIA-Directive into national law.

<sup>267</sup> Mackie (2021), p. 311.

Another source of inspiration could be the definition of the term “environmental damage” in Article 2 of the Environmental Liability Directive 2004/35/EC.<sup>268,269</sup> **119**

However, if this concept were to be used as the sole reference to write a negative general clause, more substantial additions and modifications would be necessary.<sup>270</sup>

The draft report<sup>271</sup> prepared by MEP *Lara Wolters*, the rapporteur for the European Parliament’s JURI Committee, proposed a wording that features at least elements of a negative general clause. A centrepiece of the proposed due diligence obligation would have been the term “environmental risk” which was to be defined as: **120**

any potential or actual adverse impact that may impair the right to a healthy environment, whether temporarily or permanently, and of whatever magnitude, duration or frequency. These include, but are not limited to, adverse impacts on the climate, the sustainable use of natural resources, and biodiversity and ecosystems. These risks include climate change, air and water pollution, deforestation, loss in biodiversity, and greenhouse emissions.<sup>272</sup>

However, in the final draft adopted by the Parliament’s Plenary, the clause was dropped and replaced by a concept that combines references to international and Union environmental standards (Article 3(7) Draft Directive).<sup>273</sup>

Finally, it may be worth considering singling out one or more objects of protection and subjecting them to a special regime. However, to ensure a high degree of coherence between various due diligence regimes it seems appropriate not to fully exempt any objects of protection but rather subject them to concretising specifics within a general EDD obligation.<sup>274</sup> As an alternative, existing laws designed to protect specific environmental goods like the German ‘climate protection act’<sup>275</sup> could be supplemented by a climate-protection-related due diligence obligation for companies that is modelled in accordance with a general EDD legislation. **121**

<sup>268</sup> Directive 2004/35/CE of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage, OJ L 143, 30.4.2004, pp. 56–75, as last amended by Regulation (EU) 2019/1010 of the European Parliament and of the Council of 5 June 2019 on the alignment of reporting obligations in the field of legislation related to the environment, OJ L 170, 25.6.2019, pp. 115–127.

<sup>269</sup> Mackie (2020).

<sup>270</sup> When considering such a variation, the Commission’s Guidelines providing a common understanding of the term ‘environmental damage’ as defined in Article 2 of Directive 2004/35/EC of the European Parliament and of the Council on environmental liability with regard to the prevention and remedying of environmental damage 2021/C 118/01, C/2021/1860 (OJ C 118 of 7.4.2021, 1–49) should be considered.

<sup>271</sup> Draft Report with recommendations to the Commission on corporate due diligence and corporate accountability (2020/2129(INL)), Committee on Legal Affairs, Rapporteur: Lara Wolters, PE657.191v01-00, 11.09.2020.

<sup>272</sup> Article 3 indent 9 of the proposal contained in the Draft Report.

<sup>273</sup> Cf. briefly ¶ 110.

<sup>274</sup> Cf. for further considerations regarding climate protection specific due diligence obligations: Gailhofer and Verheyen (2021), p. 402.

<sup>275</sup> Federal Climate-Protection Act (Bundes-Klimaschutzgesetz vom 12. Dezember 2019, BGBl. I S. 2513).



**122** If a legislative approach towards introducing a negative general clause was adopted, the law should specify the extent to which minor adverse effects are acceptable and do not trigger any obligations under the due diligence regime.<sup>276</sup> Therefore, some kind of ‘relevance threshold’ or ‘materiality reservation’ should be considered as without such a criterion, the due diligence obligation would be triggered by any use of resources.<sup>277</sup> The French ‘Duty of Vigilance Act’ stipulates that the duty of vigilance must be aimed at preventing severe violations (‘atteintes graves’) that risk or result in environmental damage. The European Parliament’s Draft Directive on Corporate Due Diligence and Corporate Accountability addressed this issue by limiting the concept of “contribution” via a *de minimis* threshold by excluding minor contributions explicitly: “The contribution has to be substantial, meaning that minor or trivial contributions are excluded” (Article 3(10) s. 2 Draft Directive). Alternatively, if minor environmental damage were to be exempted from the due diligence’s material scope via a general ‘adequacy test’, minimal damage would not need to be considered as part of an ‘adequate’ due diligence obligation.

### **Positive General Clause with Reference to a Standard of Conduct**

**123** A similar, but slightly different approach to the above would consist of drafting a positive general clause. The due diligence’s material scope would be defined with reference to a positive, broadly outlined, environment-related standard of conduct.<sup>278</sup> An example of how this approach could work can be found in the BMZ’s 2019 draft where an attempt is made to define a positive standard of conduct by referring in Section 3 no. 8(c)<sup>279</sup> to the “international state-of-the-art” (“Stand der Technik”, the German equivalent to what is internationally known as ‘best available techniques’ or BAT<sup>280</sup>).<sup>281</sup> A common legal definition of BAT can be found in Article 3(10) of the Industrial Emissions Directive<sup>282</sup> and, if this term is used, it may be understood as a reference to the ‘BAT reference documents’<sup>283</sup> and the ‘BAT conclusions’.<sup>284,285</sup> As such, referencing the BAT-standards resembles the

<sup>276</sup> Cf. Krebs et al. (2020), p. 47.

<sup>277</sup> Cf. Krebs et al. (2020), p. 47.

<sup>278</sup> Krebs et al. (2020), p. 44.

<sup>279</sup> Section 3 no. 8(c) of the BMZ draft defines “fundamental requirements for environmental protection” as requirements “which result from the international state-of-the-art”.

<sup>280</sup> The BAT-concept is being used e.g. in EU- (cf. Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control), OJ L 334, 17.12.2010, p. 17) and US-legislation but also in international treaties such as the Minamata-Convention (cf. Article 2(b), Article 8(4) and (5)(c) of the Convention).

<sup>281</sup> Cf. in more detail on the proposal in the BMZ-outline: Krebs et al. (2020), pp. 44 *et seq.*

<sup>282</sup> Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control), OJ L 334, 17.12.2010, p. 17.

<sup>283</sup> Cf. Article 3(11) Industrial Emissions Directive.

<sup>284</sup> Cf. Article 3(12) Industrial Emissions Directive.

<sup>285</sup> Krebs (2021c), p. 28.

aforementioned reference to substantive home State law and makes the line between the two concepts, reference to home State law and a positive general clause, difficult to distinguish. Consequently, regarding the reference to BAT-standards the same potentials and pitfalls as regarding references to home state law may occur: In a best-case scenario referencing BAT-standards may incentivize the ‘export’ of advanced technology, however, unintended impediments to foreign investments are also conceivable.

While using the BAT standard may imply a reference to specified EU standards, it is possible to use this approach in a manner that entails a more international standard of conduct. Indeed, the BMZ draft pointed in this direction by adding the qualifier “international” to the term “state-of-the-art” (Section 3 no. 8 lit. c) BMZ draft). This could imply a reference to international standards, including soft law such as the ‘Good International Industry Practice’ (GIIP) that is present in the International Financial Corporation’s guidelines (‘Environmental, Health and Safety Guidelines’ (‘EHS Guidelines’) as well as ‘Industry Sector Guidelines’).<sup>286,287</sup> Overall, the approach may lead to similar results as explicitly referencing environmental soft law and technical regulations.

Just as in the case of reference to home State provisions, another option to avoid the above-mentioned unintended side effects could consist of integrating an opening clause similar to that suggested by *Roda Verheyen*.<sup>288</sup> Such an approach could be particularly appropriate regarding emissions which often have harmful environmental impacts only through complex and very difficult to prove causal chains.<sup>289</sup>

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### 7.5.3 Combined Approach

Both, the referencing approach (¶ 89 *et seq.*) and the use of a general clause (¶ 115 *et seq.*) are conceivable options to use in determining the material scope of an EDD obligation, however, both approaches have some downsides. Therefore, setting a material scope that has the greatest potential to cover as many of the foreseeable cases of environmental harm in transnational value chains that may arise, a combination of both approaches including all or some of their variations may be appropriate.<sup>290</sup>

Reference to the local environmental law at the ‘place of effect’ would only represent a minimum standard, therefore, it should be complemented by reference to

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<sup>286</sup> All guidelines are published on the International Finance Corporation’s website at [www.ifc.org/ehsguidelines](http://www.ifc.org/ehsguidelines), last accessed 26 April 2022.

<sup>287</sup> Cf. Krebs et al. (2020), p. 45.

<sup>288</sup> Cf. ¶ 113 *et seq.* and Verheyen (2020).

<sup>289</sup> Cf. Initiative Lieferkettengesetz proposes a twofold point of reference for an environmental due diligence obligation: harm for environmental subjects of protection on the one hand and emissions on the other (cf. Initiative Lieferkettengesetz 2020, p. 49).

<sup>290</sup> Cf. in a similar direction the approach taken by the BMZ draft (see Section 4(3) in conjunction with Section 3 no. 8(a) to (c) and no. 9 of the BMZ draft); Krebs et al. (2020), pp. 46 *et seq.*

international environmental treaty law. This would allow regulatory deficits in the local law of the ‘place of effect’ to be addressed. However, as outlined above, there is no comprehensive canon of environmental treaties that would cover all, or even most, of the relevant environmental issues. For specific issues and industries, references to certain norms within the body of a home State’s environmental norms may be considered. However, if the local law at the ‘place of effect’ has a regulatory deficit regarding a specific matter, no standards can be borrowed from international treaties and no reference to one of the selected environmental norms in home State law applies in the specific case, any remaining regulatory gaps could be covered by a catch-all provision either in form of a negative or a positive general clause.

**128** Two variations of a combination of a general clause with references to certain environmental provisions are conceivable. They differ in the way the general clause is employed: Firstly, the general clause may have only a subsidiary ‘catch-all’ or ‘sweeping-up’ function; in this variation the general clause is relevant only as a last resort if EDD’s material scope cannot be determined by means of the references to existing substantive provisions that shall apply with priority.<sup>291</sup> Secondly, the general clause can serve as a basic, general rule which is subsequently concretised by some or all of the supplementary references to substantive norms; in this variation the general clause serves as a point of departure when determining EDD’s material scope for a specific case.<sup>292</sup> Notably in this context, the choice of which variation to use is somewhat immaterial as the overall result of both will be rather similar.

**129** The key challenge of employing a combination approach consists in clarifying the relationship and, ideally, establishing a hierarchy of the various elements.<sup>293</sup> Especially if reference to the local law at the ‘place of effect’ is included, the due diligence law must provide a sufficiently clear set of criteria that define when this standard is overridden by one of the other elements. Where local law is in breach of international law, the formulation of a corresponding collision rule should not pose major difficulties as any reference to international law will prevail. Furthermore, it appears justifiable to invoke the standard of international law, even if only the home State of the duty bearer is bound to those stricter standards while the State of the ‘place of effect’ is not. This is a viable option as long as it does not lead to the EDD that is rooted in international law prescribing conduct that is banned under local law (‘prescription conflict’). The use of a such a collusion rule also appears justifiable from the perspective of public international law and the principle of non-intervention.<sup>294</sup> In the realm of environmental standards and regulations, however, encountering ‘prescription conflict’ issues seems a rather unlikely scenario.<sup>295</sup>

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<sup>291</sup> Krebs et al. (2020), pp. 46 *et seq.*

<sup>292</sup> Henn and Jahn (2020), pp. 37 *et seq.*

<sup>293</sup> Krebs et al. (2020), p. 47.

<sup>294</sup> Cf. ¶ 188 *et seq.*

<sup>295</sup> Cf. ¶ 193 *et seq.*

In cases where a conflict between references to weaker local laws at the ‘place of effect’ and stricter home State laws does occur, the rule could simply be that the stricter standard prevails. More difficult cases may arise when local laws at the ‘place of effect’ appear to have a regulatory deficit, although not in breach of international law, and no reference to a stricter home State provision applies. This raises the question of which circumstances lead to the local provision being deemed insufficient and a stricter standard being formulated by an interpretation of the general clause.

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At first glance, the difficulties associated with the combined solution may suggest that an EDD’s material scope should rather be determined only by means of a general clause. This would render obsolete the clarification of the relationship between different points of reference for EDD. However, following this path reveals that similar difficulties arise and begs the question: How does the general clause relate to existing local environmental standards and can local environmental provisions be superseded or overridden by an EDD obligation whose material scope is determined by a general clause? Furthermore, simply employing a general clause bears the risk of leaving too much leeway for interpretation to the duty bearers, relevant authorities, and courts.

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## 7.6 Enforcing Environmental Due Diligence Through Tortious Liability

To effectively prevent environmental harm in transnational value chains an EDD obligation needs to be enforced through appropriate mechanisms. Irrespective of the due diligence obligation’s material scope, a broad spectrum of possible enforcement instruments in national home State law can be taken into consideration.<sup>296</sup> However, given the topic of this study, this chapter focuses on enforcement by means of tortious liability. Since tortious liability of private companies is generally a matter of national law, the relevant issues are discussed here by way of example for the German legal system.

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<sup>296</sup>The spectrum of principally permissible and potentially effective enforcement instruments ranges from rather soft instruments to increase market transparency and corporate governance self-regulation, to administrative oversight and enforcement as well as administrative fines and criminal sanctions, liability under unfair competition law, incentives under public procurement and subsidy regulations through to import bans; cf. for a more detailed overview: Krebs et al. (2020), pp. 52–61; Klinger et al. (2016), pp. 68 *et seq.*

### 7.6.1 *Liability's Twofold Function*

- 133** From the legislature's perspective, liability for tortious acts serves a twofold<sup>297</sup> purpose:<sup>298</sup> According to the traditional and still dominant view among legal scholars, in particular in Germany, civil liability is primarily aimed at compensation for damage.<sup>299</sup> In this way, compensation through liability mechanisms can be seen as a manifestation of 'corrective justice'. However, it is now also widely recognised that tort law has a behaviour-influencing effect.<sup>300</sup> Therefore, the fact that the legislator may use tort law and liability instruments to both incentivise and deter certain behaviour is unlikely to face any significant objections.<sup>301</sup>
- 134** Hence, a tort-based liability mechanism for human rights abuses and environmental harm in transnational value chains can be justified in two ways: Firstly, from a 'corrective justice' perspective, the negative impact of abuses and harm in transnational value chains should not be borne by employees and local communities involved in or impacted by those value chains. Rather, such negative external effects should be internalised in the cost function of the involved companies and ultimately reflected in the final price of their products. In a nutshell, this principle is aptly described by the much-cited catchphrase that summarised the rationale of the worker's compensation legislation passed at the beginning of the twentieth century: "The price of the product should bear the blood of the workman."<sup>302</sup> This normative idea can be generalised for all negative external effects so that the price of the product should bear all the costs of all negative externalities, including those related to environmental harm.<sup>303</sup> Secondly, the legislature can use liability as a deterrent enforcement mechanism. If a perpetrator anticipates that he will be held liable and forced to compensate for any damage negligently caused by him, this can be an incentive for compliance with the required duty of care.
- 135** Coupling value chain due diligence with a civil liability mechanism also offers some advantages and can prove to be quite effective, at least in some situations. One such advantage is that when compared to administrative oversight and public enforcement, such a coupling is a low-cost, or perhaps even a no-cost, mechanism from a public spending perspective. At the same time, is certainly less vulnerable, if

<sup>297</sup> Sometimes punishment is discussed as a third purpose of tortious liability.

<sup>298</sup> Cf. above in more detail on the functions of liability, Chap. 2, ¶ 45 *et seq.* (Sects. 2.4 and 2.4.1).

<sup>299</sup> Cf. for an overview Jansen (2003), p. 36; Wagner (2006), pp. 451 *et seq.*

<sup>300</sup> Wagner (2006); Franck (2016), pp. 54–69; regarding the contested question, whether this accepted preventive function of tort law justifies normative conclusions with regard to the interpretation of existing liability norms cf. Wagner (2020), para. 45 *et seq.*

<sup>301</sup> Cf. in particular with regard to environmental matters Lübke-Wolff (2001), p. 485.

<sup>302</sup> The slogan is attributed to the former British prime minister Lloyd George, cf. Williams and Barth (1973), p. 21.

<sup>303</sup> Cf. on the issue of internalisation of externalities by means of civil liability, Chap. 2, ¶ 45 *et seq.* (Sects. 2.4 and 2.4.1).

not immune, to legal objections regarding due diligence’s extraterritorial impacts (Sect. 7.7).

### 7.6.2 *Legislative Options: “Big Solution” vs. “Small Solution”*

Essentially, there are two fundamentally differing options for integrating a new due diligence obligation as a relevant standard of care into domestic tort law: **136**

The first approach, labelled by *Leonhard Hübner* as the ‘small solution’,<sup>304</sup> was proposed, *inter alia*, in the 2016 NGO proposal for a German HRDD Bill (cf. Section 15). According to the ‘small solution’, the due diligence obligation serves as a relevant standard of care in determining whether a defendant has caused damage negligently. To this end, the due diligence obligation in home State law is declared to be an ‘overriding mandatory provision’ only to the extent that it serves to determine the relevant standard of care. All other elements of the claim need to be assessed according to the law applicable pursuant to Article 4 Rome II Regulation, particularly regarding damage, causation and time limitations. This approach may more readily gather politically support as it leaves the national substantive civil liability law principally untouched while also deviating less from European Union law (Article 4(1) Rome II). **137**

The second option, labelled by *Hübner* as the ‘big solution’,<sup>305</sup> consists of establishing an entirely new legal basis for tort claims in the due diligence act and is—cautiously—favoured by *Hübner*.<sup>306</sup> The ‘big solution’ requires that the entire legal basis be deemed as an ‘overriding mandatory provision’ within the sense of Article 16 Rome II Regulation. Regarding the enforcement of an EDD obligation by means of tortious liability, it has greater potential than the ‘small solution’ because some of the problems detailed below can be addressed more easily by appropriately drafting the new legal basis for a tort claim triggered by a violation of the due diligence obligation. However, the ‘big solution’ seems significantly less likely to pass the hurdles of the required legislative procedure. The legislature’s concerns regarding the liability issue in the process of developing and passing the German ‘Supply Chain Due Diligence Act’, with its last-minute amendment to explicitly exclude new civil liability claims (cf. Section 3(3) of the Act), illustrate this. Furthermore, the ‘big solution’ may face bigger legal challenges in EU primary **138**

<sup>304</sup>Cf. *Hübner* (2022), p. 467: “kleine Lösung”.

<sup>305</sup>Cf. *Hübner* (2022), p. 467: “große Lösung”.

<sup>306</sup>See *Hübner*’s detailed reasoning, *Hübner* (2022), pp. 467 ff, according to which the big solution is generally more suitable (“zweckmäßig”) (pp. 484 *et seq.*) and avoids a *depeçage* (pp. 478 ff), although the small solution may be more easily designed in a compliant manner with regard to EU law (pp. 473–476).

and secondary law.<sup>307</sup> However, if civil liability is provided for in a future EU directive, these issues will be less problematic, a prospect that seems plausible given the European Parliament's Draft Directive suggested a quite far-reaching civil liability provision.<sup>308</sup>

### 7.6.3 Challenges of Employing Tortious Liability as Enforcement Mechanism

- 139** How effective tortious liability as an enforcement mechanism will be depends, of course, on various factors. Firstly, following a grossly simplified rational choice perspective, the costs of compliant business operations and the potential additional gains from non-compliant business models are relevant. Secondly, the method of calculating damages in the relevant legal system will impact the influence of tort law on a company's risk calculation. For example, the deterring effects can be stronger if the damage calculation is based on the profits the perpetrator can make by violating the due diligence obligation rather than the actual losses of the victim.<sup>309</sup> Moreover, the deterring effects will be even stronger if tort claims are not limited to being commensurate with the economic gains of the perpetrator but instead allow the awarding of even higher punitive damages.<sup>310</sup>
- 140** Thirdly, in the context of complex and rather non-transparent value chains, both the probability of discovering and proving the perpetrator's causal contribution and the likely success of the judicial enforcement of a liability claim influence the deterring effects of liability risks. One important factor related to the probable success of any judicial enforcement of liability claims is the design of certain elements of procedural law. These particularly concern the rules on the burden of

<sup>307</sup>Cf. in detail: Hübner (2022), pp. 473–476.

<sup>308</sup>Cf. on this matter and in particular the contested issue of the EU's legislative competence: Krebs (2021c), pp. 41–43.

<sup>309</sup>In German and EU law on the protection of intellectual property the calculation of damages shall consider, *inter alia*, any unfair profits made by the infringer (cf. Article 13(1)(a) of the Directive 2004/48/EC of 29 April 2004 on the enforcement of intellectual property rights, OJ L 157 30.4.2004, p. 45 and Section 97(2) sentence 3 of the German Intellectual Property Act (Gesetz über Urheberrecht und verwandte Schutzrechte vom 9. September 1965 (BGBl. I S. 1273), zuletzt geändert durch Art. 1 G vom 28.11.2018 (BGBl. I S. 2014): “Bei der Bemessung des Schadensersatzes kann auch der Gewinn, den der Verletzer durch die Verletzung des Rechts erzielt hat, berücksichtigt werden”). Particularly in the field of non-material damages the German Federal Court of Justice (Bundesgerichtshof) argued in the case of a violation of the right of personality (allgemeines Persönlichkeitsrecht) the deterring effect of the damages awarded shall be considered for their calculation (cf. German Federal Court of Justice VI ZR 56/94 (1994); German Federal Court of Justice VI ZR 255/03 (2004)).

<sup>310</sup>Cf. Wagner (2006), pp. 471 ff; however, such an approach is unlikely to be adopted many jurisdictions outside the US.

proof and the issue of legal standing.<sup>311</sup> Often, liability claims are more likely to exert behavioural impact if collective claims are allowed to enforce them. Another factor that influences the likelihood of successful ‘private enforcement’ is related to litigation costs and litigation funding options for potential claimants. These factors that may impact the effectiveness of ‘private enforcement’ by means of tortious liability will be explained in more detail in the following sections.

### Actionable Damage

Tortious liability can serve as an effective enforcement mechanism only to the extent that actionable damage can be expected. This is particularly problematic in many cases involving human rights violations such as child labour, freedom of speech, freedom of association and so forth. The same applies to certain environmental harm that does not result in the impairment of human health or economic loss.<sup>312</sup> Indeed, instances of purely ecological damage to ecosystems may not be actionable at all, depending on the national legal system of standing. However, several approaches to how this issue may be tackled are discussed elsewhere in this study [Chap. 6, ¶ 61 *et seq.* (Sect. 6.6.1)] and include actions such as establishing a legally protected interest of individuals concerning collective goods or a subjective ‘right to a healthy environment’.<sup>313</sup> While a system of administrative liability would be challenging to adopt for transnational cases due to jurisdictional restrictions,<sup>314</sup> there is no coercive reason why a foreign municipality should not be granted standing in a civil procedure involving restitution for purely ecological damage.<sup>315</sup> However, these approaches would require the creation of a new legal basis for such tort claims and, therefore, they can only be addressed by means of a ‘big solution’.<sup>316</sup>

Regardless of these problems, private enforcement is particularly promising where large amounts of damages are at stake, especially if potential plaintiffs have the necessary means to fund their litigation efforts (example: antitrust damages actions). Certain behaviour-influencing effects are also likely to emerge if individual damage awards are not particularly high on their own, but the facts that need to be established and proven in court proceedings are of a simple nature. In this case, the claims can be enforced cost-effectively or with low risk by means of standardised and partially automated processing (example: online portals for compensation claims under the EU Flight Compensation Regulation (EC) No 261/2004<sup>317</sup>).

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<sup>311</sup> Cf. on standing, Chap. 6, ¶ 39 *et seq.* (Sect. 6.4) and ¶ 144.

<sup>312</sup> Cf. on the problems related to the problems regarding ecological damage, Chap. 6, ¶ 61 *et seq.* (Sects. 6.6.1 and 6.6.2).

<sup>313</sup> Cf. Chap. 6, ¶ 72 *et seq.* (Sect. 6.6.3).

<sup>314</sup> Cf. Chap. 6, ¶ 62 (Sect. 6.6.1).

<sup>315</sup> Cf. on the issue of *parens patriae* claims and standing of municipalities, Chap. 8, ¶ 66, 78 *et seq.* (Sect. 8.3.1).

<sup>316</sup> Cf. ¶ 137.

<sup>317</sup> Regulation (EC) No 261/2004 of the European Parliament and of the Council of 11 February 2004 establishing common rules on compensation and assistance to passengers in the event of denied boarding and of cancellation or long delay of flights, and repealing Regulation (EEC) No 295/91, OJ L 46, 17.2.2004, pp. 1–8.



**143** Certain environmental tort claims may have such features, especially with regard to extractive industries and in cases involving industrial-plant disasters, however, many other claims regarding environmental harm do not. Even if there is theoretically-actionable damage, a substantial number of the claims filed in court are unlikely to succeed if small individual claims are spread across large numbers of individuals, even if the overall damage is tremendous. In this regard, the problems associated with establishing what amounts to actionable damage is caused by the frequently cumulative nature of environmental harm.

### **Burden of Proof**

**144** A critical factor determining the impact of a liability regime on corporate behaviour are the rules regarding the burden of proof.<sup>318</sup> Pursuant to German civil procedure, the plaintiff generally bears the full burden of proof and, as such, must deliver and prove all facts that the claim is based on. In German case law, however, there are many constellations where courts can ‘facilitate’ or ‘ease’ the burden of proof (‘Beweiserleichterung’) in various ways, such as *prima facie* evidence (‘Anscheinsbeweis’),<sup>319</sup> rebuttable assumptions (‘widerlegliche Vermutungen’) or even reverse which party bears the burden (‘Beweislastumkehr’). Relevant cases include claims regarding pharmaceutical liability,<sup>320</sup> medical doctors’ liability,<sup>321</sup> investment advisor’s liability,<sup>322</sup> organizational obligations<sup>323</sup> etc.<sup>324</sup> In German environmental liability law, courts have eased the burden of proof regarding the causation of damage by emissions if the claimant can prove that the defendant exceeded relevant emission standards.<sup>325</sup> Whereas such facilitations are usually employed by courts on a case by case basis, there are a few explicit provisions that reverse the burden of proof or ease it other ways; an example can be found in

<sup>318</sup>Cf. Hübner (2022), pp. 341 *et seq.*

<sup>319</sup>For a brief introduction to *prima facie* evidence under German civil procedure cf. Foerste (2020), paras. 23 *et seq.*

<sup>320</sup>Pflüger (2003), p. 363.

<sup>321</sup>German Federal Court of Justice VI ZR 34/03 (2004).

<sup>322</sup>If it is established that (pre-)contractual information obligations have been violated, it is assumed that the violation caused the damaging investment decision (Kausalitätsvermutung).

<sup>323</sup>German Federal Court of Justice III ZR 92/16 (2017).

<sup>324</sup>Cf. for an overview Wagner (2020), para. 89 *et seq.*

<sup>325</sup>German Federal Court of Justice VI ZR 223/82 (1984); German Federal Court of Justice V ZR 267/03 (2004); German Federal Court of Justice VI ZR 372/95 (1997); Higher Regional Court of Düsseldorf 22 U 9/01 (2001).

Section 6(1)<sup>326</sup> of the German Environmental Liability Act that contains a presumption of cause.<sup>327</sup>

However, such examples remain the exception to the above-mentioned general rule: Each party bears the burden of proving all of the facts that are favourable to the respective party (referred to in German legal doctrine as ‘Rosenbergsche Formel’). Consequently, for a claim based on a breach of a new EDD obligation, a plaintiff would typically have to prove in particular that there was a culpable breach of the duty of care resulting from the due diligence standard, damage resulted and there was causation. Proving the latter in particular will be quite challenging as the plaintiff has to prove that the damage would not have occurred if the defendant had acted in compliance with his due diligence/duty of care. The more distance between the defendant and the point in the value chain where the damage occurred, the more difficult it will be to prove causation. Hence, if tortious liability is meant to be an effective enforcement mechanism, the legislature should consider easing or shifting the burden of proof for violating the due diligence obligation and/or causation in certain circumstances.<sup>328</sup> Shifting the burden of proof to establish that there was no violation of the due diligence obligation would create a strong incentive for companies to engage in meaningful due diligence efforts and thorough documentation.<sup>329</sup>

Further research is required to identify situations in which shifting the burden of proof regarding the causal link between the harm done and a breach of due diligence, and thereby the duty of care, could be adequate. There needs to be a differentiated answer to this question, in particular if the due diligence obligation potentially covers the entire value chain. This can result in very long chains of causation and, therefore, an undifferentiated approach of generally reversing the burden of proof for all cases may face justified objections. However, shifting the burden of proof regarding causation could be justified where the damage occurs within the sphere of direct control of the defendant company,<sup>330</sup> although doing so will require the ‘big solution’.<sup>331</sup>

Regarding the problems associated with the necessity to prove there was a breach of the due diligence obligation by the defendant, the claimant’s difficulties can be further eased by other means: The German NGO proposal of 2016 and the 2019

<sup>326</sup>Section 6(1) Environmental Liability Act reads: “If an installation is likely to cause the damage that occurred on the basis of the given facts of the individual case, it is presumed that the damage was caused by this installation. The likelihood in the individual case shall be evaluated on the basis of the operating procedures, the facilities used, the type and concentration of the substances used and released, the meteorological factors, the time and place the damage occurred and the type of damage as well as all the other given facts that speak for or against the causing of damage in the individual case.” (translation issued by Federal Ministry of Justice and Consumer Protection).

<sup>327</sup>Cf. e.g. Section 6 of the German Environmental Liability Act (Umwelthaftungsgesetz).

<sup>328</sup>For a rather restrained approach to easing the burden of proof see: Hübner (2022), pp. 312 *et seq.*

<sup>329</sup>Cf. Gailhofer (2020), p. 19.

<sup>330</sup>Cf. Gailhofer (2020), p. 20.

<sup>331</sup>Cf. ¶ 138.

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BMZ draft suggested that the internal documentation of carrying out due diligence by the obliged company shall be done also in the interest of affected third parties: Section 11(1) of both drafts recommended stipulating that compliance with the due diligence obligations must be documented, *inter alia*, “to preserve evidence in the interest of those affected by human rights violations”.<sup>332</sup> Thereby, claimants would have access to the documentation via Section 422 ZPO (German Code of Civil Procedure) and Section 810 BGB (German Civil Code).<sup>333</sup>

### **Mobilisation Cost Factors: The Cost of Fact-Finding and Legal Action, Standing and Group Actions**

**148** The right to bring an individual action would be, at least theoretically, open to any person who has suffered an actionable loss due to a culpable breach of due diligence. However, individual actions are, in some cases, likely to be of limited effectiveness as an instrument of private enforcement due to the high “mobilisation costs” under the current Code of Civil Procedure.<sup>334</sup> Factors that will impact the mobilisation costs include the cost rules of civil procedure, the standing of NGOs and the admissibility of collective legal action as well as the cost for pre-trial investigations and fact-finding efforts.

**149** The ‘chilling effect’ of the ‘loser-pays’, as a principle in court proceedings, has been examined in a study regarding the legal system of the UK.<sup>335</sup> One can assume that similar effects will be seen in the German legal system and this ‘chilling effect’ can only be partially mitigated by legal aid schemes.<sup>336</sup> Currently, typical scenarios for cases following this path will involve victims/plaintiffs from the Global South for whom a lawsuit in Germany or another EU Member State will, in all likelihood, be particularly burdensome (e.g., language barriers, geographical distance, restrictive visa policies, legal fees and a foreign legal system that may require translation services etc.). Moreover, the facts of the case will regularly be legally and factually complex because fact-finding has to be carried out abroad with the possibility<sup>337</sup> that foreign law has to be applied. Extensive pre-financed research will be required before such legal action can be taken. Hence, it is not surprising that filing lawsuits

<sup>332</sup>Original wording of Section 11(1) sentence 1 SorgfaltspflichtenG: “Die Einhaltung der Pflichten aus §§ 5 bis 10 ist – auch zur Beweissicherung im Interesse der von Menschenrechtsverletzungen Betroffenen – zu dokumentieren.”

<sup>333</sup>Klinger et al. (2016), p. 67.

<sup>334</sup>Cf. Baer (2016), § 7, paras. 27 *et seq.*

<sup>335</sup>Vanhala (2012).

<sup>336</sup>Under the German rules of civil procedure legal aid covers only the court fees and the legal fees for the own lawyer; the lawyer fees of the other party must be paid by the losing party, even if legal aid was granted; cf. Section 123 of the German Code of Civil Procedure (‘ZPO’).

<sup>337</sup>Pursuant to Article 4 Rome II regulation foreign law of the State where the damage occurred (*lex loci damni*) would typically be applicable; regarding the special rule in Article 7 Rome II for environmental damage cf. ¶ 158 *et seq.*

of this kind in Germany or elsewhere in the EU by affected claimants from the Global South is an exceptionally rare occurrence.<sup>338</sup>

If private enforcement is to develop its full behaviour-influencing potential, the use of collective legal action would be crucial. The German legal system traditionally insists on relatively restrictive requirements for legal standing.<sup>339</sup> However, even in Germany, there are a number of legal fields in which certain associations do enjoy a right of collective action ('Verbandsklage'). The possibility of such collective legal action is provided for in the areas of anti-discrimination of persons with disabilities,<sup>340</sup> consumer protection,<sup>341</sup> unfair competition,<sup>342</sup> antitrust law<sup>343</sup> and, as a result of Article 9(3) Aarhus Convention<sup>344</sup> and the subsequent Directive,<sup>345</sup> in the field of environmental law.<sup>346</sup> Collective action will be primarily undertaken

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<sup>338</sup>Cf. Hübner (2022), pp. 129 *et seq.*

<sup>339</sup>This is primarily relevant in cases involving proceedings under the Code of Administrative Court Procedure ('VwGO'). Cf. Section 42(2) VwGO, according to which rescissory and enforcement actions ('Anfechtungs-/Verpflichtungsklagen') require that a plaintiff may claim a violation of his/her own (subjective) rights.

<sup>340</sup>Section 15 of the German Disability Equality Act (Behindertengleichstellungsgesetz vom 27. April 2002 (BGBl. I S. 1467, 1468), das zuletzt durch Artikel 3 des Gesetzes vom 10. Juli 2018 (BGBl. I S. 1117) geändert worden ist).

<sup>341</sup>Cf. Sections 3 *et seq.* of the German 'Injunctive Relief Act' (Unterlassungsklagengesetz in der Fassung der Bekanntmachung vom 27. August 2002 (BGBl. I S. 3422, 4346), das zuletzt durch Artikel 4 des Gesetzes vom 17. Juli 2017 (BGBl. I S. 2446) geändert worden ist) and Section 8 (3) no. 3 of the German 'Act against Unfair Competition' (Gesetz gegen den unlauteren Wettbewerb (UWG) in der Fassung der Bekanntmachung vom 3. März 2010 (BGBl. I S. 254), das zuletzt durch Artikel 5 des Gesetzes vom 18. April 2019 (BGBl. I S. 466) geändert worden ist); cf. Halfmeier (2015).

<sup>342</sup>Cf. Section 8(3) no. 2 German 'Act against Unfair Competition' (UWG).

<sup>343</sup>Cf. Section 33(4) of the German 'Act against Restraints of Competition' (Gesetz gegen Wettbewerbsbeschränkungen (GWB) in der Fassung der Bekanntmachung vom 26. Juni 2013 (BGBl. I S. 1750, 3245), das zuletzt durch Artikel 1 des Gesetzes vom 25. März 2020 (BGBl. I S. 674) geändert worden ist).

<sup>344</sup>UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters done at Aarhus, Denmark, on 25 June 1998 ("Aarhus Convention").

<sup>345</sup>Directive 2003/35/EC of the European Parliament and of the Council of 26 May 2003 providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment and amending with regard to public participation and access to justice Council Directives 85/337/EEC and 96/61/EC, OJ L 156, 25.6.2003, pp. 17–25 as amended most recently by Directive (EU) 2016/2284 of the European Parliament and of the Council of 14 December 2016 on the reduction of national emissions of certain atmospheric pollutants, amending Directive 2003/35/EC and repealing Directive 2001/81/EC, OJ L 344, 17.12.2016, pp. 1–31.

<sup>346</sup>Cf. Gesetz über ergänzende Vorschriften zu Rechtsbehelfen in Umweltangelegenheiten nach der EG-Richtlinie 2003/35/EG (Umwelt-Rechtsbehelfsgesetz—UmwRG) in der Fassung der Bekanntmachung vom 23. August 2017 (BGBl. I S. 3290), das durch Artikel 4 des Gesetzes vom 17. Dezember 2018 (BGBl. I S. 2549) geändert worden ist.

when seeking injunctive relief or seeking administrative measures to be taken. In some cases, a “confiscation of profits” can be achieved through collective action,<sup>347</sup> meaning the defendant would be ordered to pay certain illegally obtained profits to the State rather than the suing claimant. This is likely to be a reason why there have been very few cases in which associations have sued for the confiscation of profits and, therefore, these provisions have been criticised as largely ineffective.<sup>348</sup>

**151** With regard to a potential statutory EDD obligation in German law the right of collective action for certain environmental NGOs (‘Umweltverbandsklage’), set out in the Environmental Appeals Act (‘UmwRG’),<sup>349</sup> is of particular interest. It can be legitimately asked whether Germany is, irrespective of its good intentions,<sup>350</sup> in full compliance with Article 9(3) of the Aarhus Convention<sup>351</sup> as the catalogue defining the UmwRG’s scope in Section 1 can, at best, be regarded as sufficient only if it is interpreted very extensively.<sup>352</sup> Nevertheless, in order to clarify the question of legal standing, it seems preferable to explicitly include administrative implementation measures with regard to a new statutory EDD obligation in the catalogue of Section 1 UmwRG. If an EDD obligation were to be provided for in EU law, the legal standing of environmental NGOs could arguably be based on ECJ case law without any further amendments to the German UmwRG or the rules governing administrative courts’ procedures.<sup>353</sup> However, if this were to be the case, an explicit clarification in the UmwRG would ideally still be included to achieve a satisfactory degree of legal clarity.

**152** The second type of collective action established in the German legal system is ‘model declaratory proceedings’ (Musterfeststellungsklage), known in German

<sup>347</sup>Cf. Section 34a German ‘Act against Restraints of Competition’ (GWB) and Section 10 German ‘Act against Unfair Competition’ (UWG).

<sup>348</sup>Meller-Hannich and Höland (2010), p. 142: “almost entirely ineffective” (“nahezu vollständig ineffektiv”).

<sup>349</sup>Umweltrechtsbehelfsgesetz—UmwRG.

<sup>350</sup>Cf. BT-Drs. 18/9526, Gesetzentwurf der Bundesregierung, Entwurf eines Gesetzes zur Anpassung des Umwelt-Rechtsbehelfsgesetzes und anderer Vorschriften an europa- und völkerrechtliche Vorgaben, 5.09.2016 pp. 2 and 23.

<sup>351</sup>Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters done at Aarhus, Denmark, on 25 June 1998.

<sup>352</sup>Cf. Schlacke (2017, 2018), Heß (2018), Guckelberger (2020), Brigola and Heß (2017), and Franzius (2018); cf. on the policy debate before the most recent amendment of the UmwRG: Schmidt et al. (2017).

<sup>353</sup>Cf. ECJ *Protect Natur-, Arten- und Landschaftsschutz Umweltorganisation* [2017] ECLI:EU:C:2017:987, para. 47; recently opinion AG Rantos [2022] ECLI:EU:C:2022:156 in ECJ *Deutsche Umwelthilfe e.V. v Bundesrepublik Deutschland* Case C-873/19 [judgment forthcoming]; as a result according to this case law Article 9(3) Aarhus Convention in conjunction with Article 47 Charter of Fundamental Rights of the European Union grants legal standing to certain environmental NGOs to take legal action for enforcing objective EU environmental law, cf. Wegener (2018); cf. from the case law in Germany: Administrative Court of Berlin ‘Gigaliner’ VG 11 K 216.17 (2018).

investment law<sup>354</sup> and—more recently—in consumer protection law.<sup>355</sup> This type of lawsuit can be filed by a recognised consumer protection association. It aims at a binding determination of certain facts and legal questions that are relevant for deciding on individual claims (Section 606(1) ZPO). Individual consumers can join the lawsuit by registering in an official claims register (Section 609 ZPO) to the effect that they (and the defendant) will be bound by the model declaratory judgment (Section 613 ZPO).<sup>356</sup>

Designing a tortious liability claim as an effective mechanism for private enforcement of due diligence obligations in transnational value chains would suggest extending the model declaratory proceedings to such claims of affected parties as a collective redress mechanism. For legislative approaches at the EU level, the recently adopted Directive (EU) 2020/1828,<sup>357</sup> could serve as a point of reference for the development of representative action to protect the collective interests of the environment and people who are affected by transnational value chains.

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### International Jurisdiction of German Courts

Jurisdiction of national Courts within the EU for claims against companies incorporated on EU territory is relatively straightforward to establish, even *de lege lata*.<sup>358</sup> Pursuant to Article 4(1) and Article 63(1) Brussels I Recast Regulation, a company may generally<sup>359</sup> be sued at the place of their statutory seat, central administration or principal place of business. The ECJ has explicitly rejected the *forum non conveniens* objection<sup>360</sup> and, only in exceptional cases, is the Brussels I Recast Regulation not applicable.<sup>361</sup>

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A different and much more difficult question is whether, and under which circumstances, a German court has jurisdiction for a claim against a foreign company, including foreign incorporated subsidiaries of domestic parent companies.<sup>362</sup> In a number of proceedings in the UK and the Netherlands, a successful approach consisted of suing the foreign subsidiary together with the domestic parent company

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<sup>354</sup>Cf. the German ‘Act on Model Case Proceedings in Disputes under Capital Markets Law (Capital Markets Model Case Act – KapMuG)’ (Gesetz über Musterverfahren in kapitalmarktrechtlichen Streitigkeiten (Kapitalanleger-Musterverfahrensgesetz—KapMuG) vom 19. Oktober 2012 (BGBl. I S. 2182), das zuletzt durch Artikel 8 Absatz 2 des Gesetzes vom 8. Juli 2019 (BGBl. I S. 1002) geändert worden ist).

<sup>355</sup>Sections 606 *et seq.* German Code of Civil Procedure (ZPO).

<sup>356</sup>Cf. for an overview of the relatively new procedure: Meller-Hannich (2018).

<sup>357</sup>Directive (EU) 2020/1828 of the European Parliament and of the Council of 25 November 2020 on representative actions for the protection of the collective interests of consumers and repealing Directive 2009/22/EC, OJ L 409, 4.12.2020, pp. 1–27.

<sup>358</sup>Cf. in more detail, Chap. 6, ¶ 27 *et seq.* (Sects. 6.3.3 and 6.3.4).

<sup>359</sup>Cf. on the rare and narrow exceptions under Articles 33 and 34 Brussels I Recast Regulation, Chap. 6, ¶ 32 (Sect. 6.3.3).

<sup>360</sup>ECJ *Andrew Owusu v N. B. Jackson* [2005] ECLI:EU:C:2005:120, para. 37–46.

<sup>361</sup>Even in those cases, the same result follows from German international civil procedural law that stipulates international jurisdiction at the place of domicile Sections 12 and 17 ZPO.

<sup>362</sup>Cf. Chap. 6, ¶ 33 and 35 *et seq.* (Sects. 6.3.3 and 6.3.4) and for this problem in German and EU-civil procedure: Hübner (2022), pp. 104 ff; Hartmann (2018), pp. 289 *et seq.*

before a domestic court. However, this does not appear to be an approach that is readily transferable to German international civil procedure law.<sup>363</sup> Therefore, it should be considered, as a general-policy consideration regarding access to justice for harm caused by multinational corporate groups, to moderately extent the jurisdiction of German courts with regard to foreign subsidiaries of German parent companies if a fair trial in the otherwise competent jurisdiction cannot be guaranteed.<sup>364</sup> However, as long as the proposed due diligence act is only applicable to companies domiciled in Germany, these practically relevant questions do not affect the application of the proposed law.

#### 7.6.4 *Private International Law: Environmental Liability in Transnational Cases (Articles 4, 7, and 16 Rome II Regulation)*

**156** To optimally harness the behaviour-influencing potential of tortious liability, a due diligence obligation in a German value chain act would have to define the duty of care under the tort law that is applicable pursuant to private international law. However, it is not self-evident which national tort law applies in cases involving transnational value chains. The applicable law is generally determined by the ‘place of effect’, i.e. the country on whose territory the damage occurred (*lex loci damni*, Article 4 (1) Rome II Regulation) [cf. Chap. 6, ¶44 *et seq.* (Sect. 6.5.1)]. The ‘place of effect’ is distinct from the place where the event giving rise to the damage occurred (‘place of action’, *locus delicti commissi*) and the places where any indirect consequences of the damage occurred (Article 4(1), 2nd half-sentence Rome II Regulation). The majority of severe human rights violations or environmental harm in transnational value chains involve incidents of damage occurring in third countries. Hence, in these cases, substantive German tort law does not apply to tort claims even if the case is filed at a German court and the defendant is a company incorporated in Germany. Consequently, stipulating any kind of substantive duty of care would not apply to cross-border tort claims involving harm abroad. A due diligence obligation in national home State law can be applied as a relevant duty and standard of care for tort claims, albeit only if one of the exceptions in the Rome II Regulation applies.<sup>365</sup>

**157** Some authors have argued that Article 17 Rome II Regulation could open a door to interpret a HRDD-obligation as rules of safety and conduct.<sup>366</sup> This view arises because, pursuant to this provision, account shall be taken in so far as is appropriate, of the rules of safety and conduct at the place of the event giving rise to the liability (i.e. *locus delicti commissi*). Hence, it may be argued that a HRDD-obligation in home State law shall be taken account of “in so far as is appropriate”, where relevant

<sup>363</sup>Cf. Hübner (2022), pp. 104–129; Hartmann (2018), p. 290.

<sup>364</sup>Cf. Hartmann (2018), p. 293.

<sup>365</sup>Cf. extensively on this issue: Hübner (2022), chapter 4 and pp. 445–493.

<sup>366</sup>Saage-Maß and Leifker (2015), p. 2502.



events, such as management or oversight failures, on home State territory gave rise to the liability. However, Article 17 Rome II Regulation leaves a significant degree of discretion to courts as applicable rules of safety and conduct are not necessarily directly applicable but merely to be “taken account of” and even then, only as far as it is “appropriate”. While the avenue via Article 17 Rome II Regulation may be worth considering when interpreting certain provisions *de lege lata*, a new due diligence obligation in home State law that is specifically designed to be applied to transnational value chains should rather rely on Article 16 Rome II Regulation.<sup>367</sup> Pursuant to Article 16, the application of so-called ‘overriding mandatory provisions’ is cogent, i.e. provisions of the *lex fori* apply in a mandatory manner irrespective of the law otherwise applicable to the non-contractual obligation.<sup>368</sup> Hence, the Regulation leaves Member States certain leeway to adopt overriding mandatory provisions. To avoid courts having discretion and eliminate any ambiguities in the legislation, a law can declare certain norms explicitly as overriding mandatory provisions within the meaning of Article 16 Rome II Regulation.<sup>369</sup>

However, in the case of liability for violating a purely *environmental* due diligence obligation, these questions could be less problematic. Article 7 Rome II Regulation reads:

The law applicable to a non-contractual obligation arising out of environmental damage or damage sustained by persons or property as a result of such damage shall be the law determined pursuant to Article 4(1), *unless the person seeking compensation for damage chooses to base his or her claim on the law of the country in which the event giving rise to the damage occurred.* (emphasis added).

It has been contested, though, whether Article 7 Rome II also applies to cases where environmental damage abroad has been caused only indirectly, in a location different to the ‘place of effect’ through an act or omission such as management failures or violations of an organisational obligation.<sup>370</sup> However, arguably this view cannot be transferred to the situation where a specific and independent due diligence obligation of a company is created to prevent or minimise the chances of harm arising from activities along a transnational value chain. The act or omission that could potentially trigger the liability of the company is not a third party’s action occurring in a third country directly causing the damage, rather it is the company’s own failure to comply with the due diligence obligation.<sup>371</sup> Liability for breach of a

<sup>367</sup> Cf. Hübner (2022), pp. 170 *et seq.*

<sup>368</sup> According to the ECJ, the definition Article 9(1) Rome I Regulation may be used to interpret the identical term in Article 16 Rome II Regulation (ECJ *Agostinho da Silva Martins v Dekra Claims Services Portugal SA* [2019] ECLI:EU:C:2019:84, para. 28. Article 9(1) Rome I Regulation reads: “Overriding mandatory provisions are provisions the respect for which is regarded as crucial by a country for safeguarding its public interests, such as its political, social or economic organisation, to such an extent that they are applicable to any situation falling within their scope, irrespective of the law otherwise applicable to the contract under this Regulation.”

<sup>369</sup> Cf. Section 15 HRDD-Bill of 2016.

<sup>370</sup> Cf. Chap. 6, ¶ 53 (Sect. 6.5.2); Wagner (2016), pp. 743 *et seq.*

<sup>371</sup> Cf. in this direction: Hübner (2022), pp. 157 *et seq.*



due diligence obligation is not a case of third party liability where the obliged company has been attributed the action of a third party and thereby held liability for actions of the third party; by contrast, the obliged company is held liable for its own acts and omissions, namely the breach of its own due diligence obligations, in particular management failures in the home country.<sup>372</sup> Accordingly, the creation of an explicit mandatory overriding provision would not necessarily be required in order to apply an EDD obligation enshrined in national home State law in transnational liability cases. After all, the claimant would most likely have the possibility to choose the respondent company's home State law—with the favourable due diligence/duty of care standard—as the legal basis for his claim.

**160** If obligations are to be regulated jointly, this raises the question of whether a mandatory overriding provision supersedes the injured party's right to choose as laid down in Article 7 Rome II for claims arising from environmental damage. In the theoretically conceivable case that the law at the 'place of effect' imposes a stricter standard of care than the home country's EDD obligation, the home State regulation would fail to achieve its purpose. However, such a scenario appears rather unlikely. Insofar as the material reference point of the EDD is determined by a reference to the law at the 'place of effect', the aforementioned scenario is excluded from the outset. If the EDD obligation is defined by a combined approach that references both the law of the home State and the law of the 'place of effect', the aforesaid scenario can be avoided by providing for a precedence of the reference to the law of the 'place of effect' whenever the latter imposes a more stringent standard.

**161** Another option would be to limit the overriding mandatory provision to the application of the 'human rights' due diligence obligation and thereby exempt 'environmental' due diligence. Although there will be some overlap of cases that involve human rights as well as EDD obligations, the two types of obligations can be readily distinguished. Nevertheless, given the controversy regarding the application of Article 7 Rome II Regulation to action indirectly causing harm abroad, a comprehensive overriding mandatory provision that includes environmental damage should be the preferred option.

## 7.7 Legal Objections Related to 'Extraterritoriality'

**162** Legal objections to unilateral environmental protection in transnational value chains by means of exercising home State jurisdiction are encapsulated by the keyword 'extraterritoriality'.<sup>373</sup> In order to conclusively assess these legal objections, a

<sup>372</sup>Cf. Hübner (2022), p. 162.

<sup>373</sup>The following section draws on thoughts developed by the author over the course of writing an ongoing dissertation project at the Friedrich-Alexander University Erlangen-Nürnberg under the working title "Transterritorialer Menschenrechtsschutz durch heimatstaatliches Globalisierungsfolgenrecht".

detailed analysis of a specific design of EDD obligations in home State law would be necessary. The outcome of such an analysis would be particularly affected by its material scope and the specific enforcement mechanism employed, especially if the latter comprises more than just a civil liability regime. However, the general principles outlined below indicate that such a piece of value chain due diligence legislation can be drafted in a lawful manner, notwithstanding any extraterritorial impacts.

Because the policy choices related to extraterritorially-effective legislation are complex and require a differentiated analysis, they can be only pointed out but it is beyond the scope of this book to analyse them in any depth (§ 164 *et seq.*). Instead, this section focuses on the legal issues related to stipulating, by means of home State legislation, EDD obligations regarding transnational value chains. However, before turning to the legal analysis, a few words on terminology are necessary (§ 167 *et seq.*). With regard to public international law, the lawful exercise of ‘extraterritorial jurisdiction’ that home State regulation may potentially be associated with has been called into question (§ 173 *et seq.*). Secondly, with regard to the potentially discriminatory effects of the approach, these should be examined under WTO law (§ 198). Finally, certain aspects of extraterritoriality could be discussed through the lens of national constitutional law (§ 215 *et seq.*).

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### 7.7.1 *Excursus: Complex Policy Choices*

Regulatory measures with at least some extraterritorial reach or impact can raise difficult policy questions that cannot be adequately addressed here. However, a few remarks in this regard serve to illustrate the complexity of such policy choices. A differentiated line of argument could consider, on the one hand, that market-regulating policies with extraterritorial impacts or reach are an option primarily, if not exclusively, for States with substantial market power; the economic inequality inherently brought to bear by this policy approach stems from the fact that small-market actors lack the power to force foreign manufacturers to adopt their regulatory standards. Economically smaller and less powerful States risk that foreign producers may choose to withdraw from their market rather than comply with their regulatory requirements, particularly if these are costly or difficult to implement and/or incur substantial or ongoing risk for the producer.<sup>374</sup> In this regard ‘extraterritoriality’, when exercised as a policy dimension, could be regarded as a manifestation of ‘oligarchy’, as *Nico Krisch* pointedly remarks, because it is available to only a few economically powerful States.<sup>375</sup> Consequently, asserting extraterritorially-effective policy measures could be viewed as a potentially

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<sup>374</sup>Cooreman (2016).

<sup>375</sup>Cf. Krisch (2020), p. 31.

illegitimate policy choice of a ‘legal hegemon’, who lacks democratic legitimisation vis-à-vis the affected people in the foreign territory.<sup>376</sup>

165 However, on the other hand, these reservations are not necessarily a reason to simply discard this option. The alternative for some economically-weak States to being extraterritorially impacted by wealthy and economically-powerful third States is that they are impacted by unregulated, economically-powerful multinational enterprises. The result of these power dynamics is a dilemma situation of smaller economies being caught between a rock (i.e. extraterritorial regulation by a State) and a hard place (i.e. an unregulated multinational company)—or, as *Krisch* puts it, between *Skylla* and *Charybdis*.<sup>377</sup> Moreover, the economic power of bigger market economies and their ability to adopt extraterritorially influential policy options can also be interpreted as a responsibility or even a duty.<sup>378</sup>

166 These considerations show that from an economic, political, and moral perspective, policy choices involving domestic regulation of transnational business activities with extraterritorial effects need to be well-considered, especially with regard to potentially unintended side effects. However, the political, economic and moral questions that arise cannot be answered adequately by means of legal methods. Therefore, the remainder of this section focus on legal objections that extraterritoriality faces.

### 7.7.2 *Extraterritoriality, Territorial Extension and Jurisdiction*

167 Generally speaking, ‘extraterritoriality’ implies some kind of reference or impact to a territory that is foreign to the acting State, i.e. to persons, objects, events or situations that are situated on such territory. In the legal discourse on extraterritoriality and extraterritorial jurisdiction, certain conceptual distinctions are relevant and need highlighting.

168 First, extraterritoriality and extraterritorial jurisdiction are not monolithic, clear-cut concepts as they can entail a number of different ways of how a norm or measure of one State may refer to, apply to or impact persons, objects, events or situations on the territory of another State. *Joanne Scott* distinguishes between ‘extraterritoriality’ and simple ‘territorial extension’<sup>379</sup> by suggesting that a measure should be categorised as extraterritorial when its “application does not depend on the existence

<sup>376</sup> Cf. in this direction *Schmalenbach* (2017), p. 264.

<sup>377</sup> *Krisch* (2020), p. 31.

<sup>378</sup> *Cooreman* (2016); *Francioni* (1996), p. 132: “A coherent doctrine of extraterritoriality requires (...) the linking of the right to assert extraterritoriality with the responsibility to exercise extraterritorial jurisdiction whenever it is appropriate in order to avoid serious environmental harm or the exposure of the public to an uncontrolled hazard in foreign territory”.

<sup>379</sup> *Scott* (2014); *Scott* (2019), p. 22; cf. also *Krisch* (2020), p. 22: “Territoriale Weiterungen”.

of a territorial connection between a regulated activity” and the acting State.<sup>380</sup> In contrast, a ‘territorial extension’ of a measure’s application is triggered by the existence of a territorial connection with the acting State.<sup>381</sup> As a clear example of the first, Scott mentions the ‘Counterparty Principle’ in EU financial market regulation by which “third country actors incur obligations under EU law when they enter into a contract with an EU counterparty, even where the contract in question is concluded abroad”.<sup>382</sup> As an example of territorial extension, which *Scott* sees as a widespread phenomenon in EU law, she points to the protection of animals at the time of killing by Council Regulation 1099/2009.<sup>383</sup> According to Article 12 of the mentioned Regulation in conjunction with Article 12(2)(a) of Regulation (EC) No 854/2004,<sup>384</sup> products of animal origin are not permitted to be imported into the EU unless the killing of the animal complied with EU rules or with requirements “that were determined to be equivalent”. In *Scott*’s view, the regulation based on the nationality principle (e.g. a regulation restricting the conduct of a State’s own nationals abroad) should also be categorised as extraterritorial, however, she admits that the distinction is not always clear. This is especially the case when a home State regulation applies to legal persons ‘established’ within the home State’s territory which means, from her perspective, “there may be uncertainty about whether the application of this law is triggered by a non-territorial connection (nationality) or a territorial connection (presence).”<sup>385</sup>

The type of laws discussed here would create an EDD obligation for companies that have their principal place of business or seat in the regulating State’s territory. Arguably, the justification for such a regulation is built upon the presence of business operations in the home State’s territory, in particular, management decisions, rather than the company’s ‘nationality’. Hence, given that an effective due diligence obligation’s scope would include a company’s global value chains, accepting *Scott*’s categories and terminology would mean the discussed legislative approaches should be labelled as ‘territorial extensions’. Although ‘territorial extension’ may be easier to justify than the arguably more invasively-natured extraterritoriality, *Scott* insists that her terminological framework is designed as more of an analytical tool rather than a ‘normative shortcut’.<sup>386</sup> In particular, she argues that the existence of some

<sup>380</sup> Scott (2019), p. 22.

<sup>381</sup> Scott (2019), p. 22. In the class of simple ‘territorial extension’, Scott further distinguishes various kinds: *transaction-level, firm-level and country-level*, *ibid.* p. 25.

<sup>382</sup> Scott (2019), p. 22, referring to Article 4(1)(a)(iv) of Regulation 648/2012 of 4 July 2012 on OTC derivatives, central counterparties and trade repositories (EMIR), OJ 2012 L 201/1.

<sup>383</sup> Council Regulation (EC) No 1099/2009 of 24 September 2009 on the protection of animals at the time of killing, OJ L 303, 18.11.2009, p. 1.

<sup>384</sup> Regulation (EC) No 854/2004 of the European Parliament and of the Council of 29 April 2004 laying down specific rules for the organisation of official controls on products of animal origin intended for human consumption, OJ L 139, 30.4.2004, p. 206.

<sup>385</sup> Scott (2019), p. 23.

<sup>386</sup> Cf. Scott (2019), p. 38.

kind of territorial connection is, by itself, insufficient to conclude that a measure is lawful.<sup>387</sup>

170 A similar conceptual distinction was suggested by the then Special Representative of the Secretary-General *John Ruggie* in the course of elaborating the UNGPs. The distinction *Ruggie* drew is reflected in the commentary on Guiding Principle No. 2 where it states that “domestic measures with extraterritorial implications”, such as corporate reporting requirements on a corporation’s foreign conduct, should be distinguished from “direct extraterritorial legislation and enforcement”, such as criminal punishment for crimes committed exclusively abroad.<sup>388</sup> Direct extraterritorial legislation is more likely to face objections from other States than domestic measures with purely extraterritorial implications.<sup>389</sup>

171 A domestic due diligence obligation whose personal scope is limited to domestic companies, even if its material scope is applicable to events occurring abroad, may be categorised as domestic legislation with extraterritorial implications. Similarly, in its General Comment No. 24, the UN Committee on Economic, Social and Cultural Rights took the view that this kind of legislation cannot be categorised as a manifestation of the exercise of “extraterritorial jurisdiction”.<sup>390</sup>

172 Finally, a classic and crucial distinction is drawn between jurisdiction to prescribe, adjudicate and enforce, which describe the three modes by which State authority may be exercised. By imposing due diligence obligations unilaterally on companies domiciled on its territory, the home State exercises jurisdiction to prescribe.

### 7.7.3 *Public International Law*

173 The key objection against exercising any kind of extraterritorial jurisdiction or ‘territorial extension’ of domestic measures stems from its potential conflict with host<sup>391</sup> States’ territorial sovereignty. In order to justify an extraterritorial reach or impact given the potential conflict with another State’s sovereignty, a certain kind of

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<sup>387</sup>Scott (2019), p. 38.

<sup>388</sup>Cf. Zerk (2010), pp. 15 *et seq.*; HRCComm, Report of the Special Representative of the Secretary-General on the issue of human rights and transnational corporations and other business enterprises, John Ruggie—Business and human rights: further steps toward the operationalization of the “protect, respect and remedy” framework, 9. April 2010, A/HRC/14/27, para. 48.

<sup>389</sup>Zerk (2010), p. 210.

<sup>390</sup>General comment No. 24 (2017) on State obligations under the International Covenant on Economic, Social and Cultural Rights in the context of business activities, E/C.12/GC/24, (UN Committee on Economic, Social and Cultural Rights August 10, 2017), para. 33.

<sup>391</sup>Regarding the problematic use of this terminology cf. ¶ 109. However, the necessary distinctions are not relevant here and, for purposes of better understanding, I use the traditional terminology in this section.

connection to the acting State is required. However, even if a sufficient connection is provided, the exercise of jurisdiction shall not infringe the principle of non-intervention. The following parts of this section will discuss these key issues in more detail.

### Extraterritorial Jurisdiction Versus Host State Sovereignty

Territorial sovereignty encompasses a State's right to exercise within its territory, "to the exclusion of any other State, the functions of a State", hence the "principle of the exclusive competence of the State in regard to its own territory".<sup>392</sup> Accordingly, in the *Lotus Case*,<sup>393</sup> the Permanent Court of International Justice (PCIJ) issued a general prohibition to exercise power extraterritorially as far as the jurisdiction to enforce is concerned.<sup>394</sup> Nevertheless, as far as the jurisdiction to prescribe is concerned, there is no prohibition in international law to exercise jurisdiction in a State's own territory "in respect of any case which relates to acts which have taken place abroad". In particular, when doing so, a State does not need to rely on any kind of permissive rule from international law. Indeed, international law leaves States with broad discretion as to how territorially-exercised jurisdiction relates to impacts and events that occurred abroad:

It does not (. . .) follow that international law prohibits a State from exercising jurisdiction in its own territory, in respect of any case which relates to acts which have taken place abroad, and in which it cannot rely on some permissive rule of international law. Such a view would only be tenable if international law contained a general prohibition to States to extend the application of their laws and the jurisdiction of their courts to persons, property and acts outside their territory, and if, as an exception to this general prohibition, it allowed States to do so in certain specific cases. But this is certainly not the case under international law as it stands at present. Far from laying down a general prohibition to the effect that States may not extend the application of their laws and the jurisdiction of their courts to persons, property and acts outside their territory, it leaves them in this respect a wide measure of discretion which is only limited in certain cases by prohibitive rules; (. . .).<sup>395</sup>

This passage from the *Lotus Case*'s majority opinion remains the typical starting point for discussing extraterritorial jurisdiction despite the fact its interpretation remains controversial. Some scholars read the judgment in a rather straightforward manner and concluded that according to the '*Lotus Principle*' enshrined in the judgment, extraterritorial jurisdiction to prescribe and to adjudicate is generally permissible without further prerequisites. These authors tend to reformulate the key finding of the judgment as a 'permissive rule' arguing that "whatever is not

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<sup>392</sup>PCA *Island of Palmas Case (or Miangas)* (United States v Netherlands) (1928) 2 RIAA 829–871 at 838.

<sup>393</sup>PCIJ '*Lotus*' (France v Turkey) PCIJ Ser A No 10 (1927). Huber's vote as President of the PCIJ tipped the scales in the 6:6 vote.

<sup>394</sup>PCIJ '*Lotus*' (France v Turkey) PCIJ Ser A No 10 (1927).

<sup>395</sup>PCIJ '*Lotus*' (France v Turkey) PCIJ Ser A No 10 (1927), 19.

explicitly prohibited by international law is permitted”.<sup>396</sup> However, others suggest that such far-reaching conclusions are the result of an incomplete or incorrect reading of the judgment,<sup>397</sup> declare it to be an ‘anomaly’<sup>398</sup> or simply the “high water mark of laissez-faire in international relations”.<sup>399</sup> Notwithstanding the persistent significance of the *Lotus Case*, States typically choose a more precautionary approach when claiming jurisdiction by invoking some kind of connecting factor rather than purely and primarily relying on the ‘*Lotus Principle*’.<sup>400</sup>

**176** Therefore, according to many scholars and State practice, measures that seek to create ‘purely’ prescriptive or adjudicative extraterritorial jurisdiction are permitted to the extent that a sufficient connection to the State asserting jurisdiction is provided.<sup>401</sup> Traditionally, rather than establishing a general, abstract definition of what a sufficient or ‘genuine link’ requires, doctrine and practice have established and now operate with a number of accepted connecting factors: the territoriality principle, the nationality or active personality principle, the passive personality principle, the protective principle, the effects doctrine, and the rather narrow universality principle.<sup>402</sup> Whether these ‘permissive’ principles can, or even should, be merged into an overarching principle that sets a new standard of what constitutes a genuine link that can justify extraterritorial jurisdiction<sup>403</sup> is beyond the scope of this book. Even for the purposes of this chapter, it is sufficient to note that extraterritorial-prescriptive jurisdiction can be exercised lawfully as long as a connecting factor pursuant to one of the aforementioned principles can be established.<sup>404</sup>

<sup>396</sup>Cf. Weil (1998), p. 112; Ryngaert (2015), pp. 35 *et seq.*; Hertogen (2015), p. 902; cf. in this direction also Belgium’s Counter Memorial in the Arrest Warrant of 11 April 2000 (Democratic Republic of the Congo v Belgium) Case at the ICJ <https://www.icj-cij.org/public/files/case-related/121/8304.pdf>, last accessed 26 April 2022, paras. 3.3.29 *et seq.*, by which Belgium relied, *inter alia*, on the *Lotus* dictum to support its view that universal criminal jurisdiction in absentia for certain crimes is lawful pursuant to public international law.

<sup>397</sup>Hertogen (2015).

<sup>398</sup>Mills (2014), p. 190.

<sup>399</sup>ICJ *Arrest Warrant of 11 April 2000* (Democratic Republic of the Congo v Belgium) (joint separate opinion Higgins, Kooijmans and Buergenthal) [2002] ICJ Rep 63, at 78.

<sup>400</sup>Ryngaert (2015), p. 42: “States - in particular the United States and the European Union and its Member States - have never primarily substantiated their claims of economic jurisdiction in *Lotus* terms.”; Lowe (1981), pp. 262 *et seq.*

<sup>401</sup>Cf. Schmalenbach (2017), p. 258.

<sup>402</sup>Cf. Kamminga (2012), paras. 11–15; ILC, *Extraterritorial Jurisdiction*, Report by the Secretariat, Annex V to the Report of the ILC on the work of its fifty-eight session, 2006, p. 231; Restatement (Fourth) of the Foreign Relations Law of the United States § 407 (Am Law Inst 2018); Ryngaert (2015), pp. 101 *et seq.*

<sup>403</sup>In this direction: Restatement (Fourth) of the Foreign Relations Law of the United States § 407 (Am Law Inst 2018); commenting rather critical in this regard: Krisch (2020), p. 16.

<sup>404</sup>Cf. von Bogdandy and Rau (2006), para. 18; Kamminga (2012), para. 9; International Bar Association (2008); cf. furthermore: Restatement (Fourth) of the Foreign Relations Law of the United States § 407 (Am Law Inst 2018).

This suggests that the discussed type of home State regulation can be designed in an essentially lawful manner, as such, by limiting the personal scope to companies domiciled in its own territory as the legislating State may always invoke the place of the statutory seat, central administration or principal place of business as sufficient territorial and personal link.<sup>405</sup> A similar argument can be made, if the personal scope is extended to foreign companies regularly engaged in business on the regulating State's territory. However, this approach may be more controversial. In addition, as far as an EDD obligation is aimed at the protection of global commons, the obligation's extraterritorial implications may be justified with respect to the effects doctrine because harming global commons would also have repercussions in the regulating home State.<sup>406</sup>

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This doctrinal stance corresponds with dynamically evolving and growing State practice of home State regulatory approaches,<sup>407</sup> in particular, those discussed above (¶ 20 *et seq.* and ¶ 68 *et seq.*) and in the UK Modern Slavery Act, the Australia Modern Slavery Act and the Dutch Child Labour Due Diligence Act. Although these pieces of legislation have been the subjects of fierce political debate and faced strong opposition from actors representing business interests, critics hardly ever invoke the illegality of the measures under public international law due to their extraterritorial impact. Therefore, and to a certain extent unsurprisingly, the recently published study on behalf of the European Commission found that with regard to this style of regulation, "some transnational application of these due diligence obligations is now widely accepted in the EU"<sup>408</sup> and that there "seems to be a consensus that states are allowed (and some argue, obliged) to regulate the adverse human rights and environmental impacts of their multinational corporations that occur outside their territories."<sup>409</sup> Although these findings may appear somewhat vague, the fleeting attention that is given to the issue in the comprehensive 570-page report may indicate that the issue is not seen as a fundamental problem, at least by the European Commission and the multiple authors of the report.

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Of course, a conclusive evaluation would need to look at the details of a proposed regulation, however, generally speaking, the approach is not likely to face legal objections from a jurisdictional perspective. Nonetheless, some of the options of legal design presented above will certainly be more challenging to justify than others and, as such, these aspects will be discussed in the following part.

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<sup>405</sup>Henn and Jahn (2020), p. 32 with regard to environmental due diligence regulation and in particular the approach in the BMZ draft; Krisch (2020), p. 36; also regarding the BMZ draft: Augenstein (2020), p. 114; with regards to human rights protection: Krajewski (2018a), p. 113; de Schutter (2006), p. 29; cf. also Haider (2019), pp. 412–415; differentiating: Chambers (2018), p. 18; somewhat unclear: International Labour Office (2020), para. 113.

<sup>406</sup>Cf. in this regard in more detail: Henn and Jahn (2020), p. 30; a more straightforward and more radical approach of taking these aspects into consideration follows from Cedric Ryngaert's concept of "cosmopolitan jurisdiction", cf. Ryngaert (2019), pp. 209 *et seq.*; Ryngaert (2020).

<sup>407</sup>Cf. more generally on territorial extension of jurisdiction: Schmalenbach (2017), pp. 262 *et seq.*

<sup>408</sup>Smit et al. (2020), p. 207.

<sup>409</sup>Smit et al. (2020), p. 223, Footnote omitted.



### A Balancing Test?

**180** It has been argued that to be lawful, in addition to one of the discussed links to the acting State's territory, extraterritorial jurisdiction needs to pass some kind of 'balancing test' or 'rule of reason'. Prominently, this view had been asserted in the American Law Institute's Restatement (Third) of the Foreign Relations Law of the United States of 1987.<sup>410</sup> However, there is little evidence that such a principle could be regarded as part of customary law because, as *Ryngaert* put it, "given the absence of uniform State practice and *opinio juris*, the rule of reason does not qualify as a norm of customary international law".<sup>411</sup> Indeed, the American Law Institute largely abandoned the balancing test in its fourth edition of the above-mentioned Restatement explicitly due to a lack of evidence for relevant State practice.<sup>412</sup> The balancing doctrine was particularly employed by US national courts in the realm of domestic antitrust law. Due to the distinct characteristics of antitrust law and the specific interests of the involved actors, it is difficult to generalise and expand these approaches to other fields of regulation. Furthermore, and again unsurprisingly, there is no generally accepted methodology of carrying out a balancing test. Other authors do not explicitly require a balancing test or a rule of reason, however, some would likely still take a more sceptical stance vis-à-vis the dynamic trend towards growing 'territorial extension' of more powerful jurisdictions such as the EU and the US. In their view, the traditional categories of legitimate jurisdictional links are overly simplistic in a world of de-territorialised social spaces.<sup>413</sup> The current practice of 'territorial extension' and unilateral regulation with global reach can be viewed as conflicting with the principle of exclusive territorial competence of affected third countries and the principle of international consensus.<sup>414</sup>

**181** In view of such reservations to 'territorial extension', and with regard to the legislative approach discussed here, there is a number of elements that could be potentially relevant when hypothetically balancing the interests of the legislating home State and indirectly affected third countries. These elements will be will be considered in the following.

**182** First, the proposed EDD obligation with regard to transnational value chains creates a direct duty only for companies domiciled on the regulating State's territory that imposes the due diligence obligation. The obligation is typically to be carried out in the headquarters generally situated on the territory of the regulating home State. Therefore, it may be contested that this type of home State regulation even amounts to an exercise of genuine 'extraterritorial jurisdiction'.<sup>415</sup> In the sense of

<sup>410</sup>Cf. in this direction also Papp (2013), pp. 256 *et seq.*; Bagheri and Jahromi (2016).

<sup>411</sup>Ryngaert (2015), p. 180.

<sup>412</sup>Cf. Restatement (Fourth) of the Foreign Relations Law of the United States § 407, reporters' note 6 (Am Law Inst 2018); Dodge (2019).

<sup>413</sup>Cf. in this direction: Schmalenbach (2017), p. 258.

<sup>414</sup>Schmalenbach (2017), p. 262.

<sup>415</sup>Cf. in this sense: Krajewski (2018b), p. 28: "regulating private actors which/who are domiciled in the regulating state is not an exercise of extraterritorial sovereignty" invoking the CESCR's General Comment no. 24.

*Scott's* terminology, it would be categorised as entailing 'territorial extension' rather than seeing to establish extraterritorial jurisdiction. Of course, the obligation does have some extraterritorial repercussions. Any company obliged by its home State is placed under that obligation to influence the conduct of associated foreign third parties abroad. However, this impact is conveyed only indirectly via a chain of private contracts, hence, foreign third parties are never directly subject to the obligations stipulated in the home State law. In this sense, the due diligence obligation is never directly applied to foreign nationals abroad.

Second, the obligation's impact is potentially far-reaching as its 'horizontal scope' may cover an entire value chain. However, the discussed 'adequacy criterion' can limit the due diligence obligation's 'vertical scope' in the value chain *inter alia* with regard to the company's proximity to and leverage over the third party directly causing harm in a value chain (¶ 84). Therefore, increasing the distance from the source of the harm and decreasing the leverage held over relevant third parties means that the due diligence obligation's scope in the given value chain is also reduced *de jure*. Moreover, increasing distance and thereby, generally speaking, decreasing leverage will also reduce the *de facto* ability to privately enforce contractual obligations reflecting the home state due diligence obligation. Therefore, the extraterritorial impact of the due diligence obligation imposed by a company's home State is—*de jure* and *de facto*—contingent on the proximity and the leverage of the company directly subjected to the obligation. Strong leverage exerted by a big multinational over its suppliers in third countries is not a result of home State regulation as the leverage results primarily from the specifics of the business model and economic factors in play. Consequently, the due diligence obligation's extraterritorial impact correlates with the power and leverage to potentially contribute to harm abroad. In turn, companies that have little economic power in a value chain and, therefore, little leverage regarding foreign third parties in that chain, may contribute less to potential harm abroad and, as such, the extraterritorial impact of complying with the due diligence obligation is correspondingly lower. In summary then, there is a correlation between the *de facto* extraterritorial impact of unregulated business operations on a home State's territory and the *de jure* extraterritorial impacts of the proposed regulation. This correlation can be seen as an intentional result of the legal design of the 'adequacy test' in limiting the 'horizontal' and 'vertical scope' in the value chain. This design may contribute to justifying the 'territorial extension' because the extraterritorial impact is stronger with regard to companies that have a higher risk of substantive contribution to and complicity<sup>416</sup> with wrongdoing in third countries.

Third, as previously discussed, due diligence obligations generally create an obligation of conduct, not of result (cf. ¶ 16, 35). Thereby, even when EDD's material scope is defined by referencing substantive-environmental standards (cf. ¶ 89 *et seq.*), this does not bind the company subjected to the due diligence obligation

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<sup>416</sup>Cf. for the idea of 'complicity' as an alternative to the effects doctrine to justify territorial extension aiming at avoiding harm abroad: Scott (2019), pp. 52 *et seq.*

directly to the substantive standard. In this regard, the proposed legislation differs from many of the more controversial examples of ‘territorial extension’ in State practice that often create duties of result that apply to foreigners abroad.

185 A fourth aspect can be found in the various options for defining EDD’s material scope (cf. ¶ 87 *et seq.*). In particular, referencing the host State’s or international environmental standards, especially when the latter are multilateral, will face less objection than referencing the home State standard.<sup>417</sup> However, an adequate ‘opening clause’ that allows deviation from the home State’s standard, where justified, could shift the balance in the direction of allowing ‘territorial extension’. Beyond referring to multilateral standards, other mechanisms that can make ‘territorial extension’ more acceptable include consultation and cooperation processes with the affected third countries.<sup>418</sup>

186 A fifth relevant aspect concerns the choice and design of enforcement mechanisms, as it could significantly affect the outcome of a balancing test: Whereas civil liability is unlikely to face any significant objections, administrative enforcement or criminal punishment will need a more thorough examination. Having said that, these sanctions would exclusively be imposed by home State authorities on home State ‘nationals’ and enforced on home State territory. Almost all conceivable enforcement mechanisms do not raise any major concerns except for import bans.<sup>419</sup>

187 Overall, even if one were to require a balancing test, there are good reasons to believe that the legislating home State’s interests in protecting the environment in transnational value chains outweighs the host State’s interest in not doing so.

### Prohibition of Intervention

188 However, this does not provide a *carte blanche* as the discussed kind of legislation could potentially be problematic pursuant to international law if, and to the extent that, a specific regulation could infringe the principle of non-intervention.<sup>420</sup> This principle is a part of customary law and is reflected in a broad variety of treaties and declarations.<sup>421</sup>

189 Although some details may still be controversial, intervention in this sense is, generally speaking, understood as interference by one State in the internal or foreign affairs of another State.<sup>422</sup> Intervention is prohibited where it interferes with ‘exclusively’ domestic affairs and is executed by coercive means.<sup>423</sup> A definition by the ICJ reads as follows: The prohibition of intervention

forbids all States (. . .) to intervene directly or indirectly in internal or external affairs of other States. A prohibited intervention must accordingly be one bearing on matters in which each

<sup>417</sup> Cf. Scott (2019), p. 57; Krisch (2020), p. 32.

<sup>418</sup> Krisch (2020), p. 32.

<sup>419</sup> Cf. Krebs et al. (2020), p. 60.

<sup>420</sup> Cf. regarding *human rights* due diligence legislation: Krajewski (2018b), pp. 23 *et seq.*

<sup>421</sup> Cf. Kunig (2008), para. 7.

<sup>422</sup> Kunig (2008), para. 1.

<sup>423</sup> Kunig (2008), para. 1.

State is permitted, by the principle of State sovereignty, to decide freely. One of these is the choice of a political, economic, social and cultural system, and the formulation of foreign policy. Intervention is wrongful when it uses methods of coercion in regard to such choices, which must remain free ones.<sup>424</sup>

Although the discussed value chain due diligence legislation may be categorised as a domestic measure with extraterritorial impacts or entail ‘territorial extension’ rather than an exercise of ‘extraterritorial jurisdiction’, host States could nevertheless argue that even indirect extraterritorial effects, which are clearly intended, unduly narrow their freedom regarding how to regulate businesses operating on their territory including their freedom ‘not to regulate’. Arguably, such indirect impacts could indeed become relevant because coercive force is not limited to just military or other clearly prohibited means but can be manifest by indirect interference using economic, political and diplomatic measures.<sup>425</sup> However, neither interference in exclusively domestic affairs (below 1.) nor coercion (below 2.) are likely to be raised as objections by the discussed value chain due diligence legislation. Both potential objections will depend, in particular, on the specifics of both the due diligence’s material scope and that of the enforcement mechanism:

1. It is not easy to define what may be considered as ‘exclusively domestic affairs’. According to a broad definition, domestic affairs are all matters that are not regulated by treaty, customary international law or other international norms.<sup>426</sup> Therefore, means of home State regulation that are in line with international human rights obligations, which are binding on a State at the ‘place of effect’ (the host State), do not fall into the scope of exclusively domestic affairs. Hence, this approach of designing the material scope can hardly infringe the prohibition of intervention *per se*.<sup>427</sup> This may be asserted even when due diligence requires a violation of local laws if, and to the extent that, these laws are unlawful under international, and in particular, human rights law.<sup>428</sup>

Nevertheless, problematic constellations remain where the due diligence legislation established by a home State requires certain extraterritorial conduct which is unlawful under foreign local law but the foreign local law does not violate any international obligations of the host State. This constellation can be described as ‘prescription conflict’.<sup>429</sup> Arguably, the obligation imposed by home State law in such cases could potentially touch upon a matter of the *domaine réservé* of the host State. An example discussed in the literature is an obligation under home State law to

<sup>424</sup> ICJ *Military and Paramilitary Activities in and against Nicaragua* (Nicaragua v US) [1986] ICJ Rep 14, at 108 para. 205; according to Kunig (2008), para. 2, this definition adequately reflects customary international law.

<sup>425</sup> Kunig (2008), para. 6.

<sup>426</sup> Kunig (2008), para. 3; Ziegler (2013), para. 2.

<sup>427</sup> Cf. Schmalenbach (2001), p. 76; Krajewski (2018b), p. 30; Papp (2013), pp. 267–272.

<sup>428</sup> Schmalenbach (2001), pp. 75 *et seq.*; Krajewski (2018b), p. 30; Papp (2013), pp. 266–272.

<sup>429</sup> Papp (2013), pp. 246 *et seq.* uses the term “Präskriptionskollision”.

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ensure the establishment of works councils<sup>430</sup> or the formation of trade unions<sup>431</sup> throughout the value chain, even if such activities are forbidden under local law and the prohibiting local laws do not violate any international obligations.

**193** These considerations may be transferred to EDD and the various options of designing its material scope (§ 87 *et seq.*) as follows: Referring to the locally applicable environmental laws of the host State/‘place of effect’ does not appear to raise any concerns with regard to the prohibition of intervention. This mechanism exclusively addresses an enforcement deficit and is designed only to ensure compliance with local laws. It is virtually inconceivable that a State could successfully assert that this constitutes a prohibited interference in domestic affairs because any non-enforcement of its own laws would be an intentional development policy and strategy to attract foreign direct investment. The second approach, which involves reference to binding international environmental treaties, will not cause any problems either provided that the host State is also bound by the international environmental obligation. However, if the host State is not bound by the relevant international environmental agreement, the situation becomes less clear. One solution to this could be integrating an opening clause for such cases that read something along the line of “. . .with the exception of environmental agreements that have not been ratified by the relevant host State. . .”. The use of a general clause, as a third strategy, also appears fairly unproblematic with regard to the prohibition of intervention. Due to its relative vagueness and openness, such a clause would leave sufficient flexibility for an interpretation that takes into account the specific local situation in a particular host State. The potentially most problematic undertaking with regard to the principle of non-intervention would be a reference to environmental home State standards. If, and to the extent that, a genuine ‘prescription conflict’ occurs as a result of the extraterritorial effects of the home State due diligence obligation reflecting home state standards, it may be argued that the conflicting local law should prevail. However, it appears rather unlikely that such ‘prescription conflicts’ will occur in the realm of environmental law as conflicts of the type mentioned above (i.e. home State due diligence requires extraterritorial conduct that is explicitly prohibited under host State law) are most likely to arise only in certain areas of human rights law (e.g., with regard to freedom of association, freedom of speech, women’s rights etc.).

**194** Indeed, it is difficult to imagine ‘prescription conflicts’ arising in the area of environmental protection. Needless to say, environmental protection standards vary significantly around the globe, however, it seems rather unlikely that any local law would oblige businesses to harm the environment or that it would prohibit compliance with a higher environmental standard than the local one. Hence, efforts to address ‘prescription conflicts’ would appear to have rather hypothetical value in the realm of environmental law.<sup>432</sup>

<sup>430</sup> Schmalenbach (2001), p. 76.

<sup>431</sup> Krajewski (2018b), p. 30.

<sup>432</sup> Cf. Henn and Jahn (2020), p. 27.

2. Irrespective of whether or not the content of the proposed legislation touches upon exclusively domestic affairs of third countries, it would represent a prohibited intervention only to the extent that it brings to bear coercive means. While it is accepted that the ‘element of coercion’ does not necessarily require the use or threat of military force, it is not clear where to draw the line regarding the use of economic, political or diplomatic measures to influence activities within third States. The use of economic pressure is particularly controversial and difficult to assess<sup>433</sup> and no accepted metric or clear State practice has yet been identified.<sup>434</sup> It is, for example, contested whether relatively severe measures designed to exert economic pressure, such as boycotts and embargoes, qualify as coercion.<sup>435</sup> It has been argued that a domestic governmental decision to violate internationally lawful laws of third countries, that is domestically enforced by a threat with coercion, can represent a coercive intervention into the *domaine réservé* of the third country.<sup>436</sup> Indeed, such a normative command may cause difficulties for an obliged company facing conflicting requirements from the home and host States, however, this seems more likely to be problematic with regard to the constitutional rights of the company’s home State, in particular, the freedom of profession.<sup>437</sup> In contrast, the third country’s sovereign liberty to decide freely on its domestic affairs would still be affected, albeit at best, only very indirectly.

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The assessment as to whether a prohibited coercive element is present in the proposed type of legislation can ultimately only be assessed by considering in detail the specific enforcement regime employed. Naturally, some elements of a comprehensive enforcement mix will be more problematic than others, however, with regard to the focus of this chapter, civil liability as an enforcement mechanism is unlikely to raise concerns in this regard. On the contrary, it seems virtually impossible to conceive that a civil liability regime in one State could exert any kind of coercive influence on another State. Therefore, an enforcement mechanism based on civil liability appears to be a relatively safe option in terms of public international law objections regarding the due diligence’s extraterritorial impacts.

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The extent to which this may differ when adding other enforcement mechanisms cannot be discussed here without knowing the specifics of the mechanisms. However, there is good reason to doubt this will become a problematic area irrespective of which further elements are added to the enforcement mix, within the bounds of reason, as enforcement of due diligence in transnational value chains will always be implemented in a more or less indirect manner. Overall, the intensity of the measure,

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<sup>433</sup> Stein et al. (2017), Chapter 11, para. 649.

<sup>434</sup> Cf. Kunig (2008), para. 25.

<sup>435</sup> Kunig (2008), para. 26; Stein et al. (2017), para. 649 *et seq.*

<sup>436</sup> Meng (1994), p. 71; Schmalenbach (2001), p. 76.

<sup>437</sup> To be safe it could be considered, to include an opening clause that allows to deviate from or modify the substantive standard of reference where it is incompatible with internationally lawful host state law. Cf. on these constitutional issues Zimmermann and Weiß (2020), p. 424; Henn and Jahn (2020), pp. 26 *et seq.*

as one of the criteria suggested for evaluating the illegality of any means of intervention,<sup>438</sup> will be relatively low. It is, for example, incomparable to the impacts of an embargo or a boycott and, therefore, EDD obligations for transnational value chains in home State law will be, generally speaking, in line with the principle of non-intervention.<sup>439</sup> Irrespective of the material scope, this is certainly true regarding a due diligence obligation that is enforced exclusively by means of civil liability.

#### 7.7.4 World Trade Law

**198** ‘Territorial extension’ of the suggested EDD legislation may be relevant also with regard to WTO law.<sup>440</sup> However, due to the restrictions of this chapter, the relevant issues cannot be examined conclusively here. Rather, some of the more crucial questions that may require an in-depth analysis will be briefly highlighted.

##### Scope

**199** First of all, it needs to be clarified whether the discussed due diligence obligation in home State law falls within the scope of the General Agreement on Tariffs and Trade (GATT), the General Agreement on Trade in Services (GATS), the Technical Barriers to Trade (TBT) Agreement and/or the Sanitary and Phytosanitary (SPS) Agreement. Generally speaking, the GATT is focused on trade in products and, therefore, mainly deals with restrictions based on product characteristics, which is why ‘process and production methods’ (PPMs) have significant challenges to the WTO regime. PPMs can be differentiated into ‘product-related’ PPMs (PR-PPMs) and ‘non-product related’ PPMs (NPR-PPMs).<sup>441</sup> PR-PPMs have an impact on a final product’s physical characteristics that can be detected even if these characteristics are not readily apparent; an example could be the use of pesticides in agriculture or chemical substances in the textile industry that leave trace residues on a final

<sup>438</sup> Kunig (2008), para. 25.

<sup>439</sup> Cf. Henn and Jahn (2020), pp. 32 *et seq.*

<sup>440</sup> Cf. comprehensively Bäumlér (2020); other Studies specifically examining environmental or human rights due diligence legislation tend to be rather brief on this matter: Henn and Jahn (2020), pp. 34 *et seq.*; Initiative Lieferkettengesetz (2020), p. 77; van Dam et al. (2020), pp. 40–66; the Report from the Norwegian Ethics Information Committee November 2019, Supply Chain Transparency Proposal for an Act regulating Enterprises’ transparency about supply chains, duty to know and due diligence, p. 27 briefly mentions a legal opinion a law firm was commissioned to prepare; however, the legal opinion has not been published. Interestingly, not even critics of the proposed legislation argue, that it infringes WTO law but that WTO law allows for different—and in their view politically preferable—approaches, namely trade policy instruments: cf. Langhammer (2021): Die “Rechtsprechung der WTO zum Art. XX GATT bewegt sich seit Jahren in die Richtung, Handelsmaßnahmen zuzulassen, wenn sie sich als notwendig zum Schutz der Rechte von Menschen und Natur erweisen.”; cf. more comprehensively on WTO law and CSR in general: Gliniski (2017) and Partiti (2022).

<sup>441</sup> OECD Secretariat (1997), p. 10.



product.<sup>442</sup> NPR-PPMs, in contrast, do not impact a final product in any manner that can be detected, even by laboratory analysis or microscopic examination.<sup>443</sup> As far as the downstream value chain would be covered by the due diligence's scope, in particular the reuse, recycling, disposal of products and materials, it has not yet been clarified as to whether these processes have to be treated differently than classic PPMs.<sup>444</sup>

While a PPM requirement enforced by means of an import ban is likely to constitute *prima facie* a violation of Article XI:1 GATT, it has not been clarified whether such measures would also be within the scope of Article III:4 GATT.<sup>445</sup> Irrespective of this, if the import and sale of a product are prohibited, the measure is likely to be examined under Article III GATT.<sup>446</sup> However, it is recommended here that the discussed proposal for a cross-sectoral, overarching EDD obligation be enforced with other means than import bans, in particular, civil liability (§ 132 *et seq.*). **200**

The TBT Agreement contains specific rules for PR-PPM, such as labelling requirements.<sup>447</sup> This requires a 'sufficient nexus' of the PPM to the characteristics of the product.<sup>448</sup> In contrast, according to the contested but still dominant view, NPR-PPMs do not fall within the scope of the TBT,<sup>449</sup> therefore, as long as an NPR-PPM is not enforced with an import or sales ban or indirectly with an obligatory labelling requirement as a prerequisite for legal import or sale, it could, arguably, be excluded from the scope of both the GATT and the TBT Agreement. **201**

However, it is questionable whether the suggested due diligence obligation is an NPR-PPM. As noted above, referencing substantive environmental standards to determine the due diligence obligation's material scope does not directly bind a company to the referenced standards.<sup>450</sup> Therefore, the due diligence obligation could be viewed as simply a business management standard rather than a production standard. It has been argued, that "management systems such as ISO 9000 and ISO 14000 and general policy considerations such as labour standards or human rights **202**

<sup>442</sup> Cf. Du (2020), p. 14.

<sup>443</sup> Cf. Du (2020), p. 14.

<sup>444</sup> Cf. Hadjiyianni (2019), p. 228.

<sup>445</sup> Stoll and Jürging (2017), p. 193.

<sup>446</sup> Cf. WTO *EC – Measures affecting asbestos and asbestos-containing products* WT/DS135, WT/DS135/R (2000), para. 8.92–8.99; Hestermeyer (2010), para. 14 *et seq.*

<sup>447</sup> Du (2020), p. 18.

<sup>448</sup> WTO *EC – Measures Prohibiting the Importation and Marketing of Seal Products* WT/DS400/AB/R, WT/DS401/AB/R (2014), para. 5.12: "Thus, in the context of the first sentence of Annex 1.1, we understand the reference to "or their related processes and production methods" to indicate that the subject matter of a technical regulation may consist of a process or production method that is related to product characteristics. In order to determine whether a measure lays down related PPMs, a panel thus will have to examine whether the processes and production methods prescribed by the measure have a sufficient nexus to the characteristics of a product in order to be considered related to those characteristics."

<sup>449</sup> Cf. in more detail: Du (2020), pp. 15 *et seq.*, Koebele (2007), para. 31 *et seq.*

<sup>450</sup> Cf. ¶ 18 and Gailhofer (2020), pp. 3–8.



conditions that are not specifically related to the production of specific products” would not qualify as ‘related PPMs’.<sup>451</sup> Accordingly, the legal opinion issued by the German Supply Chain Initiative argues that a HREDD obligation in German law would fall outside both the scope of the Most-Favoured Nation (MFN) principle and the principle of non-discrimination of the GATT because such a law cannot be considered as introducing product-related restrictions.<sup>452</sup>

**203** However, WTO Member States may argue that a due diligence obligation for EU companies constitutes an indirect or *de facto* discrimination,<sup>453</sup> because it could incentivize to locate production rather in the Global North than in the Global South: Production costs in the Global South, where generally lower environmental production standards and weaker governance prevail, would increase, as here compliance with a due diligence standard would require more efforts by the involved companies themselves. In contrast, regarding production in the Global North with higher environmental standards, better-equipped authorities and more reliable governance structures, an obliged company may rely more legitimately on enforcement of environmental and social production standards by local authorities. Consequently, companies do not need to make substantial extra compliance efforts at their own expense. As a result, the comparative cost advantage of producing in the Global South would decrease while increasing in the Global North. Therefore, production in the Global South would become relatively less attractive.<sup>454</sup> Consequently, the discussed model of due diligence legislation provides an incentive for private companies to discriminate between value chains of different origins. As a result, it may become potentially more challenging for manufacturers from certain countries with lower environmental standards, to sell their goods to commercial buyers in a State which imposes a relatively rigorous EDD obligation.<sup>455</sup> However, it is not clear how, or indeed even if, such indirect discrimination could be tackled in a trade dispute under the WTO regime. Arguably, the discriminating effect of the discussed type of due diligence legislation depends very much on the cost- and risk-calculation of an obliged company and may also be impacted by the specifics of the enforcement mix, particularly whether the due diligence obligation falls within the scope of WTO obligations. The previously-discussed enforcement mechanism using civil liability is, once again, rather unlikely to create such discriminating effects and is thus less likely to run afoul of WTO law.

### **Substantive Obligations**

**204** Assuming that the above-outlined indirect discrimination falls within the scope of the WTO regime, in particular, the MFN principle (Article I:1 GATT, Article II

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<sup>451</sup> Du (2020), p. 16.

<sup>452</sup> Initiative Lieferkettengesetz (2020), p. 77; in a similar direction: Henn and Jahn (2020), p. 35.

<sup>453</sup> Cf. Bäumlér (2020), p. 484; Henn and Jahn (2020), p. 35.

<sup>454</sup> Cf. Bäumlér (2020), p. 484.

<sup>455</sup> Cf. Bäumlér (2020), p. 484.

GATS, Article 2.1 TBT, Article 2.3 SPS) and the National Treatment (NT) principle (Article III:4 GATT, Article XVII GATS, Article 2.1 TBT), could be potentially infringed by the discussed type of EDD legislation.<sup>456</sup>

Concerning the substantive obligations of non-discrimination, the issue of ‘likeness’ requires further examination. Only ‘like’ products of domestic and foreign origin (NT) and ‘like’ products from different third countries (MFN) can be subject to discrimination.<sup>457</sup> Arguably, products that have been produced in compliance with human rights or high environmental standards could be ‘unlike’ products with lower PPM standards if, and to the extent that, consumer preferences are sufficiently strong in this regard.<sup>458</sup> The same is true of course concerning those PPMs that change the physical characteristics of products; however, EDD will lead, rather exceptionally, to changes in product characteristics, for example, by producers avoiding the use of pesticides.<sup>459</sup>

In the context of environmental or human rights due diligence objections based on WTO law are quite obvious where due diligence is enforced by or combined with import bans, in particular in conjunction with certification and labelling obligations. Secondly, an extension of the personal scope to foreign companies that operate on the regulating State’s territory could be problematic.<sup>460</sup> This reflects the characteristics of the better-known WTO disputes on measures regarding environmental protection that often involved import bans or other rather obvious trade restrictions (*EC – Asbestos*,<sup>461</sup> *US – Shrimp*,<sup>462</sup> *US – Tuna*,<sup>463</sup> *EC – Seals I*,<sup>464</sup> *EC – Seals II*,<sup>465</sup>

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<sup>456</sup> Cf. Initiative Lieferkettengesetz (2020), p. 77; Henn and Jahn (2020), pp. 34 *et seq.*

<sup>457</sup> Cf. Bäumlér (2020), p. 485.

<sup>458</sup> Hadjiyianni (2019), p. 229: “In determining whether two products are ‘like’ there is some potential for process standards to be considered part of the ‘consumer’s tastes and habits’, which form part of the criteria for determining ‘likeness’. However, it is not clear whether consumer preferences would be altered by NPR-process standards to the extent required to outweigh all other indications of likeness. Nonetheless, if consumers have strong views against process standards to the extent of altering the competitive relationship between products or between services/service providers, then those products/services could be found to be ‘unlike’.” (footnotes omitted); Marceau (2019), p. 184.

<sup>459</sup> Cf. Bäumlér (2020), p. 486.

<sup>460</sup> Cf. van Dam et al. (2020), pp. 40–66.

<sup>461</sup> WTO *EC – Measures affecting asbestos and asbestos-containing products* WT/DS135, WT/DS135/R (2000) and WT/DS135/AB/R (2001).

<sup>462</sup> WTO *United States – Import Prohibition of Certain Shrimp and Shrimp Products* WT/DS58, WT/DS61, WT/DS58/R (1998), WT/DS58/AB/R (1998).

<sup>463</sup> WTO *United States – Measures Concerning the Importation, Marketing and Sale of Tuna and Tuna Products* WT/DS381 (2007).

<sup>464</sup> WTO *EC – Certain Measures Prohibiting the Importation and Marketing of Seal Products* WT/DS369 (2007–2014); the dispute was settled by a mutually agreed solution.

<sup>465</sup> WTO *EC – Measures Prohibiting the Importation and Marketing of Seal Products* WT/DS400/AB/R, WT/DS401/AB/R (2014).

*EU – Atlanto-Scandian Herring*<sup>466</sup>). However, more subtle measures of environmental protection have recently become the objects of ongoing disputes, such as the EU Renewable Energy Directive (RED), that do not impose import bans but rather provide incentives to private parties to indirectly discriminate against certain products from third countries.<sup>467</sup>

207 Ultimately, specific details of EDD’s material scope and its enforcement mix will be decisive when assessing legality under WTO law. As noted above, some of the approaches to determine the material scope (e.g. reference to international treaties) are less problematic in this regard than others (e.g. reference to home State law) and, similarly, some enforcement measures (e.g. import bans, criminal sanctions) will be more challenging than others, in particular civil liability. Consequently, a more in-depth analysis will need to look into the details of a proposed material scope and the enforcement regime.

### Article XX GATT

208 Even if a unilateral EDD obligation in home State law falls within the scope of the WTO regime and potentially violates one of the WTO principles, namely MFN or NT principles, an exemption under one of the exceptions could justify the measure. Relevant exceptions from WTO obligations can be found in particular in Article XX GATT.

209 Three exceptions in Article XX GATT could potentially be applied to justify potentially discriminating impacts of the proposed EDD obligation: Firstly, pursuant to Article XX(a) GATT, Member States may adopt measures that are necessary to protect public morals.<sup>468</sup> Secondly, measures necessary to protect human, animal and plant life or health can be allowed pursuant to Article XX(b) GATT. Thirdly, measures relating to the conservation of exhaustible natural resources can be justified pursuant to Article XX(g) GATT. In comparison to the first two exceptions, item (g) has the advantage of not requiring a measure to pass the necessity test, however,

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<sup>466</sup>WTO *EU – Measures on Atlanto-Scandian Herring* WT/DS469, WT/DS469/1 (2013); the measure at stake involved the prohibition to introduce herring to the EU territory but also to use EU ports for vessels transporting the relevant fish species; the dispute was settled in 2014 before a panel report had been issued; however, the dispute was settled before a panel report was issued.

<sup>467</sup>In the recently initiated consultations (WTO *EU and Certain Member States – Certain measures concerning palm oil and oil palm crop-based biofuels* WT/DS600/1 (pending)), Malaysia and others object *inter alia* the EU’s GHG-reduction calculation policy that does not consider palm oil as sustainable bio fuel due to its asserted “high risk of indirect land-use change” (ILUC) and a French fuel tax. Although the import of palm oil is not banned, the use of palm oil is less attractive than other bio fuels, because it does not contribute to the EU’s binding target of at least 32% renewable energy by 2030.

<sup>468</sup>Cf. for an example case: WTO *EC – Measures Prohibiting the Importation and Marketing of Seal Products* WT/DS400/R, WT/DS401/R, where the Panel and the Appellate Body accepted the EU’s “public morals”-defense pursuant to Article XX(a) GATT only to the extent that the import bans purpose of animal protection can be a matter of “public morals” (WT/DS400/R, WT/DS401/R (2013), para. 7.639; WT/DS400/AB/R, WT/DS401/AB/R (2014), para. 5.290).

it has also been interpreted by Panels and Appellate Bodies in a rather restrictive manner.<sup>469</sup>

Justification based on item (a) would not raise any territoriality issues because the measure is designed, arguably, to protect public morals in the regulating State's territory. Things are more complex regarding items (b) and (g) of Article XX GATT because the goods protected by the measure are not situated in the acting State's territory but in the territory of other Member States and third parties and, as such, the measure is extraterritorial. This may raise complex legal questions.

In *Tuna I*, 'extrajurisdictional protection' of the protected goods in Article XX (b) and (g) GATT was rejected<sup>470</sup> while in *US – Shrimp* the question was not explicitly ruled on.<sup>471</sup> However, the Appellate Body held that the protection of 'extraterritorial goods' is not prohibited *per se* but that such a policy choice requires a 'sufficient nexus'.<sup>472</sup> More recent cases of this type, *US – Tuna II* and *EC – Seals*, were not decided on jurisdictional grounds even though the measures at stake had an obvious extraterritorial impact. This has been interpreted as an indication that the "extraterritorial reach of unilateral measures is not the determining factor for the consistency of such measures with WTO law. It is thus unlikely that PPMs would be condemned based on their extraterritorial reach."<sup>473</sup>

If a measure falls within the scope of one of the exceptions listed in Article XX GATT, it still needs to pass the test in the chapeau ('two-tiered test'). To do so, the measure may not be "a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail" and it shall not be "a disguised restriction on international trade" (Article XX GATT). The chapeau of Article XX GATT has been viewed as having the "greatest potential in disciplining" policy measures with extraterritorial impact.<sup>474</sup> The Appellate Body in *US – Shrimp* interpreted this restriction as requiring, *inter alia*, serious attempts in good faith to engage in negotiations in order to find a multilateral and consensual solution prior to unilateral measures as last resort.<sup>475</sup> Although the Appellate Body accepted the

<sup>469</sup>Stoll and Jürging (2017), p. 196.

<sup>470</sup>GATT, *United States – Restrictions on Imports of Tuna*, DS21/R, Panel Report of 3 September 1991 (unadopted), BISD 39S/155, para. 5.26 *et seq.*

<sup>471</sup>WTO *United States – Import Prohibition of Certain Shrimp and Shrimp Products* WT/DS58 (1998), WT/DS58/AB/R (1998), para. 133: "We do not pass upon the question of whether there is an implied jurisdictional limitation in Article XX(g), and if so, the nature or extent of that limitation. We note only that in the specific circumstances of the case before us, there is a sufficient nexus between the migratory and endangered marine populations involved and the United States for purposes of Article XX(g)."

<sup>472</sup>WTO *United States – Import Prohibition of Certain Shrimp and Shrimp Products* WT/DS58 (1998), WT/DS58/AB/R (1998), para. 164; Cf. on the interpretation of the sufficient nexus test: Cooreman (2016).

<sup>473</sup>Hadjiyianni (2019), p. 254.

<sup>474</sup>Hadjiyianni (2019), p. 265.

<sup>475</sup>The chapeau of Article XX GATT stipulates a duty of conduct, not of result. Therefore, unilateral measures do not violate the chapeau of Article XX GATT if a serious attempt to negotiate in good faith was not successful, cf. Krajewski (2020), p. 321.

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intended protection of sea turtles as a legitimate policy goal pursuant to Article XX (g) GATT, the import ban for non-certified shrimp was deemed as not justified because the requirement in the chapeau of Article XX GATT had not been met. The reason for this was, in particular, the “failure of the United States to engage the appellees, as well as other Members exporting shrimp to the United States, in serious, across-the-board negotiations with the objective of concluding bilateral or multilateral agreements for the protection and conservation of sea turtles, before enforcing the import prohibition against the shrimp exports of those other Members.”<sup>476</sup> The Appellate Body pointed to, *inter alia*, Principle 12 of the Rio Declaration on Environment and Development and para. 2.22 (i) of Agenda 21.<sup>477</sup> Although the chapeau in Article XX GATT requires serious efforts be made in good faith to negotiate a multilateral solution, this amounts to a simple duty of conduct rather than one of result,<sup>478</sup> hence, unilateral measures can be in line with the chapeau of Article XX GATT even if attempts to negotiate were not fruitful.<sup>479</sup> Therefore, it is noteworthy that the Appellate Body did not condemn the measure simply because of its unilateral character, rather, it opened the door to member States adopting a more flexible approach to trade, the environmental and other policy-related issues.<sup>480</sup> Furthermore, it should be noted that the negotiating requirement was applied in *US – Gambling*, however, this was done in a significantly more lenient way than was previously seen.<sup>481</sup>

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<sup>476</sup>WTO *United States – Import Prohibition of Certain Shrimp and Shrimp Products* WT/DS58 (1998), WT/DS58/AB/R (1998), para. 166.

<sup>477</sup>The Appellate Body quoted sentence 3 and 4: “Unilateral actions to deal with environmental challenges outside the jurisdiction of the importing country should be avoided. *Environmental measures addressing transboundary or global environmental problems should, as far as possible, be based on an international consensus.*” (*italicised in the original*, WTO *United States – Import Prohibition of Certain Shrimp and Shrimp Products* WT/DS58 (1998), WT/DS58/AB/R (1998) para. 168).

<sup>478</sup>Therefore, Krajewski identifies in this obligation to negotiate in good faith in the chapeau of Article XX GATT elements of due diligence in trade law, cf. Krajewski (2020), p. 321.

<sup>479</sup>This can be concluded from the Appellate Body’s Report on the subsequent recourse to Article 21.5 DSU, where it held: “Requiring that a multilateral agreement be *concluded* by the United States in order to avoid “arbitrary or unjustifiable discrimination” in applying its measure would mean that any country party to the negotiations with the United States, whether a WTO Member or not, would have, in effect, a veto over whether the United States could fulfill its WTO obligations. Such a requirement would not be reasonable. For a variety of reasons, it may be possible to conclude an agreement with one group of countries but not another. The conclusion of a multilateral agreement requires the cooperation and commitment of many countries. In our view, the United States cannot be held to have engaged in “arbitrary or unjustifiable discrimination” under Article XX solely because one international negotiation resulted in an agreement while another did not.” (WTO *United States – Import Prohibition of Certain Shrimp and Shrimp Products – Recourse to Article 21.5 of the DSU by Malaysia* WT/DS58/AB/RW (2001), para. 123); Hadjiyianni (2019), p. 286.

<sup>480</sup>Wolftrum (2010a), para. 37.

<sup>481</sup>WTO *United States – Measures Affecting the Cross-Border Supply of Gambling and Betting Services* WT/DS281/AB/R (2005), para. 317: “Engaging in consultations with Antigua, with a view

From the reasoning expressed in *US – Shrimp*, two conclusions may be drawn. Firstly, and generally speaking, due diligence approaches will be easier to justify if their material scope refers to multilateral-substantive standards (binding international law or non-binding international soft law).<sup>482</sup> Referring to host State standards may need further clarification as to how this could result in a violation of the MFN principle.<sup>483</sup> More ambitious approaches, including references to home State standards, will require more rigorous scrutiny and it remains to be seen if an opening clause in an EDD obligation that references home State standards (cf. ¶ 107–114) could provide sufficient flexibility. Secondly, against the backdrop of the reasoning in the *US – Shrimp*, justification will be difficult if a home State were to unilaterally adopt a HREDD regime for transnational value chains, but did not support or even engage in serious multilateral negotiations on a business and human rights treaty.<sup>484</sup> Such inconsistency in policy approaches could harm the possibility to justify the discussed type of home State legislation under Article XX GATT.

Overall, WTO law does not appear to pose insurmountable obstacles to legislating extraterritorially-effective EDD obligations. However, a more thorough examination would need to consider the details of a proposed regulation. As *Carola Glinski* puts it with regard to ‘corporate social responsibility’ (CSR) measures more generally: “while the extraterritoriality of CSR protection aims is not a fundamental hurdle to their admissibility under WTO law, the devil is within the details, and CSR measures, in particular those which aim at the protection of health and safety and labour standards, will have to be drafted carefully in order to not constitute a protectionist and disguised discriminatory measure.”<sup>485</sup> Similar views have been expressed by *Jelena Bäuml*<sup>486</sup> and *Enrico Partiti*.<sup>487</sup>

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to arriving at a negotiated settlement that achieves the same objectives as the challenged United States’ measures, was not an appropriate alternative for the Panel to consider because consultations are by definition a process, the results of which are uncertain and therefore not capable of comparison with the measures at issue in this case.”

<sup>482</sup> Hadjiyianni (2019), p. 252.

<sup>483</sup> Hadjiyianni (2019), p. 233: Measures with extraterritorial impact “that require compliance with third country laws before products can be imported into the EU could also give rise to MFN discrimination. For example, the Timber Regulation could give rise to MFN discrimination because access to the EU market is determined by reference to the laws of third countries. This could give rise to situations where timber harvested in exactly the same manner is deemed legal in some countries and illegal in others.”

<sup>484</sup> Cf. ¶ 71 and Chap. 4, ¶ 40 *et seq.* (Sect. 4.2.3).

<sup>485</sup> Glinski (2017), p. 147.

<sup>486</sup> Bäuml (2020), pp. 499 *et seq.*

<sup>487</sup> Partiti (2020), p. 254: “the regulation of social and environmental requirements taking the form of PPMs may structurally generate detrimental impacts for certain producers, for example from developing countries. It must therefore be carefully designed in order to avoid breaches of the non-discrimination principle.”

### 7.7.5 *Home State Constitutional Law*

- 215** Finally, a third aspect of extraterritoriality, besides public international and WTO law, may be raised with regard to the legislating home State's constitutional law.<sup>488</sup> Arguably, a legislative approach that references the substantive-environmental law at the 'place of effect' to determine the EDD's material scope potentially leads, indirectly, to facilitating the enforcement of foreign law by home State authorities and courts. This aspect of extraterritorial effects could potentially raise eyebrows if regarded through the lens of the home State Constitution.
- 216** The application of foreign substantive law by national civil courts is a standard approach in cases involving private international law matters.<sup>489</sup> Multilateral conflict-of-law rules that may refer not just to the *lex fori* but also to the law of third countries as *lex causae* are considered to be the dominant type of conflict-of-laws rules.<sup>490</sup> Reflecting an established State practice the approach is generally not considered as being problematic. Therefore, as long as the EDD obligation in home State law is enforced only by means of tort law (i.e. private law) referencing foreign environmental law at the 'place of effect' to determine EDD's material scope will not pose any problem.
- 217** However, in the realm of public law, the situation is more complex. Therefore, if an EDD obligation is designed to be enforced also by means of administrative or criminal law, it may require a closer examination in this regard. As there are hardly any written conflict-of-law rules in public law, any discussion in this regard must draw on general legal principles, theories and doctrines such as the "State proximity" ("Staatsnähe") of public law as opposed to the "State distancing" ("Staatsferne") of private law.<sup>491</sup> Under varying labels such as 'public law taboo'<sup>492</sup> and the

<sup>488</sup>To comprehensively review the constitutionality of an environmental due diligence obligation in home State law a comprehensive review of numerous other aspects against the standard of the home State constitution would be required, in particular with regard to legal certainty and a possible violation of individual fundamental rights of the companies. Given that these questions can only be answered with regard to specific *national* constitutional standards of the respective home State, they are beyond the scope of this book. On German constitutional standards in this regard cf. Krebs et al. (2020), pp. 48–52 (on legal certainty); Zimmermann and Weiß (2020), pp. 440–463 (on the legislative competence of the German Federal State, legal certainty, and the freedom of profession); Henn and Jahn (2020).

<sup>489</sup>Cf. ¶ 243.

<sup>490</sup>von Hein (2020), para. 90.

<sup>491</sup>Hemler (2019), pp. 82 *et seq.*

<sup>492</sup>The underlying principle is usually attributed to Lord Mansfield in UK Court of King's Bench *Holman v Johnson* [1775] 1. Cowp. 341 (343): "no country ever takes notice of the revenue laws of another." This (quite narrow) common law rule against foreign tax law enforcement was later extended to penal law (e.g. by the US Supreme Court in US Supreme Court *The Antelope* (1825) 23 U.S. 66 [123]: "The courts of no country execute the penal laws of another" and finally transferred to public law in general, cf. Dodge (2002).



“Unilateralism Doctrine” (“Einseitigkeitsdogma”<sup>493</sup>), it has been contested whether a simple reference to foreign public law may lead to the application of foreign public law in a similar manner as in the realm of private international law. Indeed, it has been noted that in State practice, such references to foreign public law are not as frequent as in private international law, but they do occur.<sup>494</sup>

Another point of reference in the discussion of the constitutionality regarding the aspect of extraterritoriality concerns the principle of democracy. It could be argued that the referenced foreign law is not sufficiently legitimised by the home State’s legislature. The argument may be examined very briefly in an exemplary manner in the light of German constitutional law. Arguably, external references in an due diligence obligation that aims at protecting the environment in transnational value chains should be regarded in the light of the needs of international cooperation<sup>495</sup> and the Basic Law’s (‘Grundgesetz’, hereafter: GG) commitment to international law (“Völkerrechtsfreundlichkeit des Grundgesetzes”<sup>496</sup>). By establishing a due diligence obligation that draws on a reference to the local law applicable at the ‘place of effect’, the home State legislature emphasises the legislative sovereignty of the relevant State where the ‘place of effect’ is situated. Moreover, the reference to the local law at the ‘place of effect’ would not result in a direct application of foreign law by a German court but simply in the application of a due diligence obligation which, in turn, facilitates compliance with local laws at the ‘place of effect’. This follows also from the observation that reference to foreign law as means to delineate EDD’s material scope does not lead to an obligated company being directly bound to a foreign norm.<sup>497</sup>

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## 7.8 Conclusion

As a point of departure, this chapter identified an emerging trend in State practice that increasingly employs due diligence obligations in home State law to foster human rights in particular and, to a lesser degree, environmental protection in transnational value chains. The various legislative approaches taken in several jurisdictions have been strongly influenced by the HRDD concept outlined in the UNGPs’ ‘second pillar’. This is not overly surprising given that the UNGPs’ non-binding ‘second pillar’ can, to a certain extent, be regarded as a blueprint for this type of legislation. Current efforts focused on due diligence have led to two

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<sup>493</sup>Cf. on the scholarly debate in Germany: Ohler (2005), pp. 33 *et seq.*; Menzel (2011), pp. 793 *et seq.*; Hemler (2019), pp. 61–152.

<sup>494</sup>Hemler (2019), pp. 68–74; cf. Ohler (2005), pp. 313 *et seq.*: “Intraterritorialer Vollzug fremden Rechts durch deutsche Behörde”.

<sup>495</sup>Cf. BVerfGE 63, 343 (369 *et seq.*) referred to by Ohler (2005), p. 315.

<sup>496</sup>Cf. BVerfGE 141, 1 (26 *et seq.*) with further references from the FCC’s case law.

<sup>497</sup>Cf. ¶ 18 and Gailhofer (2020).



categories of related legislation emerging: Comprehensive concepts try to tackle all, or at least most, of the human rights issues of concern while also, at times, extending to environmental issues through the use of a single, comprehensive set of due diligence rules without limiting the scope to specific industries, stages of a value chain or objects of protection. The most prominent examples of this type of legislation are the French ‘Duty of Vigilance Act’ (2017) and the German ‘Supply Chain Due Diligence Act’ (2021). Isolated approaches, in contrast, tackle only certain and rather limited sustainability issues in settings sometimes confined to a specific industry, a particular stage of a value chain or with a limited number of objects of protection.

**220** This chapter has explored how environmental due diligence can be designed in a home State’s national law *de lege ferenda*. It focused on four issues: its scope in value chains, its material scope, its enforcement by means of civil liability, and legal objections relating to its potential ‘extraterritorial’ impact.

**221** While the ‘horizontal scope’ of due diligence should cover, as a general rule, a company’s entire value chain including its downstream parts, it must be limited in some way to adhere to the principle of proportionality. Two different models were discussed as viable options in this regard: A ‘graduated model’, which would define fixed levels of involvement (e.g. own causation, contribution, direct link) and, as a consequence, trigger different legal consequences. The second option is a ‘sliding model’ where the degree of a company’s involvement would limit its due diligence in a more flexible manner using an ‘adequacy’ or ‘appropriateness’ criterion. Relevant factors to determine ‘adequacy’ here could include, *inter alia*, the duty bearer’s proximity to and leverage over the entity directly causing harm in its value chain. The discussion of these models also highlighted that they are not mutually exclusive and their combination is possible.

**222** Particular attention should be given to the design of EDD’s material scope. In this regard, the standard approach to legislating HRDD should not simply be ‘copy-pasted’ to environmental due diligence. HRDD’s material scope is typically defined by at least implicitly referencing the internationally accepted canon of human rights treaties. While it is possible to reference international environmental treaties to describe some elements of EDD’s material scope, as a stand-alone approach this would fall short of what is necessary to provide comprehensive environmental protection. This is due to the lack of a sufficiently wide-ranging and internationally accepted canon of environmental treaties that deal with all, or at least most, of the pertinent environmental issues that may occur in transnational value chains. Therefore, designing EDD’s material scope comprehensively requires a somewhat more nuanced approach.

**223** Two main avenues for designing EDD’s material scope have been distinguished in this chapter: referencing substantive environmental provisions on the one hand and formulating a general clause on the other. Four sources of substantive environmental provisions may be taken into consideration for the referencing approach: international treaties, international soft law, local law at the ‘place of effect’ (commonly, but imprecisely referred to as host State law) and, finally, home State law. All

four sources are worth serious consideration as each has its own strengths and weaknesses as briefly outlined below.

Referencing international agreements and to some degree also international soft law as such is perhaps the most commonly accepted approach to determining EDD's material scope. Its greatest strength lies in it being the least problematic with regard to public international and in particular WTO law. Its weakness, however, stems from its patchiness. Relying solely on this approach would result in establishing an EDD obligation that has only fragmentary application, as the German 'Supply Chain Due Diligence Act' may illustrate. **224**

While referencing local environmental law at the 'place of effect' is unlikely to face any major legal objections, from a teleological perspective, this approach will be helpful only to the extent that it will primarily address enforcement deficits in local law. However, the approach will fall short of EDD's purpose in this regard if local law at the 'place of effect' is riddled by regulatory deficits. **225**

Finally, referencing environmental home State law is probably the most challenging path to pursue and the most contestable approach in terms of its lawfulness under international and WTO law. Moreover, this approach raises concerns regarding unintended side-effects, such as impeding desirable foreign direct investments in developing countries that could promote the use of more environmentally-friendly technology in third countries. Further analysis is required to determine whether the potential legal objections this approach faces could be circumvented by means of an opening clause that allows for deviation from home State standards. For the time being, one may conclude that the approach should be considered for individual industries or other more specific concretisations rather than to broadly define the material scope of a general EDD obligation. **226**

The second main avenue of designing EDD's material scope, as highlighted above, is a general clause. Such a clause can take two forms: Firstly, it can be formulated in a negative way, designed to avoid harm to the environment or a number of broadly outlined objects of protection, such as 'environmental goods'. Its second form requires it to be phrased positively to require compliance with a broadly-outlined environmental standard of conduct. One particular advantage of a general clause is that it is less likely to create loopholes than specifically referencing environmental norms. However, on its own, a general clause would leave a substantial margin of discretion and thereby leeway for companies, authorities and ultimately courts in terms of their actions and reactions to events as they occur. Therefore, while it is a useful component in its own right, a general clause should only be employed as a complement to the referencing approaches. **227**

Turning to the design of the enforcement mechanisms, this chapter focused on enforcement by means of civil liability. EDD obligations can and should be enforced by a broad mix of instruments ranging from reporting requirements to criminal punishment. However, given the focus of this book, this chapter has left these other means of enforcement aside. From the perspective of promoting EDD in transnational value chains, civil liability appears to be a stand-out option as an effective enforcement mechanism based on its proven deterring effect. The mechanism is also less vulnerable, if not completely immune, to potential legal hurdles discussed in the final part of this chapter. **228**

**229** However, a number of caveats need to be considered when employing civil liability as means to enforce EDD: First, the legal design must ensure that the liability mechanism applies in relevant cases under private international law, meaning it will need to overcome the basic rule in Article 4 Rome II Regulation according to which generally the substantive tort law of the place where the damage occurred (*lex loci damni*) is applicable. To overcome this general rule, the liability clause must be drafted as an ‘overriding mandatory provision’ (Article 16 Rome II Regulation). Such an overriding mandatory provision can be designed in two ways: Firstly, an entire new legal basis for a claim can be created and deemed an overriding mandatory provision by law; this legislative technique has been referred to as the ‘big solution’. Alternatively, a ‘small solution’ is also conceivable whereby a stipulation is made that the due diligence standard shall simply serve as an overriding duty of care standard while applying foreign tort law. Beyond this issue of private international law, other problems can hamper the effectiveness of civil liability as an enforcement mechanism. Such problems include the need to establish that actionable damage has occurred and the fact that both the burden of proof and the cost of litigation funding can be preclusive to seeking judicial redress.

**230** The final part of this chapter turned to the potential legal objections establishing EDD obligations regarding transnational value chains in home State legislation. It focused on foreseeable challenges that may be triggered by the extraterritorial impact of the discussed due diligence in home State law obligation.

**231** Firstly, under general public international law, it may be asked whether the extraterritorial impacts could violate the sovereign right of third countries to regulate business operations on their territory in a manner of their choice. However, for the purpose of this chapter, it is sufficient to establish that exercising prescriptive jurisdiction is essentially lawful, even if the due diligence law has extraterritorial effects as long as a connecting factor can be established pursuant to one of the recognised relevant principles (territory, personality, effects etc.). As long as the personal scope is limited to companies domiciled on the territory of the legislating state, establishing such a connecting factor does not appear to be problematic. A more legally challenging aspect of this kind of legislation may initially seem to come from the prohibition of intervention, however, according to the view taken in this chapter, a claim of interference with exclusively domestic affairs is rather unlikely to arise from the discussed type of EDD obligations for transnational value chains. This would be imaginable only in the exceptional case of a genuine ‘prescription conflict’ where the due diligence obligation requires the environment to be treated in a way that is explicitly forbidden under the local law of the third country in question. Whether or not such prescription conflicts are realistically conceivable depends ultimately on the specific design of the material scope of due diligence. The most vulnerable approach to designing a due diligence obligation, as noted above, consists of referencing home State law. However, although home State environmental standards may be more demanding for businesses, they will not require operations that would be forbidden pursuant to more lenient environmental standards abroad. Regardless of whether a due diligence requirement, by virtue of its material scope, interferes with exclusively internal affairs of third countries, the discussed legislation

is unlikely to have the essential element of coercion. In particular, it seems virtually impossible to assert that a purely civil liability regime in one State could exert any kind of coercive influence on the internal affairs of another State. Therefore, the extraterritorial impacts of a due diligence obligation enforced by a civil liability mechanism would be relatively immune to objections under public international law regarding any extraterritorial impact of the discussed kind of legislation.

Another legal objection relating to extraterritorial repercussions may stem from WTO law. Admittedly, the discussed kind of due diligence obligation may constitute indirect discrimination against some WTO Member States and thereby potentially run afoul of the most-favoured nation and the national treatment principle. Imposing the discussed type of EDD obligation may see production in countries of the Global South with relatively low environmental standards and weak local enforcement become disproportionately more costly than production in countries of the Global North with relatively high local standards and strong local enforcement. This may occur because to comply with the due diligence obligation, a duty bearer will need to spend more time and money on carrying out value chain due diligence when producing in countries with lower standards and weaker public enforcement compared to the production in countries with stronger standards and enforcement. This is because when producing in countries with higher standards the duty bearer may rely on the legitimate expectation that local standards and enforcement are sufficient or close to. Therefore, the discussed type of due diligence legislation may, arguably, result in indirect discriminating effects. Whether such indirect discrimination effects would amount to triggering GATT obligations will ultimately again depend on the enforcement mix. In this regard, the discussed enforcement by means of civil liability stands out again as rather unlikely to create such discriminating effects that could become relevant under WTO law.

However, a *prima facie* violation of GATT obligations can be justified pursuant to the exceptions in Article XX(a) (public morals), (b) (human, animal and plant life or health), and (g) (conservation of exhaustible natural resources) GATT. Justification based on item (a) would not raise any territoriality problems because the due diligence measure is designed to protect public morals on the regulating home State's territory. However, the 'extraterritoriality' of the protected environmental goods abroad does not necessarily preclude justification under Article XX (b) and (g) GATT. While the issue of extraterritoriality under Art XX GATT has not been conclusively settled in the case law, the more recent Panel and Appellate Body reports point in direction of granting more generous exceptions. However, to be justified by one of the exceptions, the measure also needs to pass the test in the chapeau of Article XX GATT. Pursuant to the relevant case law, this requires, *inter alia*, serious efforts to negotiate, in good faith, a multilateral solution prior to implementing unilateral measures.

In conclusion, a comprehensive corporate environmental due diligence obligation in transnational value chains can be designed in a lawful manner in home State law. Enforcement by means of a civil liability regime appears to be an approach that is particularly immune to conceivable legal objections relating to the extraterritorial impact this kind of home State legislation potentially has.

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**Part III**  
**Key Sectors and Synthesis**

# Chapter 8

## Climate Change Litigation: A Reference Area for Liability



Roda Verheyen and Johannes Franke

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### 8.1 Introductory Remarks

Chapter 7 discussed various ways in which environmental standards could be applied in an extraterritorial manner, primarily through national law addressed at companies or attribution clauses to widen and extend responsibility to several actors

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along any given supply chain. In this regard, one must keep in mind that the specific context of Chap. 7 was the due diligence obligations of companies, which should not be confused with the concept of the due diligence of States as used in the public international law terminology. A set of such rules could indeed be climate change related.<sup>1</sup> This chapter looks at climate change litigation against the backdrop of existing law as well as climate science, particularly the well-documented impacts of climate change which are both deadly and devastating and will become increasingly so as more greenhouse gases (GHGs) are released into the atmosphere in the coming decades. To put it bluntly, emissions need to drop globally by 3 to 7% per year to adhere to the globally accepted temperature target provided by the Paris Agreement to the UN FCCC of 2015<sup>2</sup> to try and mitigate the worst of the “risks and impacts” of anthropogenic climate change:

Article 2(a) Holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change.

- 2 Chapter 2 referred to liability law as essentially a ‘private’ mechanism and, keeping in mind this broad understanding of liability, we discuss the two dimensions of liability in the context of existing or potential climate change cases/litigation, based on existing legal rules in different jurisdictions. By way of reminder, on the one hand, liability is about legal consequences given that it deals with compensation or restitution for damage sustained in a particular situation, i.e. the consequences of the harmful behaviour of certain actors. On the other hand, legal theory has always stressed the ‘regulatory’ or preventive function of liability—in this sense, liability is an instrument for the implementation and enforcement of environmental standards.
- 3 This chapter uses a comparative approach to discuss tort/nuisance type cases that have principally occurred in the USA, Germany and the Netherlands. It focuses on private actors but also includes ongoing vertical climate litigation (i.e. addressed at States and governments), as such cases are also essential to understand both limitations and parallels of private liability. However, this chapter does not attempt to provide a conclusive overview of all the relevant cases and possible categories of

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<sup>1</sup>(Anthropogenic) climate change is a well-known physical phenomenon and needs no explanation. The authors of this study defer to the scientific findings of the IPCC which can be fully accessed online: [www.ipcc.ch](http://www.ipcc.ch), last accessed on 10 Mar 2022.

<sup>2</sup>See: Höhne et al. (2020).

climate change litigation as there are now so many that this would be impractical.<sup>3</sup> The categories provided here are selected to enable meaningful and transparent analysis of the challenges regarding the forensic (e.g. causation, attribution) and legal issues (e.g. damage baseline, environmental damage) that such cases face, and thus any attempt to hold private entities ‘responsible’ or liable for climate change impacts. This also precludes this chapter from examining every legal problem that must be addressed in relation to climate-change cases (such as jurisdiction, applicable law, etc.). Rather, the present analysis focuses on key issues where climate cases serve particularly well as a reference area.

In contrast to the previous Chap. 7, this chapter refers to the duty to protect in the sense of a State’s obligation to protect its citizens and discusses the standard of care that defines these duties. Such standards could be substantive duties of result or duties of conduct – depending on the legal system and level of analysis. This should be noted against the backdrop of the duties discussed in Chap. 5 (regarding the liability of private entities in international law), Chap. 6 (the liability of private entities under national law) and especially Chap. 7 (the due diligence requirements of companies as a distinct concept of law).

### 8.1.1 Broad Categories of Private Liability Actions

For this chapter, it is useful at the outset to establish broad categories of horizontal civil litigation in the climate context. These categories provide an understanding of the various forensic and legal issues<sup>4</sup> to be discussed in the sections that follow.

Firstly, there are a number of tort/nuisance type cases that have been brought in the USA, Germany and the Netherlands that will be presented in more detail below (¶ 14 *et seq*) and that are at the centre of the following analysis. Pertinent to the subject matter of the study, the defendants in these cases are private entities, large GHG emitters (the ‘carbon majors’,<sup>5</sup> ¶ 97). These cases can be divided further by the type of action involved, namely;

<sup>3</sup>The most conclusive studies to date seem to be: Burger et al. (2020); Setzer and Byrnes (2019). See also: Toussaint (2021) and the conclusive volumes by Kahl and Weller (2021) as well as Sindico and Mbengue (2021). Almost all of the cases referred to in this chapter can be found in the Climate Change Litigation Databases provided by Columbia Law School’s Sabin Center of Climate Change <http://climatecasechart.com/> (accessed on 9 Mar 2022). For all the cases available in this database, we have provided the corresponding links in the footnotes.

<sup>4</sup>Forensic issues are referred to here as issues which are subject to evidence in court or when formulating a claim. This includes attribution and compensation, even though these are naturally also legal issues at heart, see Pöttker (2014), p. 39.

<sup>5</sup>Cf. Rumpf (2019).

- monetary compensation or actual relief for damages incurred by changing trends or extreme weather events linked to climate change (the first dimension of liability), this would be actual compensation for climate-change damage.<sup>6</sup>
- implementation or financing of individual protection measures (the first dimension of liability) which suggests a monetary order but should be qualified as ‘adaptation’ in accordance with climate-change terminology.
- injunctions (the second, preventive, dimension of liability), focusing on a change in the conduct of a specific business to ensure climate-change impacts are averted by reducing emissions, such actions are classed as ‘mitigation’ in international-law terminology.

This latter category of mitigation-targeted cases can now be supplemented by cases such as the *TOTAL* case in France (*Notre Affaire à Tous and Others v TOTAL*, ¶ 47)<sup>7</sup> where specific due diligence obligations are applied as described in Chap. 7. These cases are based on the premise of a breach of due diligence, not an injunction, but are equally focused on forcing private entities to reduce GHG emissions.

7 In addition to the foregoing, there have been actions brought by shareholders against major GHG emitters claiming a loss of company value due to a failure to adapt business strategies to climate change, demanding climate-risk disclosures<sup>8</sup> or arguing for staying certain investments, such as in Poland where shareholders argue that building a new coal-fired power plant violates fiduciary duties.<sup>9</sup> A non-disclosure claim in Australia was halted after the defendant bank included a climate-risk assessment in its 2017 annual report.<sup>10</sup> These cases also belong in the category of horizontal climate litigation but have little to do with concrete physical and environmental damage as they focus on the risks of climate change to company/ shareholder value.

<sup>6</sup>See for the terms and delineation of the terms damage, adaptation and mitigation: Verheyen (2005), pp. 54 *et seq.*

<sup>7</sup>The complaint Court of Appeal of Versailles *Notre Affaire à Tous et al v TOTAL* [pending] is available at <http://climatecasechart.com/non-us-case/notre-affaire-a-tous-and-others-v-total/>, last accessed on 10 Mar 2022.

<sup>8</sup>Some authors believe this type of litigation to be a particularly promising cause of action, cf. Ganguly et al. (2018), pp. 858 *et seq.* See Duve and Hamama (2021), pp. 466 *et seq.*

<sup>9</sup>Regional Court of Poznan *Client Earth v Enea* (2019) IX GC 1118/18, for case documents and more information see <http://climatecasechart.com/non-us-case/clientearth-v-enea/>, last accessed on 10 Mar 2022.

<sup>10</sup>Hutchens (2017).



### 8.1.2 *Public Law and Private Law Litigation and the Relationship Between State and Private Duties of Care*

At the outset, it is also necessary to establish that cases involving private companies do not even come close to covering all the legal actions directly or indirectly aimed at climate protection or restitution for negative impacts. On the contrary, most cases considered to fall under the heading of climate change litigation are in fact cases that address States or invoke public law. Some of these latter group of cases are listed here, again in broad categories to give context to the following discussion:

1. Actions brought by private individuals or NGOs against States and/or government agencies to force States or their agencies to enact legislative or administrative measures to regulate GHG emissions. Most of these use human-rights arguments to support complaints about States' failure to mitigate climate change, and, to a more limited extent, to address the impacts of climate change ('adaptation').

In December 2019, in the well-known *Urgenda* case, the Supreme Court of the Netherlands (in the third instance) applied Dutch civil law using the European Convention on Human Rights as a substantive basis when it upheld a verdict obligating the Dutch government to reduce GHG emissions by 25% by 2020.<sup>11</sup> This succession of three rulings from 2015 to 2019 in the Netherlands is said to provide hope for the climate in the face of delaying tactics employed in diplomatic efforts to solve the problem globally.<sup>12</sup> The Supreme Court's decision will also be further discussed here (§ 41) since the legal basis for the claim was a tort/nuisance type provision used, in this instance, against the State.

- a. In 2020, two cases in France resulted in judgements requiring restitution for ecological damage resulting from the omission of climate protection measures of the French State as well as obligating the government to take effective

<sup>11</sup> Supreme Court of the Netherlands *Urgenda Foundation v the State of the Netherlands* (2019) 19/00135. The judgment and further case documents (including English translations) are available at <http://climatecasechart.com/non-us-case/urgenda-foundation-v-kingdom-of-the-netherlands/>, last accessed on 10 Mar 2022.

<sup>12</sup> Mary Robinson, former UN High Commissioner for Human Rights and former President of Ireland, stated in reaction to the December Judgement: "... We are at real risk of failing to meet our commitments under the Paris Agreement and unleashing untold human suffering. This judgment from the highest court in the Netherlands affirms that governments are under a legal obligation, as well as a moral obligation, to significantly increase their ambition on climate change. Our human rights depend on it." See for in depth analysis: van der Veen and de Graaf (2021).

- measures to curb emissions. This includes a claim by a coastal community Grande-Sythe<sup>13</sup> and one made by several civil-society organisations.<sup>14</sup>
- b. In New Zealand, the government was similarly ordered by a court to update its climate policies. On 2 November 2017, the High Court in Wellington<sup>15</sup> held that climate change presents significant global risks, that the government is legally accountable for its actions to address climate change and that it had failed to review the country's climate-change targets for 2050. Unlike in *Urgenda* however, the court refrained from issuing an order due to the new political targets set by the newly elected government.
  - c. In the USA, the most well-known such case is probably *Juliana v United States of America*, in which several young Americans ask for a climate recovery plan from the government based on the public trust doctrine, which was recently prevented from moving to full trial but remains pending.<sup>16</sup> Another well-known and somewhat similar US-based case is one of the first climate cases brought to court, *Environmental Protection Agency (EPA) v. Massachusetts*,<sup>17</sup> which will be presented in depth below (§ 22 *et seq.*).
  - d. In Germany, an application was brought to the administrative court of Berlin by several farmer-families seeking to hold the government to its promise made in 2007 to reduce emissions by 40% of their 1990 level by 2020. The case was dismissed in October 2019<sup>18</sup> on legal grounds, however, justiciability was accepted as was the existence of a duty to protect against the impact of climate change based on human rights as enshrined in the German Basic Law. Since Germany adopted a climate-change law in December 2019, an appeal would have been ineffective and several constitutional complaints against this law

<sup>13</sup>For details on the case Constitutional Council of France *Commune de Grande Synthe v France* [pending] see <http://climatecasechart.com/non-us-case/commune-de-grande-synthe-v-france/>, last accessed on 10 Mar 2022.

<sup>14</sup>Administrative Court of Paris *Notre Affaire à Tous et al v France* (2021) 1904967, 1904968, 1904972, 1904976/4-1, see Press Release by the Court: <http://paris.tribunal-administratif.fr/Actualites-du-Tribunal/Communiqués-de-presse/L-affaire-du-siècle>, last accessed on 10 Mar 2022. The case is documented at <http://climatecasechart.com/non-us-case/notre-affaire-a-tous-and-others-v-france/>, last accessed on 10 Mar 2022. For an in-depth analysis see: Epstein and Deckert (2021).

<sup>15</sup>High Court of New Zealand Wellington Registry [2017] NZHC 733, the decision and the complaint are available at <http://climatecasechart.com/non-us-case/thomson-v-minister-for-climate-change-issues/>, last accessed on 10 Mar 2022.

<sup>16</sup>US Court of Appeals for the 9th Circuit *Juliana v United States* (2020) 6:15-cv-01517-AA. The decision and further case documents are available at <http://climatecasechart.com/case/juliana-v-united-states/>, last accessed on 10 Mar 2022.

<sup>17</sup>US Supreme Court *Massachusetts v EPA* (2007) 549 U.S. 534, the decision is available at <http://climatecasechart.com/case/massachusetts-v-epa/>, last accessed on 10 Mar 2020. The court decided that GHG emissions by tail pipes had to be regulated by the EPA, see also below at 1.2.1. For an in-depth analysis see: Farber (2021).

<sup>18</sup>Administrative Court of Berlin 10 K 412.18 (2019); decision and complaint are available at <http://climatecasechart.com/non-us-case/family-farmers-and-greenpeace-germany-v-german-government/>, last accessed on 10 Mar 2022. For a discussion of the decision see: Schomerus (2020). For an in-depth analysis see: Weller et al. (2021).

from youth plaintiffs and private individuals from Bangladesh had been brought. Similar cases are ongoing in the courts of the EU,<sup>19</sup> Switzerland,<sup>20</sup> Belgium,<sup>21</sup> France,<sup>22</sup> Canada,<sup>23</sup> South Korea<sup>24</sup> and others.

- e. About 18 months after the judgment of the Administrative Court of Berlin, the German Federal Constitutional Court held that the German Climate Protection Act (CPA) was unconstitutional insofar as it lacked reduction targets for the time after 2030.<sup>25</sup> While the court did not consider that a legislative duty of care had yet been violated, mainly because adaptation measures may still prove sufficient to protect fundamental rights against climate change, it ruled that the reduction path of the CPA violated fundamental rights in their “intertemporal dimension”.<sup>26</sup> As most of Germany’s CO<sub>2</sub> budget would be exhausted by 2030 if the path set forth by the CPA was followed, severe restrictions on individual freedoms (e.g. on mobility) would become necessary

<sup>19</sup>The *People’s Climate Case* was dismissed: ECJ *Armando Ferrão and Others v The European Parliament and the Council* [2021] ECLI:EU:C:2021:252. See for the judgment and further case documents, including pleadings, orders and appeal: <https://peoplesclimatecase.caneurope.org/documents/>, last accessed on 10 Mar 2022.

<sup>20</sup>The case was dismissed, Swiss Supreme Court *Association of Swiss Senior Women for Climate Protection v Federal Department of the Environment Transport, Energy and Communications (DETEC) et al* (2018) A-2992/2017. The decision and further case documents are provided at <http://climatecasechart.com/non-us-case/union-of-swiss-senior-women-for-climate-protection-v-swiss-federal-parliament/>, last accessed on 10 Mar 2022.

<sup>21</sup>The Court of First Instance of Brussels, Civil Section R.G. 2015/4585/A [2021], held that the Belgian federal and regional governments’ climate policy violates human rights but did not impose any concrete sanctions or reduction targets. The decision was appealed by the plaintiffs. For more information, including the first instance judgment and the appeal see <http://climatecasechart.com/climate-change-litigation/non-us-case/vzw-klimaatzaak-v-kingdom-of-belgium-et-al/>, last accessed on 10 Mar 2022.

<sup>22</sup>A case summary and the memorandum to the French Constitutional Council are available at <http://climatecasechart.com/non-us-case/external-contribution-to-the-french-constitutional-council/>, last accessed on 10 Mar 2022.

<sup>23</sup>There are two Canadian climate cases challenging Canada’s climate policy as insufficient. The first one was brought by youth plaintiffs in 2019: Canadian Federal Court of Appeal *La Rose v Her Majesty the Queen* [pending] (further information and case documents available at <http://climatecasechart.com/non-us-case/la-rose-v-her-majesty-the-queen/>, last accessed on 10 Mar 2022), the second one was brought by an indigenous group in 2020: Canadian Federal Court of Appeal *Lho’inggin et al v Her Majesty the Queen* [pending] (further information and complaint available at <http://climatecasechart.com/non-us-case/gagnon-et-al-v-her-majesty-the-queen/>, last accessed on 10 Mar 2022).

<sup>24</sup>A case summary and case documents of South Korean Constitutional Court *Do-Hyun Kim et al v South Korea* [pending] are available at <http://climatecasechart.com/non-us-case/kim-yujin-et-al-v-south-korea/>, last accessed on 10 Mar 2022.

<sup>25</sup>Federal Constitutional Court 1 BvR 2656/18 (2021), decision available in English at [https://www.bundesverfassungsgericht.de/SharedDocs/Entscheidungen/EN/2021/03/rs20210324\\_1bvr265618en.html](https://www.bundesverfassungsgericht.de/SharedDocs/Entscheidungen/EN/2021/03/rs20210324_1bvr265618en.html), last accessed 10 Mar 2022.

<sup>26</sup>For a discussion of the judgment and the “intertemporal dimension” of fundamental rights see Winter (2021).

- to meet Germany's contribution to the binding goals of the Paris Agreement. Therefore, the CPA placed a disproportionate burden on future generations who would have had to bear the brunt of the government's radical last-minute action to reduce emissions. This line of argument may open a new avenue for climate change litigation, not only against States but also against private emitters who consume a disproportionately large share of the remaining CO<sub>2</sub> budget, thus threatening to impose severe restrictions on future freedoms.
- f. In Ireland, the Supreme Court ordered the State to draft a new climate-change plan based on the 2015 legislation since the existing plan did not provide sufficient measures to meet the agreed-upon targets.<sup>27</sup> It ruled that "a compliant plan must be sufficiently specific as to policy over the whole period to 2050."
  - g. Another successful case that focused on adaptation to climate change is the *Leghari case* in Pakistan.<sup>28</sup> Mr Leghari, a Pakistani farmer, applied for an order for the failure of the Pakistani government to implement its national climate-change law and policy. In 2015, the Green Bench of the Lahore High Court upheld the claim based on the State's obligations to protect the constitutional rights to life and dignity.
  - h. In Colombia, the Supreme Court issued a rather spectacular ruling in April 2018 on an application brought by youth plaintiffs against the national government, several local governments and a number of corporations where the court found that the Colombian Amazon has its own rights and, given its importance for halting climate change, ordered the government to make and carry out action plans to address deforestation in the Amazon.<sup>29</sup>
2. Actions indirectly<sup>30</sup> brought against large GHG emitters to ensure the enforcement of existing environmental statutes or invoking climate change in discretionary decisions for the approval of certain projects such as harbours, coal mines or roads, i.e. legal actions aimed at cassation of facility approvals. Today, there are probably several thousand cases worldwide based on various aspects of climate change and, since 2015, the Paris Agreement in the context of projects approvals

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<sup>27</sup>The case was dismissed at the first instance: H Ireland High Court *Friends of the Irish Environment v the Government of Ireland* No. 793 JR (2019); appeal to the Irish Supreme Court was successful, Supreme Court of Ireland *Friends of the Irish Environment v the Government of Ireland* 205/19 (2020). The judgments and further case documents are available at <http://climatecasechart.com/non-us-case/friends-of-the-irish-environment-v-ireland/>, last accessed on 10 Mar 2022.

<sup>28</sup>High Court of Lahore *Leghari v Federation of Pakistan* (2015) W.P. No. 25501/2015, the decision and further case documents are available at <http://climatecasechart.com/non-us-case/ashgar-leghari-v-federation-of-pakistan/>, last accessed on 10 Mar 2022.

<sup>29</sup>Supreme Court of Columbia *Andrea Lozano Barragán and others v the President of Colombia and others* [2018] STC 4360-20. The decision and further case documents are available at <http://climatecasechart.com/non-us-case/future-generation-v-ministry-environment-others/>, last accessed on 10 Mar 2022. Interestingly, the application was directed not only against the government and regional entities, but also several (public) corporations. See Pelizzon (2020); Alvarado and Rivas-Ramirez (2018).

<sup>30</sup>In these cases, the defendant is the competent national authority and not the private entity itself.

or plans enabling projects such as those mentioned just above. While a case involving drilling approvals in the Arctic failed in Norway<sup>31</sup> in the first instance, in *Gloucester Resources Limited v Minister for Planning*, an Australian court denied permission for a coal mine in the final instance due to coal mining's foreseeable impacts on the climate.<sup>32</sup> Similar, earlier attempts to stop climate-damaging projects around the globe had failed.<sup>33</sup> However, in the recent *Heathrow Airport case*<sup>34</sup> a London court rejected the development decision for an additional runway because GHG emissions and their impact on climate targets had not been taken into account.<sup>35</sup> The decision was ultimately overturned by the Supreme Court<sup>36</sup> but bears witness to the increasing legal importance of climate change for project approvals.

3. Last but not least, there are several pending international applications currently before human rights bodies (Right of the Child Convention,<sup>37</sup> Australian islanders at the United Nations Human Rights Committee<sup>38,39</sup>)

<sup>31</sup>Borgarting Court of Appeal *Natur og Ungdom & Greenpeace Norge v Staten* 18-060499ASD-BORG/03 [2020]. The decision and further case documents (including English translations) are available at <http://climatecasechart.com/non-us-case/greenpeace-nordic-assn-and-nature-youth-v-norway-ministry-of-petroleum-and-energy/>, last accessed on 10 Mar 2022.

<sup>32</sup>Land and Environment Court of New South Wales *Gloucester Resources Limited v Minister for Planning* [2019] NSWLEC 7. The decision and the complaint are available at <http://climatecasechart.com/non-us-case/thomson-v-minister-for-climate-change-issues/>, last accessed on 10 Mar 2022.

<sup>33</sup>In Austria, the Constitutional Court (Constitutional Court E875/2017 [2017]) reversed a decision by the Austrian Federal Court (Austrian Federal Court W109 2000179-1 [2017]), which had voided the permit to build a third runway at Vienna airport because of the negative impact on the climate. These decisions are available online at <http://climatecasechart.com/non-us-case/in-re-vienna-schwachat-airport-expansion/>, last accessed on 10 Mar 2022. An example case from the U.S. is *Northwest Environmental Defense Center v Owens Corning Corp* (US District Court of Oregon *Northwest Environmental Defense Center v Owens Corning Corp* (2006) 434 F. Supp. 2d 957), where environmental protection groups unsuccessfully tried to prevent approval of a GHG emitting manufacturing facility, the decision is available online at <http://climatecasechart.com/case/northwest-environmental-defense-center-v-owens-corning-corp/>, last accessed on 8 May 2022.

<sup>34</sup>England and Wales Court of Appeal *Plan B Earth v Secretary of State for Transport* [2020] EWCA Civ 214 14. The decision and further case documents are available at <http://climatecasechart.com/non-us-case/plan-b-earth-v-secretary-of-state-for-transport/>, last accessed on 10 Mar 2022.

<sup>35</sup>On all of these cases: Verheyen and Schayani (2020).

<sup>36</sup>UK Supreme Court *R (on the application of Friends of the Earth Ltd and others) (Respondents) v Heathrow Airport Ltd* [2020] UKSC 2020/004, available at <https://www.supremecourt.uk/cases/docs/uksc-2020-0042-judgment.pdf>, last accessed 10 Mar 2022.

<sup>37</sup><https://earthjustice.org/news/press/2019/un-committee-on-the-rights-of-the-child-receives-first-ever-human-rights-complaint-on-climate-change>, last accessed on 10 Mar 2022.

<sup>38</sup><https://www.clientearth.org/press/climate-threatened-torres-strait-islanders-bring-human-rights-claim-against-australia/>, last accessed on 10 Mar 2022.

<sup>39</sup>See: Jaimes (2015); Savaresi and Auz (2019).

- 9 Public law litigation is very relevant to private liability litigation because the science and forensics as well as many legal principles, in particular regarding causation and attribution, used in State-related cases can also be used in arguments in civil cases. Furthermore, since business decisions and the conduct of major polluters can have a similar impact on global climate change as policy decisions by national legislators, it does not seem far-fetched to demand similar standards of care from such private actors. How administrative or constitutional courts are continuing to examine and interpret the duty of care against the background of climate science necessarily also influences civil courts. This has been examined in depth in the context of the due diligence obligations of companies in Chap. 7. Turning this argument around, some French courts have now applied to the State statutes originally designed to restrict certain private behaviour to prevent, for example, ecological damage.<sup>40</sup> These decisions will be examined further below.
- 10 Nevertheless, one of the important lessons learned from past and ongoing cases is the difficult relationship between State duties and the duties of private entities. The parallel existence of public and civil law cases raises a few core questions regarding climate-change litigation: Is there a parallel responsibility for both States and private enterprises and to what extent do State and private duties align? Can the behaviour of private entities be justiciable at all if the State assumes responsibility for climate protection (as is the case in most jurisdictions, at least generally)? We will turn to this question first, in the next section.

### 8.1.3 *Structure of the Analysis*

- 11 This chapter approaches the issues raised above as follows: Using a comparative approach, tort/nuisance type cases from the USA, Germany and the Netherlands are presented in the first part of this chapter (§ 14 *et seq*) with a focus on the preliminary question of justiciability. While forensic questions, especially the problem of causation, are also relevant here, the main point of the analyses is the overlapping duties of State and private actors and the often-raised general hypothesis that State duties exclude responsibility for private actors.
- 12 The second part of the chapter (§ 55 *et seq*) will then explore the issues of standing and compensable damage as well as causation in more detail. The forensic challenges that arise in this context are very different, depending on the broad categories of civil cases outlined above (§ 5 *et seq*). In fact, as will be seen, some types of claims avoid forensic problems altogether. The analysis will also include an examination of policy proposals designed to enhance procedural and substantive laws to engage companies' commitments to address climate change.
- 13 The third part (§ 135 *et seq*) will revolve back to the relationship between private and State duties, irrespective of whether they are referred to as such or as duties of

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<sup>40</sup>See footnotes 14 and 15.

care, due diligence etc. in the given set of applicable rules. The argument will be made that new positive duties of private actors exist, or are at least emerging, that are similar to State duties and are essentially aimed at meeting the reduction targets of the Paris Agreement. It will be seen that international environmental law, while not directly binding private entities,<sup>41</sup> can be used to specify general obligations under national law. General rules of liability may thus serve a gap-filling function where there are currently no statutory cross-border due diligence obligations in national and European law as discussed above (Chap. 7).

## 8.2 Justiciability of Climate Change in Civil Courts and the Overlap of Public and Private Duties of Care

### 8.2.1 *Preceding Remarks*

The anthropogenic causes of climate change are no longer disputed by any serious scientist<sup>42</sup> and have not been contested by the defendants in the cases presented below. Nevertheless, tort/nuisance liability actions against large GHG emitters (the ‘carbon majors’) have largely not been fully successful, nor have there been many such cases to date. 14

We approach the reasons for this in a practical manner, looking at the countries in which tort/nuisance actions have actually been brought, namely the U.S., Germany and—most recently—the Netherlands, where for the first time a multinational company (Shell) has been held responsible for its contribution to climate change. While U.S. courts have seen by far the most cases, the one case brought before German courts was the first tort/nuisance-based climate case to pass the ‘motion to dismiss stage’ and will be decided on the merits. The German Court of Appeals of Hamm found the plaintiff had stated his claim conclusively and that further evidence, in the form of written scientific expertise as well as a site visit, was needed to arrive at a verdict.<sup>43</sup> In contrast, all U.S. claims have been dismissed for ‘purely legal’ reasons by citing that the plaintiffs had no claim, even if all their allegations were found to be true. 15

This relative success of the German case seems odd at first, considering that both the U.S. and German legal systems require the plaintiff to plausibly argue what are essentially the same issues,<sup>44</sup> including the neuralgic points mentioned above (¶ 3). In particular, the plaintiff must show 16

<sup>41</sup> In detail Chap. 5 ¶ 6 *et seq* (Sect. 5.1).

<sup>42</sup> Cf. for an analysis of the consensus within the scientific community: Cook et al. (2016).

<sup>43</sup> This legal approach taken by the court is more often than not criticised in more recent literature. See e.g. Wagner and Arntz (2021).

<sup>44</sup> In U.S. terminology, it is necessary to establish sufficient “standing” to bring a claim, the German legal term is the “Schlüssigkeit” (conclusiveness) of a plaintiff’s claim.



- a violation or an impairment (unreasonable interference) of his or her rights (“injury in fact”, covered type of damage) (forensic/legal)
- caused by (“fairly traceable to”) the defendant’s conduct (forensic)
- fault or foreseeability or conduct depending on the cause of action used (legal/forensic).

**17** The discussion below will, however, demonstrate that there is a very specific reason for this divergence. The dismissal of the U.S. lawsuits in the cases analysed below did not primarily hinge on forensic questions but on the more fundamental problem of justiciability, ‘political question’ and preemption or, to put it more simply, the relationship between public and private law.

**18** This points to the overlap between State or government duties to address climate change, which clearly exists and is subject to litigation around the world, with any private actor duties which could be the basis for this latter group’s liability. Any tonnage of CO<sub>2</sub> or other GHG emitted will be:

- (i) subject to a State inventory and reduction commitment under the UN climate regime following the principle of State sovereignty and the no-harm rule,
- (ii) be emitted using fossil fuels mined/produced/sold by a private actor and
- (iii) be physically emitted by a car/power plant/industry facility on the territory of the pertinent State (except for international air and ship transport which are not attributed clearly to a given State).

**19** The same is not so true for natural processes such as emissions of methane from cattle or F-gases from industry. However, for the bulk of the ‘damaging substances’ that have negative impacts on the environment, property, health etc., there is a sense of overlapping responsibility for both the State as well as the producers and users of said products. This is especially the case since emissions of CO<sub>2</sub> are not explicitly forbidden and can be, as in the case of the EU (since 2005) and some states in the USA,<sup>45</sup> explicitly allowed through the purchase of an emission certificate.

**20** Each emitted molecule of a ‘damaging substance’ can thus be attributed simultaneously to various actors within the State and the private sector. Each actor has a distinct pattern of behaviour that may involve acts of commission and omission: the State through regulation and/or enforcement or a lack thereof, primary producers through extracting and selling substances such as fossil fuels while further downstream, companies and consumers contribute by ultimately emitting. The legal duties assigned to each actor are accordingly directed at the relevant but very different actions (regulating, stopping or minimising extraction and/or sale, stopping or minimising emissions). This chapter does not seek to conclusively define and differentiate sector-specific duties of care within the private sector, rather its focus is on the overlap between State and private duties as such and the fundamental question of the relationship between State and private responsibility. A topic that is already highly controversial in itself and has been addressed differently in varying legal systems.

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<sup>45</sup> Such as California, with the original legislation dating from 2011 based on the California Global Warming Solutions Act.



### 8.2.2 *U.S. Cases and Justiciability: The Argument of Displacement by the Clean Air Act (CAA)*

It is important to understand that, in the U.S., GHG emissions are subject to regulation under the CAA by the Environmental Protection Agency (EPA), as the Supreme Court held in the landmark decision of *Massachusetts v EPA*,<sup>46</sup> see below. This case was the first and arguably most successful case of climate-change litigation in the U.S., and yet, as we will see, also the main reason why tort-based climate-change cases have either been dismissed or must overcome specific difficulties to proceed.<sup>47</sup>

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#### *Massachusetts v EPA*

The case brought by several states (one of which was Massachusetts) evolved around Section 202(a)(1) of the CAA<sup>48</sup> and the EPA's refusal to regulate GHG emissions. The CAA requires the EPA to set emission standards for "any air pollutant" from motor vehicles or motor vehicle engines "which in its judgment cause[s], or contribute[s] to, air pollution which may reasonably be anticipated to endanger public health or welfare." In 2003, the EPA ruled in a binding decision that it did not have the power to regulate CO<sub>2</sub> and other GHGs, and even if it had, it would decline to set GHG emissions standards for vehicles. The first instance court, the U.S. Court of Appeals for the District of Columbia Circuit decided in September 2005 in favour of the defendants after heavily debating whether the plaintiffs had standing to challenge the EPA's decision. The U.S. Supreme Court, in its 2007 judgement, not only found the states and cities had standing due to the impacts expected to result from global warming (with a lenient approach to causation that did not demand a concrete and traceable physical causal chain) but also agreed that GHGs are indeed pollutants. The EPA was ordered to re-issue its decision under the CAA. In 2010, the EPA decided that GHGs were indeed a threat to the environment and health, a finding supported by a court of law in 2012 and CO<sub>2</sub> emissions in vehicles, both new and used, have since been regulated.<sup>49</sup>

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<sup>46</sup>US Supreme Court *Massachusetts v EPA* (2007) 549 U.S. 534, the decision and further case documents are available online at <http://climatecasechart.com/case/massachusetts-v-epa/>, last accessed on 10 Mar 2022.

<sup>47</sup>The relation between *Massachusetts* and *Am. El. Power* is well illustrated by Belleville and Kennedy (2013).

<sup>48</sup>42 U.S.C. § 7521(a)(1).

<sup>49</sup>For an overview of the regulations see: <https://www.epa.gov/regulations-emissions-vehicles-and-engines/regulations-greenhouse-gas-emissions-passenger-cars-and>, last accessed on 10 Mar 2022.

23 It was against this backdrop that the first wave<sup>50</sup> of U.S. tort-based climate litigation took place between 2005 and 2011 with the claims primarily based on the torts of public and private nuisance under federal common law.

**American Electric Power Co. et. al. v Connecticut et. al.**

24 The case that set the tone for tort-based climate change litigation in the U.S. was *American Electric Power Co. et. al. v Connecticut et. al.* It was brought in 2004 and it is, notably, the only tort-based climate case in the USA that was decided by the Supreme Court. The plaintiffs (both states and private land trusts) claimed that the defendants (six major electric power companies) violated federal common law by emitting large quantities of GHGs and thereby contributing to global warming. As a remedy, the plaintiffs did not seek damages but injunctive relief in the form of the judicial imposition of caps for carbon-dioxide emissions on the defendants. This case is the earliest example of using liability rules to prevent damage from climate change (mitigation).

25 In a unanimous decision, the Supreme Court dismissed the case,<sup>51</sup> arguing that the plaintiffs' claims were displaced by the CAA. In the Court's opinion, the CAA transferred the sole power to regulate GHG emissions to the EPA. The argument rests on the principle of separation of powers, namely, by enacting the CAA, Congress had used its legislative powers to authorise the executive branch (the EPA) to impose carbon-dioxide caps and had, as a result, taken that competence away from the judiciary. This delegation of power to the EPA had to be respected by the courts, even if the agency refused to set emission caps or to regulate carbon-dioxide emissions at all. The Court added, however, that the EPA's inaction in itself would be subject to judicial review, as the Court had decided in the case of *Massachusetts v EPA* mentioned above. Effectively, the plaintiffs had sued the wrong defendant because the Supreme Court decided that the state duty excluded possible private duties as the duty to regulate had been placed on the EPA.

26 While the Supreme Court decided that the plaintiff's mitigation claims, aimed at the judicial imposition of emission caps, were displaced by the CAA, it is also interesting to note which arguments did *not* lead the Court to dismiss the case: An equally divided Court (4:4) found that the plaintiffs had sufficiently alleged *standing* under Article III of the Constitution. The Court's written opinion does not give much insight on why it arrived at this conclusion. Nonetheless, the result in itself is remarkable because, by refusing the defendants' argument that the plaintiffs lacked standing, the Supreme Court effectively acknowledged that the plaintiffs had *sufficiently alleged a concrete injury of their rights and causation*. In other words, the Supreme Court would not have dismissed the case without further examination of the facts had it not been for the displacement by the CAA. Furthermore, since the

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<sup>50</sup>For the distinction between a first and a second wave see Wood (2021).

<sup>51</sup>US Supreme Court *American Electric Power Co. et al v Connecticut et al* (2011) 564 U.S. 410, decision and further case documents are available online at <http://climatecasechart.com/case/american-electric-power-co-v-connecticut/>, last accessed on 10 Mar 2022.

Court had *not* ruled on the question of damages, but rather on injunctive relief and an in-effect reduction of GHG emissions by the defendants, it initially remained open whether such claims would also be displaced by the CAA.

### **Native Village of Kivalina v Exxon Mobile Corp. et. al.**

In *Native Village of Kivalina v Exxon Mobile Corp.*, however, the Court of Appeals for the 9th Circuit extended the displacement doctrine from *American Electric Power* to monetary damages.<sup>52</sup> In *Kivalina*, the Native Village of Kivalina and the City of Kivalina sued multiple energy producers for damages arising from injuries incurred as a result of climate change. The City of Kivalina was threatened by the melting of sea ice that had protected the city from heavy coastal storms. Due to the loss of sea ice, the entire city with its 400 residents had to be relocated. The plaintiffs argued that the ice loss was a result of global warming, to which the defendants significantly contributed, and sought compensatory damages for the costs of relocation. The *Kivalina* case received a lot of attention since the village appeared to be the ‘perfect plaintiff’,<sup>53</sup> as it alleged both a very concrete injury and a convincing causal chain given broad acceptance that melting sea ice can quite easily be traced to global warming.<sup>54</sup> It is both an adaptation case and a claim for damages under the categories sketched out above.

Nonetheless, the District Court dismissed the case, finding that the claims were barred by the political question doctrine and also asserting that Kivalina lacked standing since it had not sufficiently established causation. On appeal, the 9th Circuit did not dwell on those questions. Instead, it waited for the Supreme Court’s decision in *American Electric Power* and then—at least in the majority opinion<sup>55</sup>—solely relied on the Supreme Court’s displacement argument to dismiss the claim.

Although *American Electric Power*, as we have seen, did not concern a damage claim, the majority in the *Kivalina* case assumed to “have direct Supreme Court guidance” on the issue and simply acknowledged a “slightly different context” between seeking injunctive relief (i.e., setting of emission caps) on the one hand

<sup>52</sup>US Court of Appeals of the 9th Circuit *City of Kivalina v ExxonMobil et al* (2012) 09-17490, 11641-11676, the decision and further case documents are available online at <http://climatecasechart.com/case/native-village-of-kivalina-v-exxonmobil-corp/>, last accessed on 10 Mar 2022.

<sup>53</sup>Belleville and Kennedy (2013), p. 57.

<sup>54</sup>It is much easier to attribute consistent phenomena, such as rising sea levels or melting glaciers and sea ice, to climate change than single extreme weather events. See in more detail below, ¶ 100 *et seq.*

<sup>55</sup>In his concurring opinion, Judge Pro agreed with the District Court’s finding that *Kivalina* had not sufficiently alleged standing and not shown that the injuries incurred were “fairly traceable” to climate change, US Court of Appeals of the 9th Circuit *City of Kivalina v ExxonMobil et al* (2012) 09-17490, 11641–11676. For an in depth-analysis/critique of the concept of ‘fairly traceable’ see Nagle (2010).

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and damages on the other.<sup>56</sup> While the CAA gives the EPA the power to regulate emissions by setting caps it does not provide for any damage remedies, however, the Court found that the CAA displaced all common-law actions. This reasoning has been contested by U.S. scholars<sup>57</sup> and did not necessarily follow from the Supreme Court's decision in *American Electric Power* that was limited to the specific case and the relief sought. Nevertheless, the Supreme Court denied the plaintiffs' petition for a writ of *certiorari*<sup>58</sup> without comment.<sup>59</sup>

### **Ned Comer et. al. v Murphy Oil USA et. al. (Comer I and II)**

**30** Before *Kivalina*, *Comer v Murphy Oil USA* was a tort-based climate change action that was first filed in 2005 by a group of residents and landowners that had suffered injuries from Hurricane Katrina.<sup>60</sup> This is one of the first cases seeking compensation for climate change damage arising from a specific extreme weather event. In *Comer*, the plaintiffs claimed that the effects of global warming had contributed to the strength of the storm and, contrary to *American Electric Power*, they did not seek injunctive relief but damages for the injuries incurred as a result of the storm.

**31** The District Court dismissed the case for lack of standing and political question grounds, declaring itself unfit to develop a standard of unreasonableness and arguing that such matters best be left to the legislative and administrative branches.<sup>61</sup> In 2009, before the Supreme Court's decision in *American Electric Power*, a panel of the Court of Appeals for the 5th Circuit found that the plaintiffs had sufficiently alleged causation to have standing and that their claims were not barred by the political question doctrine.<sup>62</sup> This view is especially notable since the injuries were incurred by a single extreme weather event and such events are generally said to be much harder to attribute to climate change than a phenomenon such as rising sea levels.<sup>63</sup> This decision, however, was later annulled for procedural reasons and, after more procedural turbulence and a refile of the case in 2011,<sup>64</sup> the District Court's 2005 decision became legally binding. Though the Court of Appeal's annulled

<sup>56</sup>US Court of Appeals of the 9th Circuit *City of Kivalina v ExxonMobil et al* (2012) 09-17490, 11641–11676. Justice Pro's concurring opinion goes into much more detail but arrives at the same conclusion, *ibid.*, 11657 *et seq.*

<sup>57</sup>For a critique, see Belleville and Kennedy (2013), p. 74 *et seq.*

<sup>58</sup>The petition is available online at [http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/case-documents/2013/20130225\\_docket-12-1072\\_petition-for-writ-of-certiorari-1.pdf](http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/case-documents/2013/20130225_docket-12-1072_petition-for-writ-of-certiorari-1.pdf), last accessed on 10 Mar 2022.

<sup>59</sup>US Supreme Court *City of Kivalina v ExxonMobil et al* (2013) WL 798854.

<sup>60</sup>For an in-depth analysis of the various *Comer* cases see: Peresich (2016).

<sup>61</sup>*Cf.* Thorpe 24 (2008), pp. 82 *et seq.*

<sup>62</sup>US Court of Appeals of the 5th Circuit *Comer v Murphy Oil USA* (2013) 585 F.3d 855, 879–80, the decision and further case documents are available at <http://climatecasechart.com/case/comer-v-murphy-oil-usa-inc/>, last accessed on 10 Mar 2022; see also: Peresich (2016), pp. 29 *et seq.*

<sup>63</sup>¶ 100 *et seq.*

<sup>64</sup>For more detail see: Peresich (2016).

decision does not carry much precedential value,<sup>65</sup> it still illustrates that the main hurdle for getting past the motion to dismiss stage is neither causation nor the political question doctrine, but the issue of displacement by the CAA.

### New Cases Based on State Common Law

Displacement of tort-based claims by the CAA remains the primary issue in a new, second wave<sup>66</sup> of climate change litigation which began in 2017. Those actions focus on defendants' knowledge about their contribution to climate change and its catastrophic consequences, somewhat reminiscent of tobacco litigation,<sup>67</sup> and are brought by local governments based on state rather than federal common law.<sup>68</sup> These claims may have been encouraged by Justice Pro's concurring opinion in *Kivalina* that insinuated that plaintiffs may be able to bring an action under state common law.<sup>69</sup> Furthermore, some such cases have even been brought for specific types of economic impacts, as was seen in a case brought by Pacific fishermen.<sup>70</sup> As a result, the legal problem shifts to the questions of whether such claims can be brought under state common law and, especially, whether the federal CAA legislation also preempts tort claims based on state common law.

To date, at least two District Courts have dismissed such claims, holding that tort-based climate-change cases could not be brought under state law due to the interstate nature of GHG emissions and confirmed that federal common law was displaced by the CAA.<sup>71</sup> Other decisions, however, have granted plaintiffs' motions to remand

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<sup>65</sup> Belleville and Kennedy (2013), p. 57.

<sup>66</sup> For more detail see Farber (2021), pp. 237/242 *et seq* and Wood (2021), note 50.

<sup>67</sup> Ganguly et al. (2018), pp. 856 *et seq*.

<sup>68</sup> Hester (2018).

<sup>69</sup> US Court of Appeals of the 9th Circuit *City of Kivalina v ExxonMobil et al* (2012) 09-17490, 11641–11676.

<sup>70</sup> US District Court for the Northern District of California *Pacific Coast Federation of Fishermen's Associations, Inc. (PCFFA) v Chevron Corp* 3:18-cv-07477 [pending]. This case is about climate-change induced increases in algae blooms which delay and shorten the crab-harvesting seasons. The case has been stayed until a final judgement from the actions taken by the City of Oakland and the County of San Mateo, case documents are available at <http://climatecasechart.com/case/pacific-coast-federation-of-fishermens-associations-inc-v-chevron-corp/>, last accessed on 10 Mar 2022.

<sup>71</sup> US District Court for the Southern District of New York *City of New York v BP P.L.C. et al* (2018) 18 Civ. 182 (JFK), the decision and further case documents are available at <http://climatecasechart.com/case/city-new-york-v-bp-plc/> (accessed 10 Mar 2022); U.S. District Court for the Northern District of California *City of Oakland, et al v BP P.L.C.* (2018) C 17-06011 WHA, the decision and further case documents are available at <http://climatecasechart.com/case/people-state-california-v-bp-plc-oakland/> (accessed 10 Mar 2022).

and rejected the argument that state common law was displaced.<sup>72</sup> The final say on these claims is still open.<sup>73</sup>

### Germany – Luciano Lliuya v RWE AG (adaptation)

34 In the German *Luciano Lliuya v RWE AG* case,<sup>74</sup> the plaintiff's property in the Peruvian city of Huaraz is alleged to be in acute danger because a glacier above the city is receding and melting, resulting in a swollen glacial lake which threatens to flood the city or to bury it under a mudslide. Since anthropogenic climate change contributes significantly to glacial melting, Lliuya brought an action in German civil courts against the energy utility RWE, demanding the company pay 0.47%, proportional to the company's historic share of worldwide GHG emissions, of the costs to take appropriate safety measures above Huaraz.<sup>75</sup> RWE is Europe's biggest single source emitter and one of only 90 'carbon majors' that, based on analysis of historic production records covering the period from 1854 to 2010, have caused about two-thirds of global CO<sub>2</sub> emissions.<sup>76</sup> The claim was based on a general tort law provision in Section 1004(1) of the German Civil Code (BGB) which states:

If the ownership is interfered with by means other than removal or retention of possession, the owner may require the disturber to remove the interference. If further interferences are to be feared, the owner may seek a prohibitory injunction.<sup>77</sup>

35 The District Court in Essen dismissed the claim, holding that causation ('traceable cause') had not been sufficiently established. Moreover, RWE's contribution was found to be insignificant: even if the company's emissions were proportionally causal for global warming, the court argued, there were too many tortfeasors to be able to attribute consequences of climate change, in short, the plaintiff's situation would be the same even if RWE had never emitted anything.<sup>78</sup> A year later, the Court of Appeals in Hamm disagreed, holding that the plaintiff had conclusively

<sup>72</sup>US District Court for the Northern District of California *San Mateo v Chevron Corp et al* (2018) 17-cv-04929-VC, the decision and further case documents are available at <http://climatecasechart.com/case/county-san-mateo-v-chevron-corp/> (accessed 10 Mar 2022); US District Court for the District of Rhode Island *Rhode Island v Chevron Corp.* (2019) 18-395 WES, the decision and further case documents are available online at <http://climatecasechart.com/case/rhode-island-v-chevron-corp/> (accessed 10 Mar 2022).

<sup>73</sup>Farber (2021), at pp. 243 and 251.

<sup>74</sup>Disclaimer: The author of this chapter represents the plaintiff in this case.

<sup>75</sup>English translations of the claim and all other procedural documents are available at <https://germanwatch.org/en/huaraz>, last accessed on 10 March 2022.

<sup>76</sup>Heede (2014).

<sup>77</sup>Translation taken from [https://www.gesetze-im-internet.de/englisch\\_bgb/englisch\\_bgb.html#p3984](https://www.gesetze-im-internet.de/englisch_bgb/englisch_bgb.html#p3984), last accessed on 10 March 2022.

<sup>78</sup>Regional Court of Essen 2 O 285/15 (2016), an English translation of the decision is available at <https://germanwatch.org/sites/germanwatch.org/files/announcement/20823.pdf>, last accessed on 10 March 2022.

alleged both causation and attribution.<sup>79</sup> The court found the plaintiff had stated his claim conclusively but further evidence, in the form of written scientific expertise as well as a site visit, was needed to arrive at a verdict.

Notably, and in sharp contrast to the U.S. decisions presented above, the Court of Appeals in Hamm did not have any problem accepting the overlap between State and private duties,<sup>80</sup> although the German equivalent to the CAA, the Bundesimmissionsschutzgesetz (BImSchG) provides a statute similar to the CAA in the U.S. and the German cap and trade scheme (Treibhausgasemissionshandelsgesetz—TEHG) applies to the coal-fired facilities owned and operated by RWE which emit GHGs. This is because the statute itself expressly regulates the issue of preemption and the relationship between public and private law in Section 14 BImSchG, which is a universally applicable federal law, and provides for a differentiated approach:<sup>81</sup>

[1] Nobody shall have the right to request cessation of operation at any installation on grounds of civil-law claims, not based on specific titles, to protection against the detrimental impacts emanating from any piece of land on neighbouring premises, insofar as the license for such an installation has become final; it shall only be admissible to insist on such precautionary measures as are necessary to prevent such detrimental impacts. [2] If such measures are not technically feasible according to the best available techniques or not economically viable, compensation may only be claimed for the actual damage suffered.<sup>82</sup>

Section 14[1] BImSchG thus only preempts claims aiming at a complete *shutdown* of a facility (e.g., a power plant), since the permission granted based on the BImSchG legalises the operation itself.

Having said that, a claim for the abatement of emissions of a given facility is, in principle, admissible (see also Section 14[1] BImSchG), however, an application for a specific abatement measure is highly unlikely to be successful. The concrete implementation of protective measures must be left to the operator of the facility<sup>83</sup> and the law limits abatement claims to measures that are technically feasible and that do not involve unreasonable costs.<sup>84</sup> It naturally follows from this that pure mitigation claims (injunctions) may therefore be difficult to conceive.

Under no circumstances, however, does the BImSchG displace or preempt compensatory claims for monetary damages or protection and, as a result, both adaptation and compensation for damage claims are set out in Section 14 [2] BImSchG. Thus, the BImSchG legalises a plant and its emissions in the interest of the public, however, individuals can still demand protective measures with respect

<sup>79</sup>Higher Regional Court of Hamm I-5 U 15/17 (2017), an English translation of the decision is available at <https://germanwatch.org/sites/germanwatch.org/files/announcement/20812.pdf>, last accessed on 10 March 2022.

<sup>80</sup>Higher Regional Court of Hamm I-5 U 15/17 (2017), at I.2.

<sup>81</sup>For more detail see Koch et al. (2012), para. 15.88 *et seq.*

<sup>82</sup>Translation taken from <https://www.elaw.org/system/files/de.air.noise.act.eng.pdf>, last accessed on 10 Mar 2022.

<sup>83</sup>Rehbinder (2019) para. 64; Jarass (2017), § 14 para. 20.

<sup>84</sup>Rehbinder (2019), para. 58 *et seq.*; Jarass (2017), § 14 para. 17.

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to their property and so forth as well as damages.<sup>85</sup> Since a claim under Section 1004 (1) BGB does not require a breach of duty but only that the consequence of an interference with property is unlawful, it was irrelevant that RWE had not violated German public law.

39 The preliminary legal assessment of the court, particularly with respect to the application of partial causation, can be informed by the French cases mentioned above. Being based on a civil law stipulation, the courts found that the State's omissions to reduce GHG emissions cause ecological damage.

40 *Notre Affaire à Tous v France*<sup>86</sup>

A coalition of French NGOs brought a case against the French State before the Paris Administrative Court. Basing their legal argument on the State's climate law, as well as overarching constitutional provisions and the right to a clean and healthy environment, the application asked the court to find that the State was liable for the ecological damage caused by its failure to keep within the targets for 2015–2018. On 3rd February 2021, the court indeed found this to be illegal behaviour giving rise to the claim to redress ecological damage. The Administrative Court considered that a public person, in the same way as a private person, can be held responsible for damage caused to the environment. This sets a new precedent under French law, as ecological damage has to this point only been invoked under civil law against private entities. The court also found that any association that has statutes covering the protection of the environment can ask for reparation from parties causing ecological damage. The court rejected the defence's notion that damages could not be sought due to a lack of (direct) causation, adopting the application's assertion that this was a matter of partial contribution to ecological damage. The stipulation invoked was a specific tort provision under Article 1246 of the French Civil Code which states "Toute personne responsable d'un préjudice écologique est tenue de le réparer." (Every person responsible for ecological damage is obliged to pay reparation). The case continues at the time of writing as the State was given 2 months to declare how it seeks to rectify its illegal behaviour.

**Urgenda and Shell Cases in the Dutch Courts (mitigation)**

41 In the context of the overlap of and relationship between State and private responsibilities, the case of *Milieudefensie v Shell*<sup>87</sup> in the Netherlands is particularly

<sup>85</sup> Higher Regional Court of Hamm I-5 U 15/17 (2017), at I.2.

<sup>86</sup> Above, note 7.

<sup>87</sup> District Court of The Hague *Milieudefensie v Shell* (2021) C/09/571932 / HA ZA 19-379, available at <https://uitspraken.rechtspraak.nl/inziendocument?id=ECLI:NL:RBDHA:2021:5339>, last accessed on 10 Mar 2022. A translation of the Court Summons with all relevant information is available at <https://en.milieudefensie.nl/news/court-summons-translation.pdf>, last accessed on 10 Mar 2022.



interesting. Different from the *Lliuya* case, the plaintiffs sought injunctive relief and obtained an order obligating Shell to align its business model with the reduction targets of the Paris Agreement. In their application, the plaintiffs referred primarily to the judgments of the courts against the Dutch government in the *Urgenda* case.

### ***Urgenda Foundation v The State of the Netherlands***

In the *Urgenda* case, Dutch courts have ruled in three instances that the Dutch government is obliged to reduce its GHG emissions by 25% from their 1990 level by 2020.<sup>88</sup> The claim by a Dutch NGO alleged a breach of a duty of care by the Dutch government towards its citizens and was based on a general provision in Dutch civil (tort) law. In the context of private law actions, the District Court's reasoning is particularly interesting because it relied most strongly upon the general tort-law provision in Article 6:162 of the Dutch Civil Code. The District Court argued that Urgenda, as an organization, could not directly invoke Article 2 (the right to life) and Article 8 (the right to respect for family and private life) of the European Convention on the Protection of Human Rights and Fundamental Freedoms (ECHR).<sup>89</sup> Urgenda could, however, rely on the general provisions of Dutch private law and its open-to-interpretation standard of care. This standard of care was subsequently specified, inter alia, by the legal requirements of Articles 2 and 8 ECHR and other factors such as international and EU climate policy.<sup>90</sup> The Court of Appeals and the Supreme Court also deemed that the Dutch government had violated its duty of care but were of the opinion that this duty followed from Articles 2 and 8 ECHR and that Urgenda could directly invoke those provisions;<sup>91</sup> therefore the courts did not go into as much detail with regard to the interpretation of the tort-law provision.

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<sup>88</sup>Supreme Court of the Netherlands *Urgenda Foundation v the State of the Netherlands* (2019) 19/00135; Court of Appeal of The Hague *Urgenda Foundation v the State of the Netherlands* (2018) 200.178.245/01; District Court of The Hague *Urgenda Foundation v the State of the Netherlands* Den Haag, (2015) C/09/456689 / HA ZA 13-1396. All judgments and further case documents (including English translations) are available at <http://climatecasechart.com/non-us-case/urgenda-foundation-v-kingdom-of-the-netherlands/>, last accessed on 10 Mar 2022.

<sup>89</sup>District Court of The Hague *Urgenda Foundation v the State of the Netherlands* Den Haag, (2015) C/09/456689 / HA ZA 13-1396, para. 4.45, decision and further case documents are available at <http://climatecasechart.com/non-us-case/urgenda-foundation-v-kingdom-of-the-netherlands/>, last accessed on 10 Mar 2022.

<sup>90</sup>District Court of The Hague *Urgenda Foundation v the State of the Netherlands* Den Haag, (2015) C/09/456689 / HA ZA 13-1396, para. 4.46 and 4.54 *et seq*, decision and further case documents are available at <http://climatecasechart.com/non-us-case/urgenda-foundation-v-kingdom-of-the-netherlands/>, last accessed on 10 Mar 2022.

<sup>91</sup>Court of Appeal of The Hague *Urgenda Foundation v the State of the Netherlands* (2018) 200.178.245/01, para. 34 *et seq*; Supreme Court of the Netherlands *Urgenda Foundation v the State of the Netherlands* (2019) 19/00135, para. 5.9.2, decisions and further case documents are available at <http://climatecasechart.com/non-us-case/urgenda-foundation-v-kingdom-of-the-netherlands/>, last accessed on 10 Mar 2022.

43 In the *Shell* case, the plaintiffs successfully argued that the reasoning of the *Urgenda* courts regarding the State's duty of care can also be applied to private defendants. As we have seen, the *Urgenda* judgments, although directed against the State, were based on a civil law provision at the outset. The Dutch law in Article 6:162 of the Dutch Civil Code is a basic and general provision regarding a 'tortious act':

- 1. A person who commits a tortious act (unlawful act) against another person that can be attributed to him, must repair the damage that this other person has suffered as a result thereof.
- 2. As a tortious act is regarded a violation of someone else's right (entitlement) and an act or omission in violation of a duty imposed by law or of what according to unwritten law has to be regarded as proper social conduct, always as far as there was no justification for this behavior.
- 3. A tortious act can be attributed to the tortfeasor [the person committing the tortious act] if it results from his fault or from a cause for which he is accountable by virtue of law or generally accepted principles (common opinion).<sup>92</sup>

44 In the *Shell* case, the plaintiffs used this provision, in effect transferring obligations from the State to companies.<sup>93</sup> The district court largely followed the plaintiffs' reasoning, holding that *Shell* had a duty to reduce its net CO2 emissions (Scope 1, 2 and 3) by at least 45% from their 2019 levels by 2030.<sup>94</sup> The court formed its view of the unwritten standard of care provided by the second paragraph of the above-cited provision by, inter alia, referring to the *Urgenda* case and the dangers climate change poses to human rights enshrined in the ECHR. While *Shell* is not directly bound by human rights obligations, the effects of climate change on human rights factored into the court's overall interpretation of the open legal standard, as did the Paris Agreement, international soft law and climate sciences.<sup>95</sup>

45 The relationship between the *Urgenda* case and the *Shell* case is somewhat similar to the relationship between the *Massachusetts* and *American Electric Power* cases discussed above, however, the outcomes are starkly different. On the one hand, there is a judgment obliging the State to regulate or to act, on the other hand, there is one that imposes the same or similar duties on corporate defendants. At the same time, the *Shell* case makes the issue of overlapping State and private duties particularly clear. The court also denied a preemption by the European Emissions

<sup>92</sup>Translation taken from <http://dutchcivillaw.com/legislation/dcctitle6633.htm>, last accessed on 10 Mar 2022.

<sup>93</sup>District Court of The Hague *Milieudefensie v Shell* (2021) C/09/571932 / HA ZA 19-379, Court Summons, para. 503 *et seq.*, available at <http://climatecasechart.com/climate-change-litigation/non-us-case/milieudefensie-et-al-v-royal-dutch-shell-plc/>, last accessed 10 Mar 2022.

<sup>94</sup>District Court of The Hague *Milieudefensie v Shell* (2021) C/09/571932 / HA ZA 19-379, para. 5.3.

<sup>95</sup>District Court of The Hague *Milieudefensie v Shell* (2021) C/09/571932 / HA ZA 19-379, para. 4.4.1. *et seq.*

Trading System (ETS), holding that *Shell's* private law obligation was independent of State or EU legislation.<sup>96</sup>

The *Shell* decision and the 'social duty of care' premise developed there will be examined in more detail at the end of this chapter. Concluding the case analysis, this section now examines a case that also entailed an argument for a corporate duty to adapt its business conduct to meet the emission-reduction goals of the Paris Agreement. However, this argument is based on a statutory due-diligence provision that was discussed in the previous chapter.

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### **Notre Affaire à Tous and Others v Total S.A.**

In this case, the plaintiffs argued that the fossil fuel company Total has violated its statutory duty to sufficiently incorporate the climate-change-related dangers of its business model into a due-diligence plan ('plan de vigilance').<sup>97</sup> The claim is based on a provision in Article L225-102-4 of the French Commercial Code that was introduced in 2017 and specifies the general environmental duty of care stemming from Articles 1 and 2 of the Environmental Charter which is a part of the French constitution. The provision in the Commercial Code requires large companies to identify the environmental hazards and risks of their activities along their supply chains in a due-diligence plan and to specify appropriate measures to manage risk and deal with accidents. If a company fails to take action as provided for in its due-diligence plan, enacting these measures can be forced upon a company by a court. Notre Affaire à Tous (a green legal NGO) and Others assert that Total, which is responsible for approximately 1% of global CO<sub>2</sub> emissions, failed to properly identify and evaluate the climate-change-related risks of its business because its due-diligence plan does not provide for a course of action that would align Total's business model with the emission-reduction goals of the Paris Agreement. The plaintiffs, therefore, requested the issuance of a due-diligence plan suitable for this purpose. Since such a plan would be enforceable under the relevant legal provisions (see above), success for the plaintiffs would force Total to make significant adjustments to its business model.

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### **8.2.3 Assessment**

The above analysis shows that both U.S. and German courts have been divided on the issue of causation. There is, however, no fundamental difference between the two

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<sup>96</sup>District Court of The Hague *Milieudefensie v Shell* (2021) C/09/571932 / HA ZA 19-379, para. 4.4.46. *et seq.*

<sup>97</sup>The complaint is available at <http://climatecasechart.com/non-us-case/notre-affaire-a-tous-and-others-v-total/>, last accessed on 10 Mar 2022.

legal systems in that regard. The main difference is the interpretation of the relationship between private (tort) and public/administrative law by the judiciary. The question is whether the State, given existing statutes and regulations, is the sole carrier of justiciable responsibility concerning climate change or whether companies are accountable as well.

- 49 Since the decisions in *American Electric Power* and *Kivalina*, U.S. courts have taken the former view, at least with regard to federal law. In the first case, the Supreme Court argued that injunctive relief was not available under federal tort law against private polluters because the CAA transferred the power to regulate emissions to the EPA. The *Kivalina* court extended this reasoning and applied it to the question of adaptation type relief demands and damages.
- 50 In Germany, statutory law provides for the opposite, at least partially. While certain forms of injunctive relief (e.g., cessation of a permit for a facility) cannot be sought through civil law litigation, other forms of injunctive relief depend on technical and financial feasibility. Claims for compensation in the form of financial damages and adaptation type relief and protective measures are always admissible, at least this is the opinion of the High Court of Appeal in Hamm.
- 51 In the *Shell* case, the district court essentially blurred the difference between State and private obligations, arguing that private companies owe a duty of care which is, on the one hand, independent of State regulation and, on the other hand, largely corresponds to the State's responsibility as determined by the Paris Agreement (Chap. 16). This highlights the question that arises regarding the existence, basis and extent of a positive duty of care, an issue that will be examined in the final part of this chapter (§ 138 *et seq.*).
- 52 The U.S. case law undermines an important aspect of tort and nuisance law, which has traditionally been used to tackle behaviour that may not be unlawful but still detrimental to individual rights. It is a field of law that constantly adapts standards of reasonableness in the view of current social and scientific findings.<sup>98</sup> In this sense, common tort law has a 'gap-filling function'.<sup>99</sup> The view taken by U.S. courts regarding the displacement of federal common law claims runs counter this general idea.
- 53 The effect of this reasoning on legal protection is particularly strong because the cases would be able to rely on what is essentially a concept of strict liability. This is true for both the U.S. concept of private and public nuisance<sup>100</sup> and the relevant provision in the *Lliuya* case in Germany (Section 1004 of the German Civil Code). Public or private nuisance claims do not require unreasonable conduct but an unreasonable interference with protected legal interests.<sup>101</sup> Therefore, in the cases discussed above, the main requirement for establishing liability was unreasonable damage suffered by the plaintiffs or the prospect of such damage and the causality of

<sup>98</sup>Thorpe (2008), p. 101.

<sup>99</sup>Marjanac and Patton (2018), p. 284.

<sup>100</sup>For details see Hunter and Salzman (2007), pp. 1788 *et seq.*

<sup>101</sup>Merrill (2011) (2010).

the defendant's conduct. Arguing displacement due to the possibility of public law regulation under the CAA deprives the cases of any basis, without even entering into the merits. The French cases referred to above have found illegal behaviour on part of the State without indicating whether such reasoning could be applied to private entities. Given that a number of cases are pending in the jurisdictions examined, the issue here is far from closed. The results of this analysis suggest that the overlap of State and private duties remains an issue to be examined in further research.

Operating on the basis of a preliminary 'green light' evidenced in the RWE and Shell cases with respect to the justiciability of private liability (i.e., of how the overlap of State and private duties could be dealt with using tort/nuisance principles), attention will now turn to a deeper analysis of the legal and forensic problems associated with questions of damage and causation in climate-change litigation.

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### 8.3 Damage and Causation: Who Can Claim What Against Whom?

The issues of compensable damage and, in particular, causation have been extensively discussed in connection with civil liability regimes that could be employed to help address the effects of climate change.<sup>102</sup> Some of the literature extends to the climate change regime and the issue of 'loss and damage' now enshrined in Article 8 of the Paris Agreement (see Chap. 16). Regardless of questions involving a breach of duty or fault, which we will come back to later in this chapter (§ 135 *et seq.*), damage and causation form the basis of civil liability because they determine who can claim what from whom.

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The question of compensable damage determines who can sue for what: Applicants must claim that a protected legal interest has been, or is likely to be, infringed. Only after such a determination has been made can applicants be entitled to relief, be that in the form of the implementation or financing of protection measures, monetary damages or injunctive relief. In cases such as the NGOs case against the French State, this issue was largely moot as NGOs are deemed to be entitled to claim unquantified ecological damage. However, concerning claims in a horizontal context, the issue of compensable damage will remain a precondition for liability, and especially with respect to cumulative and extensive damage, standing was identified as a major issue in enforcing liability in Chap. 6.

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Establishing causation is necessary to determine who is liable for the damage suffered. Damage or risks of incurring damage as a result of the effects of climate change must be, at least to some degree, a result of a defendants' conduct. In the context of climate change cases, legal and forensic problems arise primarily from the

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<sup>102</sup>Cf. Brunnée et al. (2012), Hinteregger (2017); Pöttker (2014), pp. 62 *et seq.*, pp. 140 *et seq.* (Germany) and pp. 274 *et seq.*, pp. 306 *et seq.* (U.S.); Thorpe (2008), p. 102 with numerous references in note 139. See also Verheyen (2015).

fact that anthropogenic climate change is both global in scope and complex in nature, as typified by the following two points:

- The effects of anthropogenic climate change are universal, affecting both individual rights and common resources. This fact is captured legally through the question of standing<sup>103</sup> and compensable damage. Questions concern the interests protected by law, especially with regard to purely environmental damage, and the entitlement to enforce protection of those interests in court. The forensic challenge lies in assessing the value of protected interests, especially where intangible and collective goods without a clear market value (e.g. ecosystems) are concerned.
- Anthropogenic emissions are not the only reason for harmful trends or extreme weather events, and virtually every single human being as well as every public or private sector entity contributes to climate change in one way or another. This fact must be discussed and solved when establishing causation for the purposes of litigation. It seems clear today that establishing contributory causation is sufficient for cases to proceed (see the *Urgenda*-case, the decision of the German Federal Constitutional Court as well as the cases of RWE and Shell), nevertheless, causation will remain a core issue for any adaptation and compensation cases. For a claim to be successful, the damage or risks of damage have to be sufficiently linked, firstly, to climate change and, secondly, to the given defendants and their relative contribution. Legal questions arise in such a process regarding, for example, the necessary degree of probability and the *de minimis* threshold of contribution to global warming.

**58** The above-mentioned problems are by no means exclusive to climate change litigation as they are also present in other areas of environmental litigation, however, climate change case law, in particular, can serve as a reference area to illustrate the problems of litigation involving environmental liability in general.

**59** As mentioned above (¶ 5 *et seq.*), the severity of the legal and forensic problems depends on the concrete legal action. Following the categories established above, namely actions for damages, adaptation, mitigation and shareholder actions, we will proceed by highlighting the foreseeable key problems that can occur in climate change litigation (¶ 61 *et seq.* and ¶ 89 *et seq.*). The problems highlighted are the most relevant in tort and nuisance (i.e., damages or adaptation) cases. Here, the legal and forensic substantiation requirements are highest because a concrete impact has to be quantified into damages and the impact would have to be attributed to the defendant's conduct. Nevertheless, we will see that it is still often possible to meet these requirements, although the degree of difficulty to do so can depend on the legal

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<sup>103</sup>The term 'standing' is used here in a general manner to describe legal criteria to determine whether the claimant can bring judicial proceedings at all. In administrative law, this would refer to special admissibility criteria which, in Germany, for example, is found in Section 42(2) Administrative Procedural Code (VwGO). In civil procedural law, it refers to whether persons bringing a claim can substantiate that they have a right to bring it, normally that their property or other legal rights have, or are likely to be, infringed.

system involved. Following the general analysis of the legal and forensic issues regarding compensable damage and causation, we will turn to actions seeking protection measures or injunctive relief and consider shareholder actions that argue a loss of company value (§ 113 *et seq*). We will show how these actions avoid some, or even most, of the problems commonly associated with climate change liability. We have included a table that concisely lists the key issues as they arise in the various categories of cases to provide both clarity and serve as a ready reference.

The concluding section of this part of the chapter discusses means to overcome the problems identified by taking a look at the ‘Model Climate Compensation Act’, a policy proposition from Canada that aims to facilitate climate change liability litigation (§ 123 *et seq*).

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### **8.3.1 Who Can Claim What? Compensable Damage, Standing and Relief**

The issue of compensable damage is of central importance to answer two questions: Who has standing in court and what remedy can they claim? To undertake an effective structured analysis, it is important to first distinguish the different types of damage. As liability litigation is usually based on national tort law from the outset, it is important to keep in mind that the scope of legally protected interests, as well as the entitlement to enforce those interests in court, both depend on the legal system in which the claim is brought. This was discussed in depth in Chap. 6 and, as was made clear, the problems faced in liability litigation may vary from country to country.

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The following section takes, as a starting point, the classical position that legal protection is primarily the protection of individual rights. It begins with the least problematic legal positions, that of absolute individual rights, as these are protected under almost all legal systems. We then look at the more problematic category of individual economic risk and financial loss before finally turning to the most difficult category, namely damage to collective goods and especially to the environment. This latter category is particularly important with regard to climate change impacts as, under varying scenarios, the IPCC reports leave no doubt that entire regions, ecosystems, watercourses and species will change, may be severely reduced or damaged or even disappear altogether.

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#### **Individual Harm to a Rightsholder**

In virtually all jurisdictions, damages and abatement remedies are awarded for violating absolute individual rights, such as the right to life, health, liberty and property. In Germany, for example, Section 823(1) and Section 1004(1) of the German Civil Code (BGB) grant damages and redress against such violations (Chap. 6 § 59 *et seq* (Sect. 6.6.1)). If absolute rights are infringed, the right holder is entitled to damages, including restitution in kind (Section 249(1) BGB) or monetary compensation. Monetary compensation extends to loss of profit (Section 252 BGB) and damages for pain and suffering (Section 253 BGB).

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- 64 This will cover the bulk of the impacts on individuals that result from anthropogenic climate change and other man-made impacts on nature and the environment because, in most cases, personal damage or risk can be linked to an impairment of individual rights. In the *Lliuya* and the *Kivalina* cases, for example, personal property is threatened by glacial melting or rising sea levels. In such cases, damages can include loss of profit if the affected property is used commercially. Similarly, climate change results in heightened health risks to certain groups of people<sup>104</sup> who may, as a result, be entitled to damages for the costs incurred to mitigate those risks.
- 65 As for forensics, the assessment of damages does not pose any unusual problems. The assessment of material damages, such as the value of property and even of pain and suffering, is the daily business of courts. If necessary, courts will hear expert opinions to guide them in these matters. In some cases, there is statutory guidance, such as the German Real Estate Value Assessment Ordinance (Immobilienwertermittlungsverordnung, ‘ImmoWertV’) that is used to determine the value of real estate. If property is destroyed by an extreme weather event, such as a flood or storm, the issue of determining baselines to put a figure on the damage occurs, however, this is no different to any other environmental case involving, for example, a chemical spill.
- 66 Though the protection of absolute individual rights is a general principle of tort / nuisance law across jurisdictions and legal systems, there is no uniform standard as to who is entitled to enforce these individual rights in court. While it is clear that life, health and liberty are legal interests possessed only by individual persons, impediments to property are more complicated, even though there is broad agreement that both individuals and private corporations can have and claim property rights. However, when it comes to the standing of public entities, such as municipalities, the legal situation varies even among “Western” jurisdictions. In the U.S., the legal concept of ‘public nuisance’ entitles, *inter alia*, municipalities to bring claims as was discussed in the *Kivalina* and *American Electric Power* cases (§ 24 *et seq*). Municipalities can make claims not only if their own property is affected (e.g., infrastructure) but also on behalf of municipal citizens (so-called *parens patriae* claims).<sup>105</sup> In contrast, German law does not enshrine the concept of *parens patriae* standing meaning that actions based on the violation of individual rights must be brought by the impacted individuals.
- 67 For such jurisdictions as Germany, liability claims will, therefore, be individualised and it will be difficult to actually capture all of the damage caused. This situation is alleviated only partially by the newly established class determination action (“Musterfeststellungsklage”) introduced in November 2018 in Section 616

<sup>104</sup>Cf. Swiss Supreme Court *Association of Swiss Senior Women for Climate Protection v Federal Department of the Environment Transport, Energy and Communications (DETEC) et al* (2018) A-2992/2017, where a group of elderly women unsuccessfully sued the State of Switzerland. While this was an action against a State defendant, the issue of a violation of individual rights is similar to private liability litigation. For a detailed discussion of the case see Bähr et al. (2018).

<sup>105</sup>For more detail see: Hunter and Salzman (2007), p. 1791 *et seq*; Verheyen and Lührs (2009), pp. 135 *et seq*.



of the German Code of Civil Procedure (*Zivilprozessordnung*, ZPO). Its purpose is to make it easier for consumers who have suffered similar damages from a certain business conduct, to take legal action by enabling consumer-protection organisations to sue on behalf of such individuals, thereby reducing said individuals' cost risk of litigation. Improved enforcement of civil law claims is also in the public interest as it prevents unlawfully obtained profits from remaining with the injuring party.<sup>106</sup> However, these legitimate aims are at best partially achieved by the statutory regulation as the main problem remains, namely that such collective action only allows the determination of the existence or non-existence of certain legal conditions for a claim and but not a claim for damages or abatement itself (Section 606 (1) ZPO).<sup>107</sup> Therefore, individuals participating in a class determination action must bring a second action to obtain the remedy that they are actually seeking. Due to this construct, the intended incentive effect is unlikely to materialise on a larger scale and, with respect to climate change damage, it neither increases nor changes the type of damage covered by law.

### Pure Economic Loss

Climate change will and is already affecting ecosystems worldwide, an example being coral bleaching due to rising sea temperatures. When it comes to the compensation for and protection against such 'pure economic loss' (Chap. 6 ¶ 70 *et seq* (Sect. 6.6.2)), there are major differences between various national legal systems which lead to a patchwork of possible claims. This patchwork creates gaps and loopholes that exclude some communities heavily affected by climate change. In the context of climate change litigation, damage associated purely with economic loss can arise when businesses depend on natural resources that they do not own.<sup>108</sup> Examples include the fisher who depends on fishing grounds, the owner of a ski resort who is dependent on snow and the tour boat operator who relies on a coral reef. It is this category of damage that is at the centre of the pending *PCCA* case in the US where, in this particular instance, fishermen have applied for monetary compensation for their loss in fishery-based revenue due to changes in the maritime environment.<sup>109</sup> The case is pending.

Germanic jurisdictions are taking a particularly reluctant approach, usually denying compensation for pure economic loss outside of contractual relationships.<sup>110</sup> If there is no violation of absolute rights, namely loss of property, there is, in principle, no claim under tort law (Section 823 or Section 1004 BGB). According to German

<sup>106</sup>Statement of the Bill, BT-Drs.19/2439, 04.06.2018, 1.

<sup>107</sup>In addition, there are other shortcomings, such as the restrictive limitation of standing to very large organisations and the restriction of legal fees for rendering such claims make them unattractive to lawyers. For an overview of the critique and alternatives *de lege ferenda* see: Guggenberger and Guggenberger (2019).

<sup>108</sup>Hinteregger (2017), p. 258.

<sup>109</sup>For further information on this case see footnote 64.

<sup>110</sup>Hinteregger (2017), p. 258; cf. also Pöttker (2014), pp. 63 *et seq*.

legal doctrine, an exception is made only where there is an immediate interference aimed at the business itself (*betriebsbezogener Eingriff*).<sup>111</sup> This will usually not apply to the situations described above because the destruction of natural resources resulting from the behaviour of big polluters, such as fossil fuel companies, is not directed against specific enterprises. This approach is, as mentioned, rather specific to Germanic legal systems as Roman law tradition does not follow such a narrow concept. Rather, it is sufficient for plaintiffs to show a personal and actual interest in the claim to have standing.<sup>112</sup>

70 As far as pure economic damage can be claimed outside contractual relationships, forensics are not overly complicated. The assessment of economic loss (e.g., loss of profit) is routine and would be based, for example, on data detailing average annual income generated in a specific area or ecosystem based on tax returns and expert evidence. The problem comes in cases such as the *PCCA*, however, in being able to differentiate between causes. Is the actual decline in income the result of new fishery regulations or climate change impacts? Such problems can only be addressed by extensive forensic scrutiny undertaken by courts on a case-by-case basis.

### Pure Environmental Damage and Immaterial Collective Loss

71 Pure environmental damage and immaterial collective loss represent the most problematic area of compensable damage and standing and will undoubtedly increasingly occur with further global warming. The theoretical debate has been set out in Chap. 6. “Pure environmental damage” means, for example, the destruction of natural habitats or extinction of species<sup>113</sup> that does not concern the private interests of a person. Similar problems arise regarding damage to culture, heritage and identity, including the loss of ‘homeland’ (*Kivalina*).<sup>114</sup> There are two issues to be resolved when dealing with pure environmental damage and immaterial collective loss, as briefly detailed below.

72 Firstly, there are the legal issues of standing and admissibility. This concerns the question of whether such damage can be claimed at all and, since it cannot be pinned to an individual, who can make such a claim. The answer depends to a large degree on the applicable legal system, be it international law or, as is normal in tort litigation, national jurisdictions. The French Administrative Court has resolved this by giving NGOs access to justice for ecological damage, as long as their statutes of association concern environmental protection.<sup>115</sup>

73 Secondly, there is the forensic question of assessing damages. Even if environmental damage is covered in principle in the applicable jurisdiction, it is much more problematic to evaluate the damage suffered. The value of ecosystems and other

<sup>111</sup> German Federal Court of Justice VI ZR 199/57 (1958); German Federal of Justice VI ZR 25/63 (1964).

<sup>112</sup> Hinteregger (2017), p. 258.

<sup>113</sup> Hinteregger (2017), pp. 258 *et seq.*

<sup>114</sup> See Serdeczny *et al.* (2016).

<sup>115</sup> See above, footnote 15.

environmental intangibles is much harder to determine than when assessing the economic damage incurred by individuals. This problem, however, only arises in damage claims as it is not present in legal actions seeking the restoration of habitats, protection or adaptation.

### Is Pure Environmental Damage Recoverable?

Pure environmental damage can be claimed under international law, as was referenced in Chap. 3 with regard to the ICJ's ruling in the *Wetland Compensation Case* (Costa Rica/Nicaragua). In February 2018, the ICJ ordered Nicaragua to pay compensation to Costa Rica for environmental harm inflicted by the felling of trees and the dredging of a channel in a wetland on Costa Rican territory that was internationally protected by the Ramsar Convention.<sup>116</sup> It was the first time that the Court awarded damages for an instance of international environmental harm.<sup>117</sup> However, this case concerned the question of State responsibility and a conflict between States, while we focus in this study on claims against private corporations.

International cases against corporate defendants initially raise the question of what is the applicable law. The answer to this question is usually national law since international liability regimes do not normally apply to private activities (for exceptions Chap. 5 ). National bodies of law, however, take very different approaches when it comes to standing in and admissibility of claims relating to pure environmental damage.

Some jurisdictions are rather progressive on the issue, as is illustrated by *Burlington Resources v Republic of Ecuador*.<sup>118</sup> Burlington Resources had brought an expropriation claim before the International Centre for Settlement of Investment Disputes (ICSID), while Ecuador, in its counterclaim, argued that Burlington was liable for damage caused to the environment. In the end, Ecuador was awarded compensation of almost USD 39.2 million. In this case, Ecuadorian law was applicable as the damage occurred in Ecuador which, since 2008, gives constitutional rights to nature (Pachamama) and establishes a system of strict liability for environmental damage.<sup>119</sup>

Similarly, the recent advisory opinion of the Inter-American Court of Human Rights<sup>120</sup> explained that forests, rivers and seas, at least under this special legal framework, constitute protected juridical interests in themselves. A similar ruling

<sup>116</sup>ICJ *Certain Activities Carried Out by Nicaragua in the Border Area* (Costa Rica v Nicaragua) [2018] ICJ Rep 15.

<sup>117</sup>Da Silva (2018).

<sup>118</sup>ICSID *Burlington Resources, Inc. v Republic of Ecuador* ARB/08/5, 7 February 2017, available online at <https://www.italaw.com/sites/default/files/case-documents/italaw8206.pdf>, last accessed on 10 Mar 2022; see also Da Silva (2018), pp. 1421 *et seq.*

<sup>119</sup>Da Silva (2018), p. 1422.

<sup>120</sup>IACtHR *The environment and human rights* (Advisory Opinion) OC-23/17 (2017), an English translation is available at [https://www.corteidh.or.cr/docs/opiniones/seriea\\_23\\_ing.pdf](https://www.corteidh.or.cr/docs/opiniones/seriea_23_ing.pdf), last accessed on 11 Mar 2022.

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was made by the Colombian court<sup>121</sup> in the climate change decision mentioned above and essentially means that pure environmental damage is recoverable. These cases have not been concluded by monetary awards, so it remains unclear how the respective bodies will value the loss or determine what is appropriate compensation.

78 In the U.S., the tort of public nuisance is available and can be invoked by public entities such as municipalities/states and, under certain circumstances, by individuals. Under federal common law, a public nuisance is defined as an “unreasonable interference with a right common to the general public”.<sup>122</sup> According to U.S. legal doctrine, a claim requires proof that a defendant’s activity unreasonably interfered with the use or enjoyment of a public right and thereby caused the public-at-large substantial and widespread harm.<sup>123</sup> Under those circumstances, damages can be claimed for the violation of common goods (*parens patriae*),<sup>124</sup> which may also cover pure environmental damage in some scenarios.<sup>125</sup>

79 On the opposite side of the legal spectrum stands German tort law tradition, where the violation of collective goods, such as the environment, is traditionally a ‘blind spot’. As we have seen, German tort law only protects individual rights under Section 823(1) and Section 1004(1).<sup>126</sup> Specifically, environmental goods are not viewed as ‘other rights’ in the sense of Section 823(1) BGB.<sup>127</sup> ‘Ecological damage’, namely the actual damage to the environment as a collective legal good, is only covered by private environmental liability law if it simultaneously presents itself as a violation of individual legal goods. In the German system, a tort similar to the American public nuisance category does not exist. No *parens patriae* torts are available and the standing of municipalities and States in civil courts is limited to cases involving a violation of the respective entity’s property.

80 This situation is barely mitigated by the influence of European law even though Directive 2004/35/EC on environmental liability has been transposed through the German Environmental Damage Act (Umweltschadengesetz, USchadG, Chap. 6 ¶ 62 (Sect. 6.6.1)). These laws are supposed to cover legal ‘blind spots’ regarding pure environmental damage, but the protection is incomplete and not designed to establish private liability. Firstly, there is no comprehensive protection as the act is expressly limited to damage to water, land and protected species and habitats. It

<sup>121</sup>Supreme Court of Columbia *Andrea Lozano Barragán and others v the President of Colombia and others* [2018] STC 4360-20. The decision and further case documents are available at <http://climatecasechart.com/non-us-case/future-generation-v-ministry-environment-others/>, last accessed on 11 Mar 2022.

<sup>122</sup>Restatement (Second) of Torts § 821B(1)(1979).

<sup>123</sup>See, for example, US Court of Appeals of the 9th Circuit *City of Kivalina v ExxonMobil et al* (2012) 09-17490, 11641–11676, the decision and further case documents are available online at <http://climatecasechart.com/case/native-village-of-kivalina-v-exxonmobil-corp/>, last accessed on 11 Mar 2022.

<sup>124</sup>Verheyen and Lührs (2009), pp. 135 *et seq.*

<sup>125</sup>Pöttker (2014), p. 279.

<sup>126</sup>Pöttker (2014), pp. 65 *et seq.*

<sup>127</sup>Wagner (2017), § 823 para. 884.

does not cover air/climate and is, therefore, far from being a comprehensive tool for climate protection.<sup>128</sup>

Furthermore, existent European and German law dealing with environmental damage does little to address the fact that there is no established right to address private companies directly and claim damages. Redress is currently limited to preventive and remedial measures (Sanierungsmaßnahmen, Section 8 USchadG, Article 7 Directive 2004/35/EC) that can only be ordered by the competent national authority at the operator's expenses (Section 9 USchadG, Article 7 Directive 2004/35/EC), establishing a public rather than private law regime.<sup>129</sup> As for standing, only environmental NGOs can request a competent authority to take action (Articles 12, 13 Directive 2004/35/EC, Sections 10, 11 USchadG). Individuals only have standing if they can show there has been a violation of their individual rights.

All in all, the admissibility of damage claims seeking compensation or mitigation for pure environmental damage will, in most cases, depend decisively on the regulations of the national legal system. Approaches to remedy this issue have been discussed in Chap. 6 and shall not be repeated here.

Looking at the *RWE* case (¶ 34 *et seq*) one may ask, however, if this prevents systemically effective litigation overall. In the *RWE* case, the adaptation request for protective measures to be taken against the risks posed by glacial meltwater is based on Luciano Lluiya's property. If implemented, the city of Huaraz, as well as the watercourse that connects the current glacial lake to the city, and the ecosystem there would be protected. One could therefore argue that this issue, or hurdle to claims, is less prevalent in adaptation claims.

### How to Assess Environmental Damage?

Even if environmental loss and damage can be claimed, forensic problems remain. It is generally hard in any practical claim to pin a price on the environment or portion thereof. In the *Wetland case* introduced above, the ICJ took a view on assessing pure environmental damage that has been criticized as economy-centred (Chap. 3 ¶ 65 (Sect. 3.4.4)). On the one hand, the court called for an "overall assessment" of the environmental goods and services that have been impaired<sup>130</sup> but on the other hand, it concluded that only monetary compensation for the loss of those environmental goods and services was the appropriate remedy. The court ultimately awarded USD 120,000, a number which was much closer to Nicaragua's proposal of a maximum of USD 35,000 than to Costa Rica's claim seeking USD 2.88 million<sup>131</sup> Costa Rica had claimed damages with regard to six categories of environmental goods and services provided by the ecosystem: Standing timber (1), other raw materials (fibre and energy) (2), gas regulation and air quality (3),

<sup>128</sup> Cosack and Enders (2008), p. 408; Ruffert (2010), p. 1180.

<sup>129</sup> Cf. Pöttker (2014), pp. 70 *et seq*.

<sup>130</sup> ICJ *Certain Activities Carried Out by Nicaragua in the Border Area* (Costa Rica v Nicaragua) [2018] ICJ Rep 15, para. 78 *et seq*.

<sup>131</sup> ICJ *Certain Activities Carried Out by Nicaragua in the Border Area* (Costa Rica v Nicaragua) [2018] ICJ Rep 15, para. 57 *et seq*, 86.

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biodiversity, in terms of habitat and nursery (4), natural hazards mitigation (5) and, finally, soil formation and erosion control (6)<sup>132</sup> The court considered only the first four of those to have been impaired by Nicaragua's activities.<sup>133</sup> Furthermore, the ICJ rejected Costa Rica's view that damages for each category had to be assessed based on the assumption that the ecosystem would take 50 years to recover since the baseline condition was unclear and different components of the ecosystem required different periods of recovery.<sup>134</sup>

**85** Regardless of such questions as to the calculation of compensation, the underlying premise of limiting reparations for pure environmental damage to compensation for economically taxed services has been criticised as insufficient in literature<sup>135</sup> and even within the ICJ.<sup>136</sup> Equitable considerations should play a greater role and lead to higher damages.<sup>137</sup> Indeed, in his dissenting opinion, Judge Dugard argued that other factors had to be taken into account, namely the contribution of deforestation to climate change and the gravity of a State's violation of international law.<sup>138</sup> Judge Bhandari gave a separate opinion arguing that a precautionary approach should be factored in and even considered punitive or exemplary damages, awards that would have been unprecedented in international law.<sup>139</sup>

**86** The same evaluation problems, namely the role of equitable considerations, arise under national tort law. In the Ecuadorian *Burlington Resources* case, the ICSD—similar to the ICJ—found compensation to be the (sole) appropriate remedy, applying Ecuadorian law.<sup>140</sup> However, the calculation of damages can vary considerably from State to State. This is evident from the fact that some jurisdictions, most prominently U.S.A., award punitive damages as a deterrent while other States strictly reject this concept. For example, punitive damages are not enforceable under German law<sup>141</sup> and immaterial damages can only be recovered where the law explicitly provides for it (Section 253(1) BGB), and there is no such provision for pure environmental damage. In a national setting, the loss of ecosystems could be

<sup>132</sup>ICJ *Certain Activities Carried Out by Nicaragua in the Border Area* (Costa Rica v Nicaragua) [2018] ICJ Rep 15, para. 55.

<sup>133</sup>ICJ *Certain Activities Carried Out by Nicaragua in the Border Area* (Costa Rica v Nicaragua) [2018] ICJ Rep 15, para. 73 *et seq.*

<sup>134</sup>ICJ *Certain Activities Carried Out by Nicaragua in the Border Area* (Costa Rica v Nicaragua) [2018] ICJ Rep 15, para. 77.

<sup>135</sup>Da Silva (2018), p. 1419, pp. 1423 *et seq.*; Gaspard and Faure (2019), p. 7; see also above, Chap. 3 ¶ 64 *et seq.* (Sect. 3.3.4).

<sup>136</sup>Da Silva (2018), p. 1423, pp. 1427 *et seq.*

<sup>137</sup>Da Silva (2018), p. 1419, pp. 1424 *et seq.*

<sup>138</sup>ICJ *Certain Activities Carried Out by Nicaragua in the Border Area* (Costa Rica v Nicaragua) (dissenting opinion Dugard) [2018] ICJ Rep 119, para. 29 *et seq.*

<sup>139</sup>ICJ *Certain Activities Carried Out by Nicaragua in the Border Area* (Costa Rica v Nicaragua) (separate opinion Bhandari) [2018] ICJ Rep 96, para. 16 *et seq.*

<sup>140</sup>ICSID *Burlington Resources, Inc. v Republic of Ecuador* ARB/08/5, 7 February 2017, para. 71 *ff.*

<sup>141</sup>German Federal Court of Justice IX ZR 149/91 (1992).

quantifiable in a similar manner as the loss of forests and even single trees. Under German law, a particular method for quantifying damage to trees and forests has been sanctioned by the Federal Civil Court.<sup>142</sup> The ‘Koch Method’ is, however, a procedure used to assess the economic value of a given tree based on the value-of-the-object proceedings (Sachwertverfahren). What is done essentially is (1) establishing the costs of planting a young tree, (2) adding the costs to grow the tree to the destroyed tree’s size, (3) adding a reasonable amount of interest to those costs and, if necessary, (4) subtracting the loss of value due to advanced age or damage on the destroyed tree.<sup>143</sup> This kind of method works well for economic assets and the like but is not feasible when dealing with the loss of intangibles such as culture or home (e.g., if Pacific Islands disappear). This issue is not resolved in human rights petitions, such as that presented by Torres Strait Islanders against Australia to the UN Human Rights Committee of the United Nations, since the cultural and ecological damage does not need to be quantified in this setting.

European environmental damage legislation, as laid down in the USchadG and Directive 2004/35/EC, are designed to facilitate restitution and compensation *in natura*. Annex II, no.1.1 of the Directive provides for the following remedial measures: Firstly, there should be primary remediation (i.e., restitution), however, if full restoration by primary remediation is not successful, complementary remediation elsewhere is owed. For the interim loss of natural resources and services pending recovery, compensatory remediation is owed; however, this compensation does not entail financial compensation to the public but improvements to habitats at the damaged site or another site. Thus, European environmental damage law avoids forensic problems, at least insofar as it does not need to quantify environmental damage in monetary terms.

Overall, it appears that any liability claim for pure ecological loss caused by climate change would force a civil court to develop a new method for evaluation if such damage was covered by the court’s national jurisdiction.

### 8.3.2 Claim Against Whom? Causation

Climate liability cases raise the question of the relationship between scientific and legal concepts of causality. Legal causation is not the same as scientific causation but is heavily normative: causation in the scientific sense, using the but-for test or *condition sine qua non*, does not necessarily lead to legal liability due to certain normative corrections.<sup>144</sup> Conversely, in the context of climate change liability, the question has to be posed to what extent the strict but-for causation can be relaxed in

<sup>142</sup>German Federal Court of Justice V ZR 222/12 (2013).

<sup>143</sup>The approach is accepted by German courts since Federal Court of Justice VI ZR 85/74 (1975).

<sup>144</sup>Verheyen (2015), p. 163.

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face of the fact that in climate research, often only probabilistic statements are possible.

90 We will approach these causation issues by differentiating two questions or stages of arguing causation: Firstly, it is necessary to establish sufficient contributory causation between climate change and a defendant's conduct.<sup>145</sup> Secondly, there is the more complicated issue of tracing certain natural weather events or trends to climate change ('detection and attribution') and the problem of how to deal with probabilistic causation. As set out in more detail below (§ 112 *et seq.*), the problems described in this section will not arise in all cases involving private liability actions, but are essentially limited to litigation seeking compensation or adaptation whereas they are completely irrelevant in 'mitigation' cases, such as the *Shell* case.

### **Attributing Climate Change Loss and Damage to Individual Polluters and the 'Carbon Majors'**

91 Holding big polluters liable for damage incurred due to climate change is confronted with the problems of distance and cumulative damage: Damage can occur far from the place of emission and almost every individual's behaviour contributes to some extent to climate change as well as its attendant damage and risks. These problems are not limited to climate change litigation but are present in many fields of environmental liability.

92 The simple fact that the effects of a certain activity occur far away is not problematic as such.<sup>146</sup> However, it becomes increasingly difficult to prove that the tortfeasor's behaviour caused or contributed to specific damage as the distance increases. In the *German forest damage (acid rain)* case, for example, the German Federal Court (BGH) found that plaintiffs had not established a sufficient causal link because the defendants' emission contributions were mixed indistinguishably with those of other emitters and one emitter's pollution could not be traced to the damage incurred by a specific forest owner.<sup>147</sup> However, this ruling was largely a product of the fact that the SO<sub>2</sub>-emissions relevant to this case stay at relatively low altitudes and are, therefore, subject to the wind and not dispersed homogeneously.<sup>148</sup> Under such circumstances, the difficulty of establishing a causal link grows proportionately with the distance from the alleged source.

93 The causal nexus between a single company's GHG emissions and climate change is much clearer because GHG emissions disperse homogeneously in the atmosphere.<sup>149</sup> Therefore, the following stages of causation can be identified:

1. GHG-Emissions rise into the atmosphere where they lead to a higher density of GHG around the globe,

<sup>145</sup>Cf. Verheyen (2015), p. 163.

<sup>146</sup>Wagner (2018), p. 27.

<sup>147</sup>Federal Court of Justice III ZR 220/86 (1987).

<sup>148</sup>Frank (2017), pp. 667 *et seq.*

<sup>149</sup>See Frank (2017), p. 669; Wagner (2018), p. 27; in detail Duffy (2009).



2. the higher density of GHG traps part of the outgoing terrestrial radiation causing Earth to heat up more than it would otherwise do,
3. the rise in temperature causes regional trends or increases the likelihood and/or intensity of certain weather events (for this last stage ¶ 100 *et seq*)

This causal chain of contributory causation was accepted as legally conclusive by the Court of Appeals in Hamm in the *Lliuya* case, and is now being tested on the merits.<sup>150</sup> It was also explicitly accepted by the courts in the *Urgenda* case and implicitly by the Paris Administrative Court.<sup>151</sup>

The second issue in attributing climate change loss and damage to individual polluters is that there are many emitters and, only when they are taken together, do they cause climate change ('concurrent causation').<sup>152</sup> From the viewpoint of the but-for test of contributory causation, this is not a problem. Since each emission leads to a higher density of GHG in the atmosphere, all emissions contribute equally to global warming regardless of where they occur.<sup>153</sup> Thus, a causal link to a defendant's emissions can be established, provided the weather event itself can be traced to anthropogenic climate change (¶ 100 *et seq*). A defence submitting that a certain molecule of CO<sub>2</sub> may have been absorbed by oceans or forests would be inadmissible because the overall effect of contribution remains the same.

Making such a contribution to damage is sufficient to establish liability according to both German<sup>154</sup> and U.S.<sup>155</sup> jurisprudence. There is, however, the issue of adequacy or minimal causation: small emitters, such as individual consumers and small enterprises, are not legally liable because their contribution to climate change damage is negligible and falls under the *de minimis* threshold. A polluter's contribution to anthropogenic climate change must therefore be measurable<sup>156</sup> in the sense that it must be responsible for a quantifiable share of the anthropogenically-generated CO<sub>2</sub> accumulated in the atmosphere. Where exactly the threshold limit is set will be a matter for national law or the court in each given case.

<sup>150</sup> Higher Regional Court of Hamm I-5 U 15/17 (2017), an English translation of the decision is available at <https://germanwatch.org/sites/germanwatch.org/files/announcement/20812.pdf>, last accessed on 11 Mar 2022.

<sup>151</sup> For an academic discussion see Epstein and Deckert (2021), pp. 337/345.

<sup>152</sup> Hinteregger (2017), p. 255. This is different from cumulative causation, where every action by itself would be sufficient to cause the entire damage.

<sup>153</sup> Marjanac and Patton (2018), pp. 284 *et seq*.

<sup>154</sup> Higher Regional Court of Hamm I-5 U 15/17 (2017), an English translation of the decision is available at <https://germanwatch.org/sites/germanwatch.org/files/announcement/20812.pdf>, last accessed on 11 Mar 2022.

<sup>155</sup> The U.S. Supreme Court considered the contribution sufficient case of US Supreme Court *Massachusetts v EPA* (2007) 549 U.S. 534 (¶ 22), see Duffy (2009), pp. 212 *et seq*; Belleville and Kennedy (2013), pp. 64 *et seq*.

<sup>156</sup> To demand a substantial contribution to a specific event would be impractical and give much room to the 'subjective evidentiary scale' of the fact finder, see Duffy (2009), pp. 224 *et seq*.

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- 97** If a significant contribution is established, it would be possible to apply principles of joint and several liability in principle. However, for climate change in particular, it has been proposed that an emitter is only liable for its share since assigning liability for all the damage, as would be the result of joint and several liability, would be excessive.<sup>157</sup> This may be different when holding States accountable for ecological damage, as discussed by *Epstein and Deckert*,<sup>158</sup> but it is in line with the principle that whenever an emitter's share of total damage can be determined, it is liable for this share.<sup>159</sup> The *RWE* case follows this latter approach, while U.S. tort cases currently brought by municipalities follow the former. In any event, it is essential to specify the emitter's contribution to climate change to both establish liability (i.e., the *de minimis* threshold has been exceeded) and to define the defendant's share. For this task, *Heede* has laid the groundwork in the Carbon Majors Study,<sup>160</sup> which determines the emission share of the biggest GHG polluters. The data is regularly updated<sup>161</sup> and can be used in court to determine a defendant's portion of liability. This is being done in the *Lluyda* case where, according to the Carbon Majors Study, the emission share of RWE is 0.47% and this figure is being used to give the court a basis for estimating, under Section 287 of the German Civil Code, RWE's share of the costs to install protective measures. The Carbon Majors Study is also being used in the pending U.S. cases referred to above and in the ongoing *Shell* case in the Netherlands. Its validity has been criticised by defendants and not yet been clarified by courts. Yet, at least in jurisdictions with disclosure rules, it should be possible to excise sufficient information about the actual emissions of a defendant in a particular case.
- 98** As it is feasible to determine emission shares, it is not necessary to resort to market or pollution share liability concepts as used in earlier high-profile U.S. cases involving tobacco and asbestos companies. This is because, in essence, those earlier concepts dealt with alternative causation.<sup>162</sup> Those approaches may, however, prove useful in other environmental liability cases relating to air pollution, such as the aforementioned forest damage cases.
- 99** All in all, proving and quantifying big emitters' causal contribution to climate change should be possible if courts approach the issue in the same way the Higher Regional Court in Hamm has in the *RWE* case. Some issues regarding the determination of individual emitters' contributions remain, such as the question of which

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<sup>157</sup> Pöttker (2014), p. 239; Hinteregger (2017), p. 256.

<sup>158</sup> See footnote 148.

<sup>159</sup> Pöttker (2014), p. 239; Hinteregger (2017), p. 256.

<sup>160</sup> Heede (2014).

<sup>161</sup> The 2017 Carbon Majors Report is available at <https://cdn.cdp.net/cdp-production/cms/reports/documents/000/002/327/original/Carbon-Majors-Report-2017.pdf?1501833772>, last accessed on 11 Mar 2022.

<sup>162</sup> See only Chastain (1986) and Lawson (2011).

time frame of emissions may have to be considered,<sup>163</sup> especially in cases of fault-based liability.

### Detection and Attribution: Tracing Damage to Climate Change

While we have seen that determining a company's contribution to climate change should generally be possible, pinning natural and weather events to climate change is a more difficult task. Tracing, or rather attributing, natural and weather events to anthropogenic climate change is, first and foremost, a scientific question that is yielding increasingly accurate answers as climate-attribution science continues to make significant progress in that respect.<sup>164</sup> In a first step, there is a need to differentiate between 'slow-onset events', such as rising temperatures and sea levels as well as glacial melting, and 'extreme weather events', such as hurricanes, droughts, floods and the like.<sup>165</sup>

For 'slow-onset events', the causal chain is scientifically clear in the sense of the *conditio-sine-qua-non* formula and contributory causation.<sup>166</sup> Climate science can even attribute a percentage of temperature and sea-level rise to the 'carbon majors'. Moreover, it can differentiate between historical (pre-1980) and recent (i.e., 1980–2010) emissions. For example, according to recent studies, 26–32% of sea-level rise is attributable to historical emissions, and 11–14% to recent emissions.<sup>167</sup>

The attribution of 'extreme weather events' is more difficult as it currently seems only possible to give statements of probability.<sup>168</sup> It is all but impossible to rule out that a single event would not have occurred without anthropogenic climate change. However, climate science has made rapid progress in the field of probabilistic attribution so that, according to an editorial in *Nature* magazine, "pinning extreme weather on climate change is now routine and reliable science".<sup>169</sup> Therefore, proving the chain of causation in climate change litigation regarding extreme weather events becomes increasingly possible.<sup>170</sup>

Attribution science is about determining the statistical significance of anthropogenic climate change on the probability or magnitude of a particular weather event.<sup>171</sup> In recent years, it has become increasingly accurate and is now able to quantify the increased probability for single events, such as heat waves. For

<sup>163</sup>Instructive with examples Duffy (2009), pp. 225 *et seq.*

<sup>164</sup>Marjanac and Patton (2018); a short summary of the developments in climate science and its implications for climate change litigation can be found at Marjanac et al. (2017); Minnerop and Otto (2020), pp. 25 ff; Ganguly et al. (2018), pp. 854 *et seq.*

<sup>165</sup>Hinteregger (2017), p. 256; Verheyen (2015), pp. 161 *et seq.*; Frank (2017), p. 669.

<sup>166</sup>Hinteregger (2017), p. 256; Frank (2010), pp. 2297 *et seq.*

<sup>167</sup>Ekwurzel et al. (2017).

<sup>168</sup>Verheyen (2015), p. 162.

<sup>169</sup>Schiermeier (2018), p. 5.

<sup>170</sup>Marjanac and Patton (2018); Marjanac et al. (2017).

<sup>171</sup>Marjanac and Patton (2018), pp. 272 *et seq.*; see also Verheyen (2015), p. 162.

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example, researchers have found that anthropogenic climate change tripled the likelihood of the three-year drought in South Africa that lasted until 2018. Beyond probabilistic statements, in 2017 attribution-science studies claimed, for the first time, that three extreme weather events would not have occurred at all without anthropogenic climate change.<sup>172</sup>

104 However, such definite statements are rare and may remain the exception, depending on the questions that courts ask.<sup>173</sup> Therefore, the chances of successful climate liability litigation regarding extreme weather events largely depend on the question of whether and to what extent probabilistic and statistical attribution is sufficient to establish legal causation. This depends, once more, on the national jurisdiction and its relevant rules regarding the burden and standard of proof, which are, more often than not, not anchored in statutory law but rather set by jurisprudence on a case-by-case basis. While the burden of proof determines who must prove causation, the standard of proof determines the necessary degree of certainty about the causal chain, both aspects are briefly detailed below.

### Burden of Proof

105 It is a general rule across jurisdictions that the burden of proof regarding causation lies with the plaintiff who has to establish his or her claim. However, this burden may shift under certain circumstances.

106 Firstly, this is the case where explicitly provided by law. For example, Section 6 of the German Environmental Liability Act (UmwHG) provides a legal presumption of causation regarding damage allegedly incurred by the operation of an industrial plant. A plaintiff only has to show that a defendant's plant is likely to have caused the damage according to the circumstances of the individual case. If the plaintiff is successful, the burden of proof shifts to the defendant who then has to prove that the plant did not cause the damage. Since a plaintiff must only prove the substantial probability of causation within the scope of Section 6 UmwHG,<sup>174</sup> he or she can rely on studies that show statistical probabilities and many authors, when considering this scenario, have pointed to epidemiological studies.<sup>175</sup> This approach may also apply

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<sup>172</sup> Schiermeier (2018), p. 21.

<sup>173</sup> In cases that impact insurance premiums, climate science and insurance modelling will be able to provide definite yes/no answers since the question is about the increased risk of occurrence rather than the causation of a particular event. This chapter cannot analyse these kinds of cases as the authors have been unable to find any such cases to date. This issue (increased insurance premiums) was one of the case studies in Verheyen (2005), pp. 322 *et seq.*

<sup>174</sup> The necessary degree of probability is highly controversial, see Pöttker (2014), pp. 164 *et seq.*

<sup>175</sup> Hager (1991), pp. 137 *et seq.* The evidential value of epidemiological evidence is discussed in detail by Wiese (1997), pp. 96 *et seq.* In the U.S., epidemiological evidence has been accepted, *inter alia*, in the case of US District Court for the District of Utah *Allen v U.S.* (1984) 588 F. Supp. 247, available online at <https://law.justia.com/cases/federal/district-courts/FSupp/588/247/1679598/>, last accessed 11 Mar 2022. The case was about enhanced cancer risks due to nuclear fallout after atomic weapons tests.

to the findings of climate change attribution science,<sup>176</sup> although Section 6 UmwHG has not yet been used to establish climate change liability, probably because the Section refers to single industrial facilities. However, the fact that the plant could not have caused the damage or weather event by itself, but only in combination with other factors, does not hinder the legal presumption of causation.<sup>177</sup>

Secondly, German courts reverse the burden of proof where there is a violation of a legal duty to take safety precautions, such as that to refrain from unnecessary emissions.<sup>178</sup> A violation of a general duty of care under tort law to minimise dangers for the general public that result from a certain activity (Verkehrssicherungspflicht) is sufficient for this reversal to be enacted.<sup>179</sup> If a duty of care is breached, it is assumed that the same activity caused the damage. A duty of care to refrain from GHG emissions, or at least minimise them as much as possible, has already been assumed by the district court in the *Shell* case and such duties will be discussed in detail below (§ 139 *et seq.*). The legal assumption of causation following a breach of duty, however, does not necessarily help to establish liability because it is not the emitter's contribution to climate change that is unclear (see above) but whether the specific weather event was caused by climate change. In the *RWE* case, the plaintiff suggested that statements made in IPCC reports may establish *prima facie* facts which could result in a reversal of the burden of proof. Neither court in the *RWE* case has made a finding as to this assumption to date.

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### Standard of Proof

The standard of proof varies among jurisdictions. Under German law it traditionally has strict requirements and demands to establish causation beyond reasonable doubt (Section 286 ZPO). Common law jurisdictions, such as the U.S. and Britain, follow a less strict approach that is satisfied with a preponderance of evidence so that causation is “more likely than not”.<sup>180</sup> In other cases, courts have used a ‘doubling of the risk’ standard as the basis of liability.<sup>181</sup> Employing these more relaxed standards of proof have enabled legal actions based on statistical evidence and has been successful in asbestos and tobacco litigation<sup>182</sup> that relied on probabilistic statements.<sup>183</sup>

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<sup>176</sup>Cf. Pöttker (2014), pp. 196 *et seq.*, pp. 225 *et seq.*

<sup>177</sup>Pöttker (2014), pp. 225 *et seq.*, with note 931 for further references.

<sup>178</sup>German Federal Court of Justice VI ZR 223/82 (1984); German Federal Court of Justice VI ZR 372/95 (1997).

<sup>179</sup>Wagner (2017), § 823 para. 88.

<sup>180</sup>Marjanac and Patton (2018), pp. 280 *et seq.*; Wiese (1997), pp. 82 *et seq.*; Pöttker (2014), pp. 307 *et seq.*

<sup>181</sup>Marjanac and Patton (2018), pp. 280 *et seq.*; in more detail Duffy (2009), pp. 206 *et seq.*

<sup>182</sup>Ganguly et al. (2018), p. 856.

<sup>183</sup>Marjanac and Patton (2018), p. 280; Verheyen (2015), p. 163.

**109** There is also a new and elaborate proposition to establish a ‘matrix of causation’ that takes into account not only necessity and sufficiency but also ‘sustenance’ as a new element of causation.<sup>184</sup> Sustenance in this context means the capacity of a factor to protect or maintain an effect despite certain structural changes in a model, which opens up the concept of causation to capture general trends.<sup>185</sup>

**110** Employing a more relaxed standard of proof deals with probabilistic evidence in a way that does not affect the ‘all or nothing principle’ of full compensation. Another approach is probabilistic-proportional liability, which establishes liability in proportion to an increase of risk and has been discussed in Germany in the context of environmental liability since the 1990s.<sup>186</sup> For example, if the risk of a flood or drought was increased by 50% by anthropogenic climate change, the tortfeasors can be held accountable for 50% of the resultant damage. Such probabilistic solutions have been promoted in the context of climate change tort litigation<sup>187</sup> because, especially from an economic analysis of the law perspective, the ‘all or nothing principle’ tends to be economically inefficient. Probabilistic concepts have already been applied in medical law in France and Belgium under the *perte-d'une-chance* theory<sup>188</sup> and in the U.S. in cases involving the negligent failure to reduce a risk.<sup>189</sup> Similarly, in a class action claiming damages for cancer allegedly resulting from the use of Agent Orange in the Vietnam war, the court proposed a settlement sum based on the increased probability of those exposed to the chemical getting cancer.<sup>190</sup> Transferred to climate change litigation, private liability for damage caused by extreme weather events could be summed up as follows: “Liability is apportioned among tort defendants based on the percentage by which anthropogenic influences contributes to the risk of harm, and further divided based on each plaintiff’s share of the GHG ‘market’.”<sup>191</sup>

**111** While some jurisdictions are open to relaxed standards of proof and probabilistic concepts, this does not yet apply to the German legal system, at least according to the dominant legal doctrine.<sup>192</sup> However, Section 287 of the ZPO authorises a court to rule based on estimates. Some authors claim that the provision relaxes the standard of proof only regarding the legal consequences, namely the amount of damages or the contribution payable by a single tortfeasor for damage, but that it cannot be applied to the question of whether an action has contributed to a specific event.<sup>193</sup>

<sup>184</sup> Minnerop and Otto (2020), pp. 49 *et seq.*

<sup>185</sup> Minnerop and Otto (2020), pp. 51 *et seq.*

<sup>186</sup> Wiese (1997).

<sup>187</sup> In detail Duffy (2009), pp. 218 *et seq.*, pp. 230 *et seq.*; Hinteregger (2017), p. 257.

<sup>188</sup> Hinteregger (2017), pp. 256 *et seq.*

<sup>189</sup> Duffy (2009), pp. 209 *et seq.*

<sup>190</sup> Duffy (2009), pp. 207 *et seq.*

<sup>191</sup> Duffy (2009), p. 189.

<sup>192</sup> In detail Pöttker (2014), pp. 200 *et seq.*

<sup>193</sup> Federal Court of Justice VI ZR 21/85 (1986); in the context of climate change liability Pöttker (2014), pp. 186 *et seq.*; Chatzinerantzis and Appel (2019), pp. 882 *et seq.*

However, this view is controversial since it is clear that, in both climate and medical cases, the evidential problems are similar and closely linked.<sup>194</sup> This issue remains controversial in the *RWE* case, with the plaintiff arguing that even if the exact percentage contribution to warming cannot be determined, the court is enabled, under Section 287 ZPO, to estimate the extent of RWE's contribution to the risk of a flood in the concrete circumstances.<sup>195</sup>

Under the dominant German legal doctrine, there is only a relatively relaxed standard of proof concerning the 'typical course of events'. Such *prima facie* proof (Anscheinsbeweis) is, for example, applied in cases of severe medical malpractice.<sup>196</sup> Since this method has been developed for uniform events and 'everyday life experiences', its application to extreme weather events has been rejected in literature.<sup>197</sup> However, also under German law, there is still some room for judges to develop rules regarding the burden and standard of proof in the context of liability for extreme weather events. A practical and reasonable point of reference would be the probability of the event itself: a court could reverse the burden of proof or at least accept *prima facie* proof regarding damage caused by weather events that would have been extremely unlikely to occur in the absence of anthropogenic climate change. As noted above, IPCC statements have been argued to be *prima facie* truth in the *RWE* case.

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### 8.3.3 *Areas of Liability Avoiding Forensic Problems of Compensable Damage, Causation and Attribution de lege lata*

The legal and forensic problems described above only fully present themselves with regard to claims for damages, such as in the *Kivalina* case (§ 27 *et seq.*). They are present in such cases because, when claiming damages, it is necessary both to substantiate the damage suffered, which may potentially lead to forensic problems in assessing the damage, and to prove a causal link between the concrete damage (e.g. the destroyed house) and the harmful event (e.g. the flood or storm).

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Those issues can, at least partially, be avoided in claims seeking protection against risk rather than compensation for damage incurred. As previously suggested above, these non-compensation types of actions can be divided into three categories. Following the terminology of international climate change law, there are claims for (1) adaptation (i.e., protection against consequences of climate change, § 114 *et seq.*)

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<sup>194</sup>Foerste (2019), para. 5; Wagner (2017), § 630h para. 124 *et seq.*

<sup>195</sup>The new contribution by Wagner and Arntz (2021), pp. 405/412 *et seq.* does not provide any new answers and neglects to account for current climate science with respect to what can now be proven.

<sup>196</sup>This rule has been developed by the judiciary and is now codified in Section 630h(5) BGB.

<sup>197</sup>Pöttker (2014), p. 196.

and (2) mitigation (i.e., reducing and preventing further climate change, ¶ 117 *et seq.*). Also pertinent to the issue of this study are (3) 'investor actions' claiming a loss of company value due to a failure to adapt business models (¶ 120 *et seq.*), however, these fall outside of the climate regime's remit and relate to risks or damage to a company, resulting from a failure or delay in adopting adaptation or mitigation measures.

### **Actions for Protective Measures (adaptation)**

115 The challenges described above are already less of a hurdle to bringing claims aimed at implementing or financing protective measures against specific threats, such as in the *Lliuya* and *RWE* case (¶ 34 *et seq.*). Standing is, of course, limited to the protection of those rights the plaintiffs can assert, which may be relevant regarding actions to prevent pure environmental damage, although this is different in countries where standing is provided to NGOs. However, providing a monetary assessment of any damage incurred is not necessary as the most that would be required is an assessment of the costs of protective measures.

116 Regarding causation, there is no need to prove that anthropogenic climate change caused a singular weather event. This is because protection measures are, by definition, preventive and it is sufficient to prove that the applicant's protected legal interests, such as his or her property, are concretely endangered as a result of anthropogenic climate change.<sup>198</sup> He or she must show that climate change has significantly increased the personal risk of becoming a victim of floods, storms and the like, so that protective measures are warranted. Because risk is the reference point, there is no need to establish a causal link to a specific weather event in the past. This can draw on precedent in U.S. medical law, where plaintiffs have successfully claimed costs of ongoing monitoring that is necessary because of an increased likelihood of latent damage; the same argument can be used in the context of climate change litigation with regards to an increased probability of extreme weather events.<sup>199</sup>

### **Actions for Injunctive Relief (mitigation)**

117 The problems described above are even less relevant in actions seeking injunctive relief, such as in the *Shell* case (¶ 41 *et seq.*). In these actions, plaintiffs ask that major GHG emitters align their business plans with the reduction targets of the Paris Agreement. The fundamental legal question in such cases is whether the company in fact contributes to negative changes and whether private companies have a duty of care to abate such risks. This effectively obliges them to comply with the requirements of international law, which we will discuss in detail below (¶ 135 *et seq.*).

118 Irrespective of the details, such constellations avoid the bulk of the legal and forensic problems because actions for injunctive relief are more 'abstract' than

<sup>198</sup>Cf. Ganguly et al. (2018), p. 855.

<sup>199</sup>Marjanac and Patton (2018), p. 287; Duffy (2009), p. 211.



actions for protective measures. Plaintiffs are not claiming individual protective measures or damages and, as such, there is no need to determine a specific causal contribution to a concrete infringement. Rather, the situation corresponds to climate change litigation against States, where plaintiffs also demand policies that effectively reduce emissions. Consequently, only a more general causal chain between the defendant's conduct, global warming and resulting risks must be shown.<sup>200</sup> This avoids both forensic problems in proving causation and the need to assess damage.

A different and purely legal question is whether individuals have standing to bring actions for injunctive relief. This issue did not present itself in the *Shell* or the *TOTAL* cases because the plaintiffs there were NGOs. Individual standing may be called into doubt because plaintiffs demand measures that effectively not only serve to protect their own legal interests. They do not (only) demand the protection of their property, but a general change in company policy benefitting society at large. The question is, in other words, if there is standing for individuals only regarding adaptation or if this extends to mitigation. The answer is that mitigation is included because there is a specific need for legal protection in either constellation. Plaintiffs assert different risks to their individual rights: protective measures help with regard to concrete risks that are already unavoidable (adaptation), while injunctive relief seeks protection against risks that can still be minimised or avoided (mitigation). This is the basis of the many statutory and constitutional applications around the world directed against States which, in short, operate on the premise that better climate change mitigation protects both individual rights and the world at large.

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### Shareholder Actions

Finally, we will take a brief look at shareholder actions, the type of claim that forms the basis of cases such as *Client Earth v Enea* (¶ 7) and entail claiming violations of fiduciary duties and unacceptable financial risks due to a company's failure to adapt to climate change. Those lawsuits differ fundamentally from the actions discussed above because they are not based on tort law but a contractual relationship. This means that shareholders are both entitled and restricted to asserting their rights regarding their invested financial interest. They neither have to prove nor can they assert, a violation of rights beyond the purely economic aspects associated with share value.

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This economic interest is also the reference point of causality.<sup>201</sup> Plaintiffs do not need to prove a causal link between a company's behaviour and climate change loss and damage. Rather, shareholders must show that a company's lack of mitigation or adaptation to climate change poses a financial risk to the company itself because the

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<sup>200</sup>This is reflected in District Court of The Hague *Milieudefensie v Shell* (2021) C/09/571932 / HA ZA 19-379, available at <https://en.milieudefensie.nl/news/court-summons-translation.pdf> (last accessed on 11 Mar 2022), para. 641 *et seq.*, where the plaintiffs explicitly refer to the courts' reasoning in the *Urgenda* case and limit their argument on causality to the fact that the large number of other emitters does not eliminate Shell's responsibility.

<sup>201</sup>See Peel and Markey-Towler (2020) who stress this with regard to risk disclosure cases.

**Table 8.1** Legal and forensic issues by case type

Type of action	Cases	Issues/Forensics
Physical, determinable climate change damage has occurred Relief: damages/relocation costs	Private Sector: <i>Kivalina, Comer, Pacific Coast Federation of Fishermen's Associations, Inc. (PCFFA)</i>	Full causation, contribution, attribution in fact, the scale of the damage, determination of costs (damage baseline)
Physical, determinable climate change damage or risk has arisen	<i>Luciano Lluiya / RWE</i> , various U.S. communities (coastal protection)	Full causation regarding the risk, contribution, attribution in fact, determination of adaptation costs not against a damage baseline
Physical climate change damage to be prevented Relief: injunction, determination	Private Sector: <i>American Electric Power Co. et. al. v Connecticut et. al., Mileudefensie v Shell; TOTAL</i> States: <i>Urgenda</i> , German Federal Constitutional Court etc.	Causation, contribution, attribution in fact but only to a prognostic event or trend, not specific damage on site Relationship between. private and public law
Non-physical (i.e., financial) damage occurred Relief: Damages	<i>.I.</i>	Scientific causation is not relevant but financial causation is: would the damage (to shareholder value etc.) have occurred without the investment etc.
Non-physical (i.e., financial) damage to be prevented Relief: Injunction or change in business behaviour	<i>Client Earth v Enea (Ostroleka Coal Plant)</i>	Damage and Causation only relevant as part of economic analysis if at all, no attribution of specific damage

business model is not sustainable given its incompatibility with the reduction goals of the Paris Agreement.

### Summary Table: Legal and forensic issues by case type

122 The analysis above has been coalesced and summarized in the Table 8.1 below. When examining the categories of actions established above (§ 6) from a practitioner's point of view, it becomes clear that the remedy sought will, in fact, determine both the parties and the types of damage covered as well as the legal and forensic problems arising in litigation.

### 8.3.4 Tackling the Problems of Climate Change Litigation *de lege ferenda: The Model Climate Compensation Act*

123 As we have seen, the severity of legal and forensic problems associated with climate change litigation depend largely on the remedy sought. While actions seeking

protection against risks can avoid many problems, claiming damages and compensation remains problematic.

Here, in the absence of a specific legal framework, the outcome of climate change litigation is rather unpredictable. As discussed above, much depends on the specifics of the national jurisdiction under which a proceeding takes place, nevertheless, uncertainties and risks persist for both plaintiffs and defendants. As climate change progresses and the once theoretical risks materialise into realities all over the world, it becomes increasingly likely that at least some courts will assign liability. It is, therefore, also in the interest of companies to have legal certainty as to the scope of their liability. To meaningfully explore some options of how this could be achieved, we will turn to a specific proposal. 124

In Canada, an independent law centre drafted a “Model Climate Compensation Act” (MCCA)<sup>202</sup> that aims to tackle the risks and uncertainties of climate change litigation against major emitters that are defined in Article 8 MCCA. The MCCA proposes rules for national jurisdictions as litigation is based on national tort law regimes and the implementation of liability standards seems more realistically achievable at the national as opposed to the international level. 125

The MCCA applies a nuisance approach that is restricted to major emitters and provides primarily procedural rules. While it deals with a variety of problems of climate change litigation, we will focus our examination of the MCCA on the issues discussed above and look at proposals regarding standing as well as compensable damage and causation. We will also introduce the idea of funds and/or insurance schemes that would make financial risks more calculable for emitters. 126

### **Standing and Compensable Damage**

The scope of protected rights determines who has standing and what damages are compensable. As we have seen, the protection of immaterial collective goods, such as nature, depends very much on the relevant jurisdiction. In that regard, Article 4(1) MCCA stipulates a “right to a healthy atmosphere” and the alteration of atmosphere to a measurable degree constitutes a violation of that right and a public nuisance giving rise to remedies, Article 4(2) MCCA. Where individual rights are harmed, Article 4(3) MCCA provides for strict liability. In other words, plaintiffs do not need to establish the breach of a duty of care, which naturally facilitates liability litigation even though, as we will see in the next part of this chapter, there are compelling reasons to assume that such duties exist. 127

The MCCA also establishes *parens patriae* jurisdiction for State and local governments in its Article 5 and Article 6. This provides governments with extensive rights to bring claims for damages based on damage to public infrastructure, increased public health costs, harm to the natural environment and so forth. This would be a significant step forward for States, such as Germany, which do not know 128

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<sup>202</sup>Gage and Wewerinke (2015).

*parens patriae* standing, thus excluding local governments from bringing liability actions in the public interest and the interest of their citizens.

### Causation

**129** Regarding causation, the MCCA does not propose major changes to existing Anglo-American tort law.<sup>203</sup> As already claimed in current climate change litigation, such as in the *Lliuya* case, polluters are liable for a share of damage that corresponds to their contribution to emissions, Article 9(1) MCCA. Joint and several liability is assumed where two or more large emitters are responsible for the same emissions, Article 9(2) MCCA, as is the case in supply chains.<sup>204</sup> This type of rule would overlap with the new due diligence law suggested in Chap. 7, however, the reasoning behind this rule assumes that the major emitters are a part of the fossil fuel industry. There is no economy-wide solution offered, especially with regard to actually accounting for Scope 1, 2 and 3 emissions.<sup>205</sup> We will reflect on this issue below and against the backdrop of Chap. 7.

**130** The MCCA does not reverse the burden of proof regarding causation, however, Article 10 (1) MCCA emphasises that courts have to take into account statistical evidence and Article 10(2) and (3) MCCA refer to the “balance of probabilities” or “doubling of the risk” standard of proof. Though this is already the standard in the U.S. and UK, such a rule would be a considerable step forward in the German legal system that relies on the ‘no reasonable doubt’ standard (§ 108 *et seq*).

### Beyond Litigation: Climate Damages Insurance and Climate Compensation Fund

**131** The MCCA does not exclusively aim at facilitating litigation, but also proposes the interesting idea of a Climate Compensation Fund in Article 11 *et seq* MCCA. The idea of compensation funds for climate change loss and damage has long been discussed at the international level<sup>206</sup> without leading to any concrete results. The advantage of the fund proposed in the MCCA is that it would be implemented at the national level. The proposed fund is designed as a form of insurance for big emitters who can escape liability and litigation by contributing to the fund, thereby keeping their risks calculable. This insurance-style approach serves as the ‘carrot’ alternative to the ‘stick’ of damage litigation.<sup>207</sup>

**132** According to Article 16(1) MCCA, a major emitter that holds an acceptable insurance is not liable for damages covered by the policy. The scope and conditions of this insurance would be determined for each fund by its respective national government. Emitters could then purchase this insurance and the money would go

<sup>203</sup> Gage and Wewerinke (2015).

<sup>204</sup> For more details see Gage and Wewerinke (2015).

<sup>205</sup> For definitions see World Resources Institute and World Business Council for Sustainable Development (2004), available at <https://ghgprotocol.org/about-us>, last accessed on 11 Mar 2022.

<sup>206</sup> Verheyen and Roderick (2008).

<sup>207</sup> Gage and Wewerinke (2015).

into the Climate Compensation Fund (CCF), Article 16(6), Article 11 MCCA. In the event of extreme weather events that meet certain criteria (“triggers”), the policy would require a payment of funds into the CCF, which in turn would compensate victims.<sup>208</sup>

Beyond the voluntary approach of the MCCA, the compulsory financing of a fund by big emitters is also worth considering. Under such an approach, such companies would be legally obliged to pay a premium into the fund proportionate to their emission share (e.g., as a surcharge on emission certificates). In Germany, the implementation of such a concept would be legally possible as special taxes to finance certain tasks (Finanzierungsabgabe) are constitutional where there is a special financial responsibility for said task. Such responsibility exists, *inter alia*, regarding risks that are inherent to the professional activities of those being taxed. For example, banks can be forced to contribute to funds designed to protect citizens against the risk of financial crises<sup>209</sup> and sewage sludge producers can be obligated to pay into a fund designed to compensate for damage stemming from sludge production.<sup>210</sup>

Regardless of the particular design, the challenges of any climate-liability fund are defining the triggers and thresholds that give rise to claims against the fund. This requires defining under which circumstances, particularly to what degree of probability, can loss and damage be considered climate change induced. Other problems include the amount, distribution and modalities of compensation.<sup>211</sup> In determining the compensation amount and its distribution, legislators could employ innovative concepts such as probabilistic-proportionate liability (§ 110). It needs to be stated clearly, however, that the MCCA only deals with the consequences of past and ongoing emissions as partial contributors to climate change damage and, even then, this is only done so with regard to the compensatory dimension of liability. With respect to the preventive dimension, no resolution is offered by the MCCA as it does not tackle the issue of mitigation commitments or reduction pathways.

## 8.4 Emergence of New Positive Duties

Finally, and while remaining conscious of the fact that this matter will necessitate further research, we turn to the question of emerging duties of care for the large GHG emitters such as the ‘carbon majors’ and others to reduce GHG emissions and the relationship between these duties and the duties of care owed by States and governments. We have partially dealt with the issue in the first part of this chapter (§ 14 *et seq*) when analysing the preliminary question of whether or not existing public law

<sup>208</sup>Gage and Wewerinke (2015).

<sup>209</sup>German Federal Constitutional Court ‘Anleger-Entschädigungsfonds’ 2 BvR 1387/04 (2009).

<sup>210</sup>Federal Constitutional Court ‘Klärschlamm-Entschädigungsfonds’ 2 BvR 2374/99 (2004).

<sup>211</sup>Those problems have already been described by Verheyen and Roderick (2008).

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and State duties preclude private obligations under tort /nuisance law. We found that U.S. courts consider at least federal tort claims against private companies inadmissible due to displacement by the Clean Air Act. In contrast, this argument has been rejected in the *Lliuya* case because German statutory law (Section 14[2] BImSchG) explicitly provides that claims for compensation and/or protective measures remain possible against private defendants even if the emitting installation has been approved by the authorities. We have also introduced the case of *Milieudefensie v Shell*, where a district court held that big emitters such as Shell have an independent social duty of care to reduce emissions, strongly resembling the duty owed by the State.

**136** In this section, we will follow up on the question raised in the *Shell* case and analyse more closely the emergence of new positive private duties of care to reduce emissions in accord with the reduction goals of the Paris Agreement, the scientific needs of risk reduction as well as the relationship of such duties to the duties owed by the State. We take the view that State and private duties of care converge in the face of the long-term temperature goal of the Paris Agreement and the ever-increasing urgency of combatting climate change. We also contend that, even though international law usually does not directly bind private individuals (Chap. 3 ), it can be relevant indirectly through national tort law and nuisance principles. This is underpinned by the fact that under international law, States have a duty to provide sufficient regulation in matters that do or could involve transnational damage. This duty, as discussed in Chap. 3, can be discharged by courts applying national tort law.

**137** While cases arguing strict liability, such as *Lliuya* (¶ 34 *et seq*), do not need to establish negligence, in many other instances determining there has been a breach of a duty of care is necessary to establish civil liability. In this context, it is important to realise that duties of care may have different points of reference in time depending on the remedy sought. Civil law claims for the compensation of damages suffered in the past would have to establish past negligence, whereas in the following we will focus on forward-looking duties and cases seeking injunctions and behavioural change using the future as the temporal point of reference. Taking this future-oriented perspective means that the standard of care defining the duty of care of companies will be very different than that used in cases such as *Kivalina* and others. With this in mind, we analyse the line of argument put forward by the plaintiffs in the *Shell* case and consider the possibility to generalise (¶ 138 *et seq*). We then turn to alternative and/or complementary approaches to establish positive duties for international companies to adapt their business models (¶ 157 *et seq*). This includes another proposal to deduce and define corporate duties, which is provided by the Principles on Climate Obligations of Enterprises drafted by a group of experts in 2018 as well as shareholder actions that take a starkly different perspective on the issue and argue that a corporation's failure to adapt to climate change constitutes a business risk and violation of fiduciary duties owed to its shareholders.

### 8.4.1 *New Social Duties of Care*

In the *Shell* case (¶ 41 *et seq*), the district court held that Shell has an independent duty of care to align its business model with the targets of the Paris Agreement and has until 2030 to reduce its CO2 emissions by 45% from its 2019 level.<sup>212</sup> Taking a closer look at the court’s reasoning, we consider that it is based on general legal tort and human rights principles and is, therefore, transferable to other jurisdictions, though it ultimately depends on the case-by-case development of such duties by the judiciary.

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#### The ‘Social Duty of Care’ in the Shell Case

The District Court derives Shell’s positive obligation to reduce its emissions from general principles in Dutch tort law. It relies on the general clause in Article 6:162 of the Dutch Civil Code (for the text ¶ 43) and argues that Shell’s business conduct is “in conflict with what is generally accepted according to unwritten law” and therefore violates a social duty of care and constitutes unlawful endangerment.<sup>213</sup> Shell is beyond doubt a major emitter, it is not only one of the most prolific private GHG emitters in the world but it is also one of the world’s largest ‘carbon majors’.

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Article 6:162 of the Dutch Civil Code is similar to Section 823 of the German BGB and represents an old concept of tort law. The positive social duty of care is an open and dynamic legal standard. Its existence and content with regard to a specific behaviour is the result of a balancing of interests in a specific context that calls for an assessment of all circumstances of the case in question.<sup>214</sup> As already mentioned (¶ 41 *et seq*), the same provision was used in the *Urgenda* case to establish the Dutch government’s duty of care. In the case against Shell, the court included 14 factors in its interpretation, essentially dealing with the following issues:<sup>215</sup>

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- the human rights relevance of climate change and its significance for tort law,
- the concretisation of Shell’s duty of care based on international hard and soft law as well as the findings of climate science,
- the proportionality of the reduction obligation, and
- the relationship of the social duty of care to existing or missing State regulatory measures, i.e. the question of overlapping duties.

<sup>212</sup>District Court of The Hague *Milieudefensie v Shell* (2021) C/09/571932 / HA ZA 19-379, para. 5.3.

<sup>213</sup>District Court of The Hague *Milieudefensie v Shell* (2021) C/09/571932 / HA ZA 19-379, para. 4.4.1.

<sup>214</sup>District Court of The Hague *Milieudefensie v Shell* (2021) C/09/571932 / HA ZA 19-379, para. 4.4.1.

<sup>215</sup>District Court of The Hague *Milieudefensie v Shell* (2021) C/09/571932 / HA ZA 19-379, para. 4.4.2.

- 141** As for human rights, the District Court first cited the well-known dangers that climate change poses to the inhabitants of the Netherlands, particularly the results of rising sea levels. The court referred to the *Urgenda* judgments, holding that climate change threatens the rights to life, privacy and family as enshrined in Article 2 and Article 8 ECHR.<sup>216</sup> It then invoked the indirect horizontal effects of human rights. While the ECHR does not directly bind private corporations, it is accepted that its fundamental guarantees are, indirectly, relevant to interpreting private law in general and open legal standards and general clauses (i.e., in the case at hand, Article 6:162 of the Dutch Civil Code) in particular.<sup>217</sup>
- 142** The court then turned to the task of concretising the extent of Shell’s duty of care, referring to the expectations of science and society. The judgment establishes an “international consensus”, which derives from international hard and soft law as well as the findings of climate science. The expectation that and how enterprises have to respect human rights is drawn from international soft law standards, particularly from the UN Guiding Principles on Business and Human Rights (UNGPs).<sup>218</sup> Even though these standards are non-binding, they are internationally endorsed, which allowed the court to correctly, but nevertheless courageously, refer to them when defining societal expectation in this regard. The standards of the UNGPs are particularly used to establish responsibility for emissions in supply chains (Scope 3).<sup>219</sup> As for the temperature targets and reduction pathways, the court invoked the Paris Agreement and the findings of organisations such as the IPCC and the International Energy Agency (IEA).<sup>220</sup> The court deemed that, in the light of the dangers to human rights, Shell’s longstanding knowledge about climate change as well as the foreseeability of further damage, the considerable inconveniences of restructuring its business to bring it in line with current scientific knowledge and the goals of the Paris Agreement could not be considered disproportionate.<sup>221</sup>
- 143** Since Shell’s emissions are governed by the European ETS, which would allow for more emissions than permitted according to the tort law standard as applied by the court, the court also had to decide on the question of the relationship between private law and public law as discussed above (¶ 18 *et seq.*). It did so quite briefly, only stating that Shell’s obligation was independent of the State’s regulatory responsibility. As the social duty of care constituted a minimum of protection under private

<sup>216</sup>District Court of The Hague *Milieudefensie v Shell* (2021) C/09/571932 / HA ZA 19-379, para. 4.4.10.

<sup>217</sup>District Court of The Hague *Milieudefensie v Shell* (2021) C/09/571932 / HA ZA 19-379, para. 4.4.9.

<sup>218</sup>District Court of The Hague *Milieudefensie v Shell* (2021) C/09/571932 / HA ZA 19-3799, para. 4.4.11. *et seq.*

<sup>219</sup>District Court of The Hague *Milieudefensie v Shell* (2021) C/09/571932 / HA ZA 19-379, para. 4.4.17. *et seq.*

<sup>220</sup>District Court of The Hague *Milieudefensie v Shell* (2021) C/09/571932 / HA ZA 19-379, para. 4.4.26. *et seq.*

<sup>221</sup>District Court of The Hague *Milieudefensie v Shell* (2021) C/09/571932 / HA ZA 19-379, para. 4.4.54.



law, this threshold could not be further lowered by State regulation, or a lack thereof.<sup>222</sup>

### **Forward-Looking Duties as a New Approach in Private Climate Change Liability**

Concerning future injunction/mitigation cases, we consider the following points to be crucial in the analysis, rendering these types of cases very different from compensation or adaptation cases, both with respect to the legal issues involved and their forensic requirements: **144**

The main difference between past injunction type cases, such as *American Electric Power* (§ 24 *et seq*), and possible approaches today is the timeframe and the clarity of the result that needs to be achieved to protect both global climate as well as the legal interests, rights and indeed, the lives of millions of humans around the world. Today's duties under tort or nuisance type claims would be directed forward in time, not backwards. The issue is no longer whether a company foresaw or could have foreseen the impacts of climate change throughout its history of producing emissions, though such knowledge will still be relevant when evaluating the proportionality of the imposition of mitigation duties. The question is to what extent each major emitter today has a duty to protect and reduce the risks associated with climate change as much as possible to achieve a level of protection that is objectively necessary and has been legally agreed upon in the Paris Agreement. Even if the Paris Agreement was to be disregarded as an international legal standard,<sup>223</sup> the IPCC's findings are more than clear about the world having to reduce emissions drastically to protect lives and ecosystems worldwide as there are big differences in the outcomes of "well below 2°C" or 1.5 °C warming, and other scenarios. **145**

Today, we know that we essentially have 10 years to reduce emissions drastically and get to GHG neutrality as quickly as possible. This is highlighted in a current paper by some of the key scientists involved in IPCC projections modelled on reduction pledges versus the necessities of the global GHG budget.<sup>224</sup> At the time that some of the cases discussed above (§ 21 *et seq*) were brought to the attention of courts, the discussion was still very much focused on State obligations and relatively long timeframes. In 2010, science and the global public, including political and business leaders had reason to believe that the world still had about 30 years to only halve global emissions of GHGs from their pre-industrial levels. Given the fact that emissions have continued to increase dramatically, this is no longer scientifically viable. In fact, to keep within the agreed temperature target of the Paris agreement, reduction pathways must be very steep and immediate. The graph below displays this dilemma only concerning short-term targets, 2020 and 2030. It relates to time **146**

<sup>222</sup> District Court of The Hague *Milieudefensie v Shell* (2021) C/09/571932 / HA ZA 19-379, para. 4.4.46. *et seq*.

<sup>223</sup> As argued by Habersack and Ehrl (2021), p. 456.

<sup>224</sup> See: Höhne et al. (2020).

frames from the international climate regime and while, for example, the Paris agreement of 2015 may not be directly applicable to private entities' duties with respect to preventing climate change, the graph clearly shows that there is very little time for global emissions to move towards GHG neutrality to avoid catastrophic future global-climate outcomes. The emissions gap, that is the gap between current policies all over the world and what actually needs to be done to reach the 2 °C target, as seen in Fig. 8.1 below, is already large, grows annually as emissions continue to rise and result in increasingly difficult to achieve pathways to reach the agreed-upon goals.

**147** In our view, this can guide the interpretation of legal requirements in the context of tort provisions, particularly concerning standards of negligence. If it is true that the overlap of State and private legal duties with regards to mitigation (i.e., reducing emissions of GHG) does not lead to an exclusion of duties of private entities (§ 48 *et seq.*), it is sound to argue that a duty of care exists with respect to every large emitter, meaning the *Shell* case is something of a precursor. If a private actor is causing and contributing to a certain and identifiable risk, the majority of jurisdictions would deduct from such knowledge a certain independent duty to prevent such risk insofar as this is possible.

**148** For example,<sup>225</sup> the existence of social duties of care is well established in German tort law (Section 823(1) BGB). According to German legal doctrine, a person who creates or causes a risk to persist in his or her area of responsibility must take all reasonable measures and precautions to prevent harm to others (Verkehrssicherungspflicht).<sup>226</sup> The existence and extent of a duty to avoid unreasonable dangers emerging from a certain behaviour essentially depend on the same factors that are discussed in the *Shell* case; the gravity, probability and foreseeability of the danger have to be weighed against the costs and inconveniences of countermeasures.<sup>227</sup> As in the *Shell* case, this standard of care is flexible, dynamic and intensifies as scientific knowledge and technology advance, which together providing a better understanding of the risks and enhanced technical options to address them. It is acknowledged under both Dutch case law and German legal doctrine that the mere lack of legislation, or in this instance, a prohibition on emitting GHGs, does not preclude a duty of care for private entities, especially in the context of Section 14 BImSchG (§ 38). Existing public law obligations constitute a minimum duty of care, but they are not exhaustive.<sup>228</sup>

<sup>225</sup>The duty to protect others from damage as a result of balancing interests is also mentioned in European Group on Tort Law (2005), Article 4:103, para. 6. The "Principles" are not legally binding but based on a comparison of tort principles in European jurisdiction, *ibid.*, Introduction, para. 14 *et seq.* Duties of care as a consequence of a balancing of interests are also known to U.S. legal doctrine, see: Hunter and Salzman (2007), pp. 1768 *et seq.*

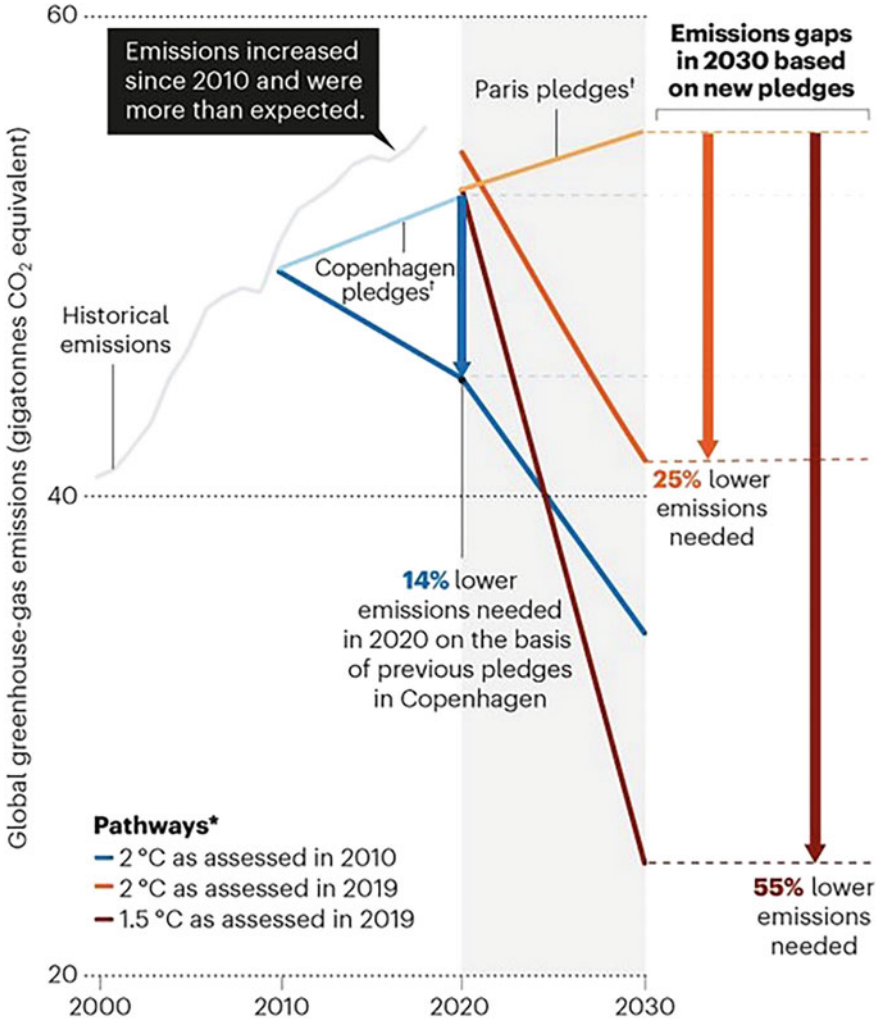
<sup>226</sup>Wagner (2017), § 823 para. 403 with many references to relevant case law.

<sup>227</sup>See in the context of climate change: Pöttker (2014), pp. 124 *et seq.* Specifically regarding the *Shell* judgment: Verheyen and Franke (2021).

<sup>228</sup>Spindler (2020), § 823 para. 417; see for instance: Regional Court of Münster 11 O 444/82 (1986), regarding a failure to take necessary precautions against Thallium emissions, even if neither the permit nor legal emission thresholds were violated.

## MORE AND FASTER

Insufficient climate action during the past decade means that transformational development pathways are now required to reduce greenhouse-gas emissions on time.



\*Median of scenarios that meet the temperature goals at global least costs.  
<sup>†</sup>Projected emissions in 2020 based on parties' pledges made in 2009-10 for the Copenhagen accord.  
<sup>‡</sup>Projected emissions in 2030 based on pledges made in 2015 for the Paris agreement.  
Most parties have not updated their pledges, but are expected to do so in 2020.  
Emissions are aggregated using global-warming potentials from the 2007 IPCC Fourth Assessment Report. Values from the UNEP *Emissions Gap Report 2010* were converted using a correction factor based on the difference in 2010 global CO<sub>2</sub>-equivalent emissions.



Fig. 8.1 Emissions gaps, Höhne et al. (2020), p. 27

- 149** Considering the progression and intensification of climate change-related damage, a corporate duty of care is also becoming increasingly evident from a human rights perspective. The disastrous consequences of further inaction for fundamental and human rights have an impact on the duties of big polluters, since those basic rights, though not directly binding private entities, are relevant to the interpretation of civil law. In Germany, for example, the legal relevance of the basic rights guaranteed under the German Basic Law for the interpretation of private law has been accepted by the German Constitutional Court since the 1950s.<sup>229</sup> This approach follows the idea that fundamental and human rights are threatened today not only by State decisions and actions, but to a similar extent by those of private entities. Considering that a single private company, such as Shell, produces as much or more emissions than entire industrialised countries and is, therefore, a danger to fundamental and human rights, the indirect horizontal effects of human and basic rights clearly support the emergence of corporate duties of care.
- 150** Finally, there is now consensus as to what the minimum level of protection may look like given that the reduction targets set out in the Paris Agreement express global consensus and make it possible, for the first time, to define the obligations of companies in concrete terms.<sup>230</sup> Compared to the present and impending losses of property, health etc., the costs of adapting business models to the Paris Agreement can hardly be a decisive factor.<sup>231</sup> Moreover, adaptation will be necessary anyway, as is argued in financial actions brought by investors (§ 162 *et seq.*), and an early start to the process is likely to reduce the associated costs in the long run.
- 151** This essentially leads to the social duty of care argued and applied in the *Shell* case and we would venture to argue that such a duty could be established for other significant emitters. Insofar as a particular emitter has control over its emissions, it flows from the duty to counter known risks, meaning that a reduction pathway leading to GHG neutrality would have to be pursued. In the *Shell* case, the court deemed that not only must a reduction pathway lead to this overall goal but, because of the company's unique control over the extraction of oil, the need to restrict emissions quickly and the realities of the global carbon budget, there are also identifiable targets that should be met between now and 2050, the specific date set to reach GHG neutrality.
- 152** Here, in our view, the standard of care of large private entities could merge entirely with the duties of States and human rights regimes or in the context of the implementation of international climate agreements and targets. In principle, this applies regardless of different legal approaches used to define State duties. For example, the German Constitutional Court's argument that the remaining CO<sub>2</sub>

<sup>229</sup> German Federal Constitutional Court 1 BvR 400/51 (1958), an English translation of the decision is available at <https://law.utexas.edu/transnational/foreign-law-translations/german/case.php?id=1369>, last accessed on 11 Mar 2022.

<sup>230</sup> District Court of The Hague *Milieudefensie v Shell* (2021) C/09/571932 / HA ZA 19-379, para. 503 *et seq.*

<sup>231</sup> District Court of The Hague *Milieudefensie v Shell* (2021) C/09/571932 / HA ZA 19-379, para. 530 *et seq.*

budget available under the Paris Agreement must not be used up prematurely at the expense of future freedoms and generations (¶ 8) could also be applied to private corporations. A duty of care would then demand that a company does not consume more than its fair share of the remaining budget.

In essence, the standard of care applied by a court would be a duty of conduct corresponding to universally accepted risk-reducing measures in the context of negligence statutes or provisions in civil codes or environmental liability provisions. The duty of conduct would arise regardless of whether or not one company's following a reduction pathway would actually avert damage. This issue was treated at length in the *Urgenda* judgments where the courts unanimously ruled that no single emitter, in this instance the Dutch State, could nullify its own duty of care because other States violate their duties as well.<sup>232</sup> The German Federal Constitutional Court concurred with the reasoning of the Dutch courts.<sup>233</sup> The argument that there are many other tortfeasors has also been rejected by the District Court in the *Shell* case as well as the court of 2nd instance in the *RWE* case in Germany. This is the logical consequence of a phenomenon such as climate change that is caused by cumulative emissions from various sources and processes: the nature of cumulative pollution is that taking away one contribution does not solve the whole problem.

It should be emphasised that the duty of care described here is directed at an enterprise's own conduct and therefore does not rely on the attribution of or responsibility for the conduct of other companies. The latter may be achieved by statutory duties, such as the one underlying the *TOTAL* case described above (¶ 47). While statutory duties may be generally desirable, the line of argument in the *Shell* case is independent of legislative action and *de lege lata*. What can be said, however, is that it would be plausible to argue that there are climate change-related due diligence obligations both under the existing French code described in Chap. 7 and the newly introduced Supply Chain Act in Germany.<sup>234</sup> Given the human rights implications of climate change, it seems somewhat inevitable that a due diligence obligation with procedural and substantive obligations for companies would arise, with the cumulative nature of climate change only creating a challenge for their implementation.

What requires further research is the corporate law argument against setting parameters for management and board decisions in this context. Amongst other

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<sup>232</sup>Supreme Court of the Netherlands *Urgenda Foundation v the State of the Netherlands* (2019) 19/00135, 5.7.7. The judgment and further case documents (including English translations) are available at <http://climatecasechart.com/non-us-case/urgenda-foundation-v-kingdom-of-the-netherlands/>, last accessed on 11 Mar 2022. This is referred to by the plaintiffs in Milieudefensie (2019), para. 641 *et seq.*

<sup>233</sup>German Federal Constitutional Court 1 BvR 2656/18 (2021), para. 149, 200.

<sup>234</sup>The German Act enters into force for the most part on 1st January 2022 (see. Bundesgesetzblatt I, 2021, p 2959). For links to current material: <https://lieferkettengesetz.de/presse/>, last accessed on 11 Mar 2022. See in particular on climate change and this new act: Gailhofer and Verheyen (2021).

issues, such research would help clarify if a defence argument is permissible which rests, at least in principle, on fiduciary duty and shareholder expectation?<sup>235</sup>

### 8.4.2 *Alternative and Complementary Approaches*

**156** Finally, we briefly look at alternative and complementary approaches to define the positive duties of corporations to mitigate the effects of or adapt their business models to the reality of climate change. These approaches can serve as the basis for both an improved definition of management duties under corporate law and for a statutory provision, with the possibility of even extending into the field of due diligence obligations.

#### **The Principles on Climate Obligations of Enterprises**

**157** A comprehensive approach to defining corporate duties to prevent or mitigate dangerous climate change are the Principles on Climate Obligations of Enterprises<sup>236</sup> (Enterprise Principles), drafted by a group of experts in 2017. The Enterprise Principles are not a binding body of law but derived from an interpretation of tort law, human rights law as well as corporate guidelines and codes of conduct.<sup>237</sup> According to their authors, they are located between the interpretation of existing law and assumptions of how relevant law will develop<sup>238</sup> and are meant to be a “source of inspiration for international or national legislation or other political instruments”.<sup>239</sup>

**158** In contrast to the MCCA discussed above (§ 123 *et seq.*), the Enterprise Principles do not deal with compensation as they are focused purely on prevention,<sup>240</sup> as such, they are not intended to address in any way the litigation problems described above (§ 55 *et seq.*). Having said that, they do define corporate duties whose violation would give rise to liability claims in civil courts and, according to the authors, the threat of liability serves as an important incentive for corporations to align with the Enterprise Principles.<sup>241</sup>

**159** The Enterprise Principles follow a different approach to defining a duty of care than was taken by the court in the *Shell* case. The Enterprise Principles are the

<sup>235</sup> See for a legal analysis of this issue under German law (only) Habersack and Ehrl (2021), note 223.

<sup>236</sup> Expert Group on Global Climate Obligations of Enterprises (2018); a short summary is provided by Spier (2018).

<sup>237</sup> In detail Expert Group on Global Climate Obligations of Enterprises (2018), pp. 66 *et seq.*

<sup>238</sup> Spier (2018), p. 333.

<sup>239</sup> Expert Group on Global Climate Obligations of Enterprises (2018), p. 38.

<sup>240</sup> Expert Group on Global Climate Obligations of Enterprises (2018), pp. 41 *et seq.*

<sup>241</sup> Expert Group on Global Climate Obligations of Enterprises (2018), p. 42, available online at <https://climateprinciplesforenterprises.files.wordpress.com/2017/12/enterprisesprincipleswebpdf.pdf>, last accessed on 11 Mar 2022.

counterpart to the Oslo Principles<sup>242</sup> that aim to define countries' legal obligations regarding climate change. The basic idea of the Oslo Principles was that a global GHG budget could be divided among the globe's countries on a per capita basis.<sup>243</sup> The Enterprise Principles built on this by aligning corporate obligations with their respective countries' obligations as stipulated under the Oslo principles. This is laid down in detail in principles 2–16 concerning GHG reduction obligations of corporations. The GHG budgets developed for States are also applied to corporations because, as was discussed under the heading “Duty Overlap” in (¶ 18 *et seq.*), GHG emissions are primarily produced by corporations within a given country (principle 2).<sup>244</sup> The Enterprise Principles seek to go beyond just the problems associated with Scope 1, 2 and 3 emissions, i.e. emissions not only from a production facility in a certain country (Scope 1) but all emissions associated with the facility and production along the value chain (Scope 2 and 3).

The approach to defining corporate duties followed by the Enterprise Principles is, on the one hand, less straightforward than the line of argument in the *Shell* case. Rather than tying corporate behaviour to the reduction goals of the Paris Agreement (especially CO<sub>2</sub> neutrality by 2050), the Enterprise Principles define corporate obligations depending on the CO<sub>2</sub> budget of the country they are located in. This complicates defining duties of care regarding multinational corporations (cf. Principle 5). Conversely, the principles offer a variety of very concrete actions corporations would have to take to comply with their duty of care. This is not limited to reduction obligations but extends to obligations to consider GHG emissions when choosing suppliers (principle 17), the obligations of investors and financiers (principles 25–30) as well as required disclosures and other obligations owed to regulators, the public and shareholders (principles 18–24).<sup>245</sup> This introduces another perspective on corporate duties, namely the duty to avert financial risks in the interest of the company itself and, ultimately, its shareholders.

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### Shareholder Actions, the ‘Financial Duty of Care’ and the XDC Model

Shareholder actions in the context of climate change liability allege a breach of the fiduciary duty owed by the directors of a company to its shareholders to avoid irresponsible financial risks by insufficiently adapting the company's business model to address climate change.<sup>246</sup> In such cases, the duty of care is not derived from tort law but is of a contractual nature. It is not directly aimed at protecting the legal interests of third persons (such as life and property) but at securing the financial interests of shareholders. A recent example of a successful shareholder claim is the

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<sup>242</sup>Expert Group on Global Climate Obligations (2015).

<sup>243</sup>Expert Group on Global Climate Obligations (2015), pp. 19 *et seq.*

<sup>244</sup>Spier (2018), p. 322.

<sup>245</sup>For a summary see Spier (2018), pp. 325 *et seq.*

<sup>246</sup>Ganguly et al. (2018), pp. 858 *et seq.* See also the options for stakeholders in Duve and Hamama (2021), p. 469.



case of *Client Earth v Enea*,<sup>247</sup> where plaintiffs successfully argued that the construction of a new 1-gigawatt coal plant for €1.2 billion violated a financial duty of care due to climate-related financial risks stemming from rising carbon prices and the plummeting costs of renewables.<sup>248</sup>

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In Germany, there have been no similar court cases to date, however, there have been many attempts to operationalise the duty to do business while protecting the climate, for example, by using indicators. The start-up “right.based on science” has published a study evaluating the effectiveness of the German stock market’s 30 largest companies’ climate targets.<sup>249</sup> The evaluation is based on the economic climate impact model X-Degree Compatibility Model (XDC)<sup>250</sup> and is intended to help external stakeholders, shareholders, owners, investors and would-be investors assess companies according to the climate-related sustainability of their business plans.<sup>251</sup> The report compares a baseline scenario, in which companies do not alter their behaviour at all, to a second scenario in which companies reach their respective current climate targets.<sup>252</sup> The XDC Model follows three steps:<sup>253</sup> To begin with, the Economic Emission Intensity (EEI) is calculated by measuring the amount of GHG emissions per €1 million Gross Value Added (GVA) for each company. This is then scaled up to a global level to calculate the effect if each company operated as emission-intensely as the company analyzed. Finally, this data is translated into an effect on global warming measured in °C. The results were particularly sobering with regard to big energy suppliers such as E.ON and RWE, which returned results of 8.1 °C and 9.5 °C respectively if they met their own sustainability goals. If the proclaimed climate-related sustainability efforts on the part of such companies prove to be so strikingly insufficient, it could lead to investor reticence and both shareholders and third parties using the results as a basis for taking legal action and calling for more effective mitigation efforts.

<sup>247</sup>Regional Court of Poznan *Client Earth v Enea* (2019) IX GC 1118/18, case documents can be found at <http://climatecasechart.com/non-us-case/clientearth-v-enea/>, last accessed on 11 Mar 2022.

<sup>248</sup>For more information see: <https://www.clientearth.org/major-court-win-shows-power-of-corporate-law-to-fight-climate-change/>, last accessed on 11 Mar 2022.

<sup>249</sup>right.based on science (2019).

<sup>250</sup>The software can be used by enterprises to evaluate their own climate impact and is available at <https://www.xdegreecompatible.de/de>, last accessed on 11 Mar 2022.

<sup>251</sup>right.based on science (2019), p. 8.

<sup>252</sup>right.based on science (2019), p. 9, available online at [https://uploads-ssl.webflow.com/5ddb8f4d31f0fb0ad6f12fd/5de0ee8ed4143433dfd2d13d\\_right\\_%23whatif\\_2019\\_report.pdf](https://uploads-ssl.webflow.com/5ddb8f4d31f0fb0ad6f12fd/5de0ee8ed4143433dfd2d13d_right_%23whatif_2019_report.pdf), last accessed on 11 Mar 2022.

<sup>253</sup>right.based on science (2019), pp. 10 *et seq.*



## 8.5 Conclusion

Climate change has moved from being theoretical to a reality that causes, and will continue to cause, damage. It is now routinely accepted by a number of courts in different countries as an issue that needs to be judicially addressed. However, doing so raises questions such as who is responsible and is there a basis for liability of private actors? This chapter has taken the very new but active field of climate litigation as an example for an in-depth discussion of the hurdles and opportunities for introducing corporate liability for environmental damage. Against the background of the many already decided and still pending State-directed climate court cases, we began by classifying cases by the remedy sought, namely mitigation, adaptation or compensation for damage.

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Given the nature of climate change, where emissions can give rise to responsibility on different levels, we then analysed the overlap between State duties and those of private actors, to which end we compared the situations in the USA and Germany. We found that in the USA, liability claims seem to be preempted based on the Supreme Court judgement in *American Electric Power*, even though this case only referred to a mitigation type claim and was not strictly a case about climate change damage. German courts appear to look at this issue differently, at least in the high-profile *RWE* case, using Section 14 BImSchG as the key guiding law in this area. While there will always be variation caused by the specifics of the jurisdiction involved, we have concluded that State duties will not normally preempt private actors' duties concerning climate change. However, how each jurisdiction will approach this overlap in responsibility remains to be seen.

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Looking at several legal and forensic issues, such as standing, types of damage and causation, we found that these only present hurdles to some types of cases. Given the increasingly accurate and provable scientific findings on the impacts and timeframes for mitigation, we found that even actions seeking compensation for past behaviour and damage due to an extreme event are increasingly likely to proceed in court. As a means of ready reference, we have included a table summarising the types of foreseeable cases as well as the specific problems each is likely to encounter. As a resource for discussions concerning policy options, we have summarised possible approaches to solve some of the key problems identified.

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Looking forward to what we believe will become an increasingly commonplace occurrence, we took a closer look at two very recent cases involving claims for mitigation/injunctive relief against multinational companies, namely the *Shell* case in the Netherlands and the *TOTAL* case in France. The judgement from *Shell* is particularly demonstrative that simple tort and nuisance principles already existent in many countries can be applied to oblige private actors to minimise the climate-related risks created by their business operations and thus impose requirements to reduce their emissions. This is now possible primarily because the issue of fault in the past is no longer relevant as the standard of care now sought is forward-looking. Given how little time is left for the global community to address climate change and given how a duty of care is and has always been a social construct developed by

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courts on a case-by-case basis, we find the arguments in the Shell judgment transferrable to other jurisdictions. While further research is needed on procedural and forensic issues, as well as corporate law implications, it seems reasonable to deduct that major companies do indeed have an independent duty to reduce emissions to satisfy their duty of care towards those at risk.

**167** With new statutory instruments on due diligence emerging in Germany and being planned at the EU level, it remains to be seen where corporate responsibility overlaps with State responsibility, and how the standard of care under either duty can be defined to help limit the otherwise catastrophic impacts of climate change. Hopefully, with or without litigation forcing them, States will accept their responsibility to follow the emission reduction pathways required to achieve the Paris Goals. The questions examined here would then only be directed at those companies residing in or being regulated by States that do not comply with their own duty of care. While not an insurmountable issue, this may require a new look at extraterritorial regulation or civil liability instruments that can be applied across national boundaries.

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# Chapter 9

## Geoengineering: Methods, Associated Risks and International Liability



Alexander Proelss and Robert C. Steenkamp

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## 9.1 Introductory Remarks

- 1 Climate change arguably constitutes one of the greatest risks to the long-term health of the world’s environment. In 2015, the Intergovernmental Panel on Climate Change (IPCC) highlighted that the Earth’s climate system has consistently been warming since the 1950s and that a “large fraction of anthropogenic climate change resulting from CO<sub>2</sub> emissions is irreversible on a multi-century to millennial time scale, except in the case of a large net removal of CO<sub>2</sub> from the atmosphere over a sustained period”.<sup>1</sup> Initial responses to climate change revolved around States attempting to reduce, rather than remove, greenhouse gas emissions.<sup>2</sup> However, as the global economy expands, greenhouse gas emissions have continued to rise and cooperative arrangements aimed at reducing emissions have had limited, if any, impact. If recent predictions are to be believed, the remaining “carbon budget” needed to prevent average global temperatures from increasing by more than 1.5 °C may be exhausted by 2030.<sup>3</sup> Climate Analytics estimates that the current Nationally Determined Contributions (NDCs) made by States under the Paris Agreement<sup>4</sup> indicate that average global temperatures will rise by 2.8 °C by 2100—almost double the stipulated efforts to limit the temperature increase to 1.5 °C above pre-industrial levels mentioned in Article 2(1)(a) of the Paris Agreement.<sup>5</sup> The recent IPCC Special Report on 1.5 °C Global Warming concludes that without “increased and urgent mitigation ambition in the coming years, leading to a sharp decline in greenhouse gas emissions by 2030, global warming will [cause] irreversible loss of the most fragile ecosystems and crisis after crisis for the most vulnerable people and societies”.<sup>6</sup>
- 2 As the effects of climate change become more apparent and the need for action becomes more urgent, it is unsurprising that scientists, governments and policy-makers have begun considering climate change strategies that go beyond the reduction of greenhouse gases. This is especially true in the context of contemporary environmental law where commitments to protect the environment are sometimes held to imply that States should consider innovative actions.<sup>7</sup> In this regard, geoengineering (at times also referred to as ‘climate engineering’, or ‘climate-altering technologies’)<sup>8</sup> is emerging as a potential response to tackling climate change.

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<sup>1</sup>Alexander et al. (2013), p. 28.

<sup>2</sup>Schipper (2006).

<sup>3</sup>Rogelj et al. (2016), p. 635. See also Brent et al., p. 2.

<sup>4</sup>Paris Agreement, 12 December 2015, C.N.92.2016. Treaties-XXVII.7.d (entered into force 4.11.2016) (hereinafter Paris Agreement).

<sup>5</sup>Climate Analytics (undated).

<sup>6</sup>Taalas and Msuya (2018), p. vi.

<sup>7</sup>Reynolds (2014), p. 430; Corry (2017), p. 300.

<sup>8</sup>The terminology used is not coherent. The IPCC Special Report on the Impacts of Global Warming of 1.5 °C refrains from using the term ‘geoengineering’ (see Masson-Delmotte et al.



The term ‘geoengineering’ is somewhat difficult to define since it encompasses a wide range of dissimilar techniques with varying methodologies, costs and risk levels.<sup>9</sup> However, it is generally accepted that geoengineering can be understood as the deliberate and large-scale manipulation of the Earth’s climate to counteract anthropogenic climate change.<sup>10</sup> There are several methods of geoengineering but, for the present Chapter, individual methods can be classified into one of two broad categories: (1) solar radiation management (SRM) and (2) carbon dioxide removal (CDR).

Before turning to an examination of the differences, risks and methods associated with the activities that fall within these categories, it is important to point out that there exists an inherent tension in the development/deployment of current geoengineering methods and the potential risks that such development/deployment may entail. On the one hand, various geoengineering methods seem to promise considerable benefits, including contributing to the overall mitigation of anthropogenic climate change.<sup>11</sup> On the other hand, the potential benefits to the environment and society in general may be offset by the potential harm that one and the same geoengineering method poses.<sup>12</sup> Risks associated with geoengineering include environmental disruptions such as droughts; permanent damage to the ozone layer; an increase in acid rain; negative effects on ocean ecosystems; as well as political and social risks associated with human security. Furthermore, curbing the effects of climate change could lead to ‘moral hazard’ and deter States, as well as private stakeholders, from carrying out more costly and sometimes internationally mandated climate change mitigation measures.<sup>13</sup> With a wide array of political, environmental, social and economic risks at play, questions arise as to the compatibility of geoengineering operations with international law. This is especially true given that there are currently no binding international regulations in force that specifically focus on geoengineering as current regulation primarily relies on existing multilateral agreements established for other purposes.<sup>14</sup>

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2019, Annex I, p. 550). Similarly, the Carnegie Climate Governance Initiative (2019) is attempting to limit use of the term ‘geoengineering’ to specific situations (see <https://www.c2g2.net/whats-in-a-name-why-we-became-c2g/> and explanation of core terms: <https://www.c2g2.net/terminology-guide/>; accessed 1 Apr 2022). As far as ocean-based interventions are concerned, the terminology used in multilateral fora has recently shifted to ‘ocean-based negative emission technologies’ and ‘ocean interventions for climate change’. See IMO Doc. LC/SG 44/3/Add.1, 29 March 2021, Marine Geoengineering: Advice from GESAMP Working Group 41 to the London Protocol Parties to Assist them in Identifying Marine Geoengineering Techniques that it Might be Prudent to Consider for Listing in the New Annex 4 of the Protocol.

<sup>9</sup>Bodle et al. (2014).

<sup>10</sup>Royal Society (2009), p. 1.

<sup>11</sup>Bodansky (2013), p. 540.

<sup>12</sup>Scott (2013), p. 313; Reynolds (2014), p. 427.

<sup>13</sup>¶ 49 *et seq* for an analysis of the risks associated with current geoengineering methods. See also Horton et al. (2013).

<sup>14</sup>Talberg et al. (2017), p. 229.

5 Additionally, and unlike the ambiguous distribution of responsibility associated with CO<sub>2</sub> emissions, the deliberate and large-scale development or deployment of geoengineering methods may be attributable to identifiable actors.<sup>15</sup> The difficulties inherent in measuring, as well as attributing where possible, the effects of deploying a particular geoengineering method may lead to an increase in potential conflicts surrounding international liability and compensation. It is largely accepted, therefore, that the deployment of any geoengineering technology needs to be done against the backdrop of an existing and effective governance regime that includes international liability.

6 This Chapter is divided into five Subchapters. Following the introduction in Sect. 9.1, Sect. 9.2 briefly examines the definition of geoengineering before turning to a survey of the categories of geoengineering together with each category's associated methods in Sect. 9.3. This latter Subchapter provides an analysis of the major environmental and other risks associated with geoengineering. Section 9.4 analyses the international legal rules and principles that are currently relevant or have the potential to be relevant in the context of large-scale geoengineering activities. This Subchapter provides an overview concerning the key regimes that may be called on to govern geoengineering proposals, including the London Convention/Protocol,<sup>16</sup> the 1982 United Nations Convention on the Law of the Sea (UNCLOS), the outer space treaty system as well as customary international law rules and principles associated with the prevention of harm from activities that may have significant and adverse impacts on the environment. Using those liability regimes identified and examined earlier in the study, Sect. 9.5 highlights the options available for international responsibility and liability for damage caused by geoengineering activities. This Subchapter also includes a discussion of the challenges in attributing responsibility and liability for geoengineering activities and concludes with an examination of what a potential geoengineering liability regime may consist of.

## 9.2 Definition of Geoengineering and Terminology

7 For the present study, it is important to note from the outset that the terms 'geoengineering' and 'climate engineering' are used interchangeably.<sup>17</sup> Where specific differences between these terms are intended, such intention is expressly stated. Additionally, this Chapter adopts the accepted view that geoengineering does not

<sup>15</sup>Lawrence et al. (2018), p. 5.

<sup>16</sup>Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 29 December 1972, 1046 UNTS 120 (entered into force 30 August 1975) (London Convention); Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 14 November 1996, 36 ILM 7 (Protocol to the London Convention).

<sup>17</sup>See Rickels et al. (2011, p. 7) for a potential distinction between the term 'geoengineering' and 'climate engineering'. However, this distinction is not utilised within this study, primarily since such a distinction is based on intention rather than a difference in content or meaning. In the present

include ‘traditional’ mitigation or adaptation strategies, including industrial carbon capture, nor does it include strategies that do not involve deliberate intervention in the climate system, including conventional afforestation and avoided deforestation.

There are currently several accepted definitions for the term ‘geoengineering’.<sup>18</sup> The Royal Society defines geoengineering as the “deliberate large-scale manipulation of the planetary environment to counteract anthropogenic climate change”.<sup>19</sup> The parties to the Convention on Biological Diversity (CBD) view the term as referring to “technologies that deliberately reduce solar insolation or increase carbon sequestration from the atmosphere on a large scale that may affect biodiversity (excluding carbon capture and storage from fossil fuels when it captures carbon dioxide before it is released into the atmosphere)”.<sup>20</sup> For the present Chapter, these definitions are used to conclude that for any proposed activities to be classed as geoengineering they must be:

- Deliberate;
- Aimed at addressing anthropogenic climate change;
- Of such a large-scale that the implementation of any particular geoengineering method is designed to significantly counteract the effects of anthropogenic climate change;<sup>21</sup> and
- The activity falls within one of two broad categories: solar radiation management or carbon dioxide removal.

It is relevant to mention that the above definitions of geoengineering are not without problems. Most notably, some argue that the benefits, associated risks and potential cost portfolios of individual methods are too varied to be referred to under one umbrella term.<sup>22</sup> Such arguments may be countered by the fact that a collective term provides both a degree of commonality and advantages in the development of governance regimes. However, such terminology may also create a false impression as no geoengineering methods have thus far been undertaken beyond small-scale field experiments.<sup>23</sup> Needless to say, what qualifies as geoengineering is currently still being discussed, and the term should be viewed as referring to “a contested

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study, therefore, the only concern for the definition of geoengineering is that the relevant activities are undertaken deliberately.

<sup>18</sup>GESAMP (2019), pp. 16–17.

<sup>19</sup>Royal Society (2009), p. 1; see also Secretariat of the Convention on Biological Diversity (2012), p. 23 for a similar definition.

<sup>20</sup>The definition is contained in a footnote to Decision X/33 on Biological Diversity and Climate Change adopted by the 10th Conference of the Parties (COP) to the CBD, <https://www.cbd.int/decision/cop/?id=12299>, accessed 1 Apr 2022. Even if it may sometimes be difficult to distinguish between nature conservation and climate intervention on the basis of intent, conventional measures of nature conservation cannot be held to potentially negatively affect biodiversity in terms of the CBD definition.

<sup>21</sup>Secretariat of the Convention on Biological Diversity (2012), p. 23.

<sup>22</sup>Heyward (2015).

<sup>23</sup>Boettcher and Schäfer (2017), p. 267.

concept that unites a set of heterogeneous proposals for how a targeted intervention into the climate system might be achieved”.<sup>24</sup>

### 9.3 Categories and Risks of Geoengineering

- 10 In line with the definition of geoengineering outlined above, this Chapter distinguishes between different methods of geoengineering based on their inclusion in one of two broad categories. Which method falls into which category generally depends on whether the method aims to “treat the ‘symptoms’ of climate change by altering the Earth’s radiation budget without reducing greenhouse gas concentrations, or whether [the method] aims to treat the ‘cause’ of climate change by reducing the greenhouse gas concentrations that have changed the Earth’s radiation budget”.<sup>25</sup> It is important to highlight from the outset that the present Subchapter does not offer an analysis of every available method of geoengineering.<sup>26</sup> Rather, this Subchapter offers a discussion of a select few methods which have been selected for their potential value in shaping a future geoengineering liability regime (see Sect. 9.6). The following discussion highlights, first, the purpose of each category and, second, the methods selected and associated with each category. It is also important to keep in mind that the present Chapter only briefly highlights the categories and associated methods and does not offer an in-depth study of the scientific aspects of each method. The relatively descriptive analysis offered here is done to set the foundation for (1) a legal examination into the potential gaps surrounding geoengineering governance, and (2) allow for a discussion of important issues to consider in the context of international liability for geoengineering activities.

#### 9.3.1 Solar Radiation Management

- 11 The first category of geoengineering considered here is referred to as solar radiation management. The ultimate aim of SRM is to limit or stabilise warming caused by the increased levels of greenhouse gases in the atmosphere by reducing the amount of solar radiation the Earth absorbs.<sup>27</sup> SRM methods do this by increasing the

<sup>24</sup>Boettcher and Schäfer (2017), p. 267.

<sup>25</sup>Rickels et al. (2011), p. 37.

<sup>26</sup>For a detailed analysis of the available CDR and SRM methods, see generally Royal Society (2009); Rickels et al. (2011); Secretariat of the Convention on Biological Diversity (2012). For a detailed analysis of various SRM and CDR methods associated with marine geoengineering specifically, see GESAMP (2019).

<sup>27</sup>Royal Society (2009), p. 23.

reflectivity of the Earth (i.e. planetary albedo) to reduce the amount of sunlight that reaches the Earth's surface and that, in turn, would decrease average global temperatures.<sup>28</sup> There are predictions that SRM methods, especially stratospheric aerosol injection (SAI), would be relatively inexpensive to deploy and are designed to have an immediate impact on global temperatures. This is in contrast to CDR methods (¶ 32 *et seq*), which are predicted to be expensive and involve a substantial delay between their implementation and desired global climate impact.<sup>29</sup> The relative speed of deployment and predicted effectiveness of SRM methods may be an important consideration should anthropogenic climate change become immediately dangerous to those communities and species most vulnerable to increasing temperatures.<sup>30</sup> However, it requires particular mention that despite expectations that SRM methods will rapidly counterbalance the effects of increasing greenhouse gases, such methods do not directly address the root causes of anthropogenic climate change (i.e. increases in greenhouse gases such as CO<sub>2</sub>).<sup>31</sup>

Methods common to SRM can be deployed in three spatial zones, namely, space, including mirrors and other solar reflectors; the atmosphere, including SAI, marine cloud brightening (MCB)<sup>32</sup> and cirrus cloud thinning (CCT); and the Earth's surface, including sea ice restoration and desert reflectors.<sup>33</sup> The following Subchapter limits itself to a discussion of five SRM methods. The first three methods examined in this Chapter (SAI, MCB and CCT) are currently the most discussed, with field testing already taking place in some cases, and are, therefore, important for a discussion regarding the international governance of geoengineering. The fourth method, the restoration of sea ice, is a relatively new technique and its effectiveness and environmental impacts are largely unknown. Furthermore, employing this method is also complicated by the ecologically and politically sensitive areas in which it would take effect (such as in the Arctic). However, these particularities involving sea ice restoration offer an opportunity to assess how new approaches (broadly falling under the umbrella category of SRM) can be regulated. The fifth and last method discussed in this Subchapter, space-based solar reflectors, has several implementation challenges but is discussed here for the purposes of international liability, especially taking into account the liability regime established by the Space Liability Convention discussed in Chap. 11.<sup>34</sup> Therefore, this study incorporates an

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<sup>28</sup>Hester (2018), p. 225; Royal Society (2009), p. 23; see also Secretariat of the Convention on Biological Diversity (2012), p. 26.

<sup>29</sup>Lawrence et al. (2018), p. 9.

<sup>30</sup>Talberg et al. (2017), p. 231; ¶ 56 *et seq* concerning human rights risks associated with geoengineering.

<sup>31</sup>Secretariat of the Convention on Biological Diversity (2012), p. 26.

<sup>32</sup>MCB is a sub-method of marine sky brightening (MSB). Since MCB is the most developed and researched form of MSB, focus is placed on MCB. However, the principles and risks associated with MCB are by and large applicable to all MSB methods in general.

<sup>33</sup>Lawrence et al. (2018), p. 9.

<sup>34</sup>Convention on International Liability for Damage Caused by Space Objects, 29 March 1972, 961 UNTS 187 (Space Liability Convention).

examination of all three of the above-cited spatial zones where SRM methods could be deployed.

- 13 Before examining these five methods, two points must be highlighted for this Subchapter. First, the specific risks associated with SRM in general are discussed below (¶ 49 *et seq*) while those risks associated with each of the considered methods are discussed here. This means that the risks associated with SRM in general are also applicable to all the specific methods discussed in this Subchapter. Second, it must be borne in mind that the specifics of deployment and the overall impacts of each method will depend on factors such as geographic location and whether the method is applied at the Earth's surface, in the atmosphere or in space.<sup>35</sup>

### Stratospheric Aerosol Injection

- 14 Currently classified by some as one of the most promising geoengineering methods for cooling the climate, SAI involves the introduction of aerosols into the stratosphere to increase the reflection of sunlight.<sup>36</sup> The introduction of such aerosols has the potential to mimic the cooling effects that have been observed after large volcanic eruptions or—at lower atmospheric altitudes—in cities with air pollution.<sup>37</sup> Given the research surrounding volcanic eruptions, the focus on SAI has thus far been on the use of sulphate aerosols; however, this does not preclude that other types of aerosol particles may be preferred in future.<sup>38</sup> Recent models suggest that the sensible use of SAI has the potential to reduce temperature and precipitation anomalies at both regional as well as sub-regional levels.<sup>39</sup> The features of SAI were recently highlighted in the IPCC Special Report on 1.5 °C Global Warming where it was concluded that “SAI is the most-researched SRM method, with *high agreement* that it could limit warming to below 1.5 °C”.<sup>40</sup>

- 15 Despite the above-mentioned advantages, any study on international liability requires an examination of the potential risks and side effects of current SAI technology. The risks and side effects of SAI identified in the following are in addition (in whole or in part) to the general risks associated with SRM discussed below (¶ 49 *et seq*). The first risk associated with SAI is related to the fact that the injected aerosols have the potential to damage the ozone layer. Ozone depletion has profound consequences that range from higher rates of illness in humans, such as skin cancer and cataracts, to dramatic climatic changes and crop failures.<sup>41</sup>

<sup>35</sup>Royal Society (2009), p. 23.

<sup>36</sup>Schäfer et al. (2015), p. 41; see also Reichwein et al. (2015), p. 145.

<sup>37</sup>Crutzen (2006), p. 211; Royal Society (2009), p. 29; Brent (2018), p. 161. See also Cardwell (2022).

<sup>38</sup>Royal Society (2009), p. 29. This is particularly important to keep in mind since some of the negative impacts caused by sulphate usage may be mitigated or even avoided if aerosols other than sulphates were to be used in SAI (Secretariat of the Convention on Biological Diversity 2012, p. 48).

<sup>39</sup>Irvine et al. (2019).

<sup>40</sup>de Connick et al. (2018), p. 350.

<sup>41</sup>Robock et al. (2008), p. 1; Saxler et al. (2015), p. 115; see also Burns (2010), p. 291.

Continued depletion of the ozone layer also endangers marine ecosystems, biochemical cycles and has resulted in estimates that efforts to close the ozone hole above Antarctica could be delayed by approximately 30 to 70 years.<sup>42</sup> In addition to the potential dangers to the ozone layer, SAI could also alter precipitation patterns and water cycles—potentially exacerbating water scarcity in certain areas and worsening El Niño events.<sup>43</sup> Certain models predict that SAI may negatively affect the monsoon cycle, resulting in droughts and crop failure with a consequent increased risk of famine.<sup>44</sup> Should such side effects materialise, SAI may intensify the effects of climate change itself. Lastly, and despite ongoing research into SAI, there still exists considerable scientific uncertainty regarding its implementation. In the absence of any past observations that could serve as benchmarks, doubt remains as to whether it is possible to reliably estimate probabilities for the occurrence of a certain type of damage stemming from SAI.<sup>45</sup>

Additional difficulties surrounding the implementation of SAI are related to the mechanisms through which aerosols could be injected. Current mechanisms for the injection of potential aerosols include high-flying aircraft, stratospheric balloons, artillery shells and rockets. High-flying aircraft and stratospheric balloons are currently believed to be the most effective and economically feasible. However, both of these proposed mechanisms are currently underdeveloped and identifiable issues include the need for dedicated fleets of high-flying aircraft since the altitude ceiling of commercial aircraft is too low. Regarding tethered stratospheric balloons, issues here involve the safety of transporting several megatons of aerosol particles through hoses that may stretch several kilometres.<sup>46</sup>

Often classified as the most researched method of SRM, the risks associated with SAI highlight the critical importance of developing a robust and comprehensive liability regime.

### Marine Cloud Brightening

MCB is an SRM method that aims to disperse aerosols (most commonly sea salt particles) into low-level clouds which form over the ocean.<sup>47</sup> Sea salt particles have been identified as a major source of cloud condensation nuclei, which enhance “cloud droplet number concentrations” and therefore reduce cloud droplet size. This ultimately results in a cloud having a higher number of smaller droplets (as opposed to fewer larger droplets) and, given that more smaller droplets have a larger total surface area than fewer large droplets, this increases cloud albedo.<sup>48</sup> MCB offers a similar advantage to other SRM methods in that it promises increased

<sup>42</sup>Tilmes et al. (2008), p. 1204; see also Heckendorn et al. (2009), p. 1.

<sup>43</sup>Saxler et al. (2015), p. 115; see also Schäfer et al. (2015), p. 44.

<sup>44</sup>Robock (2008), p. 15; see also Saxler et al. (2015), p. 115.

<sup>45</sup>Saxler et al. (2015), pp. 116–117.

<sup>46</sup>Lawrence et al. (2018), p. 10.

<sup>47</sup>Schäfer et al. (2015), pp. 44–45.

<sup>48</sup>Brent et al. (2019), pp. 7–8.

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reflection of solar radiation with a potential secondary benefit that it may also prolong the lifespan of a cloud, further enhancing its cooling capacity.<sup>49</sup>

19 MCB has been described as a “significantly less risky option” than SAI, however, MCB’s primary risks are still centred around scientific uncertainty regarding its deployment and overall effectiveness.<sup>50</sup> Brief mention should be made of the fact that in 2020, a research team led by the Sydney Institute of Marine Science and Southern Cross University conducted the first outdoor MCB field test above Australia’s Great Barrier Reef. The aim of the field test was to evaluate “a delivery mechanism comprised of 100 high-pressure nozzles that can spray nano-sized sea-salt particles into the air”, at a time when the Great Barrier Reef was undergoing its third mass coral bleaching event in five years.<sup>51</sup> This MCB field test is part of a long-term programme facilitated by the Australian Reef Restoration and Adaptation Program (RRAP) “to develop, test and risk-assess novel interventions to help keep the [Great Barrier] Reef resilient and sustain critical functions and values”.<sup>52</sup>

20 Despite limited local testing, the potential effectiveness of MCB has only been assessed with global-scale models, which have poor spatial resolution and exclude any assessment on the scale of individual clouds.<sup>53</sup> Moreover, clouds are considered among the most complex and least-understood components of the climate system and the effect that large-scale MCB may have on global precipitation patterns is not fully understood.<sup>54</sup> In this regard, enhanced precipitation over low-latitude land areas may increase agricultural productivity in some areas while increasing the risk of floods in others.<sup>55</sup> Certain models predict that those areas where MCB deployment could result in decreased precipitation include South America (as an identified key target area), which could have detrimental impacts on the Amazon rainforest.<sup>56</sup> Additional risks posed by MCB to the environment include the fact that reduced ocean temperatures and available sunlight “could potentially alter the carbon uptake of the oceans directly by changing seawater chemistry and indirectly by changing phytoplankton production”—possibly impacting other biogeochemical cycles and ocean ecology, including potentially drastic changes to fisheries and other

<sup>49</sup>Brent et al. (2019), p. 8; see also Rickels et al. (2011, p. 42) highlighting that this secondary benefit has recently been challenged.

<sup>50</sup>Scott (2013), p. 328.

<sup>51</sup>Carnierge Climate Governance Initiative (2020).

<sup>52</sup>Website of the Reef Restoration and Adaption Program (RRAP): <https://www.gbrrestoration.org/home>, accessed 1 Apr 2022. The RRAP Concept Feasibility Study identified MCB as one of 43 “interventions” requiring further exploration (see Bay et al. 2019). The decision to select MCB and the other 42 “interventions” was done on the basis of their functional objective, delivery method and possible deployment scale. That said, the role that international governance (particularly international responsibility and liability for environmental damage) played in selecting the interventions appears, at first glance, minimal.

<sup>53</sup>Brent et al. (2019), p. 8.

<sup>54</sup>Schäfer et al. (2015), p. 45.

<sup>55</sup>Schäfer et al. (2015), p. 46.

<sup>56</sup>Bala et al. (2010), p. 916.



aspects of marine food webs.<sup>57</sup> Lastly, while the primary purpose of MCB is to increase cloud albedo, under certain circumstances the method has been shown to reduce rather than increase albedo.<sup>58</sup>

The above-identified risks offer challenges specific to the deployment of MCB itself. However, the underlying reason for the above risks are rooted in issues associated with effectiveness and uncertainty and are, therefore, not far removed from those risks that SAI methods face.<sup>59</sup> For this reason, the potentially applicable international laws surrounding the governance of SAI and MCB would be largely indistinguishable.

### **Cirrus Cloud Thinning**

The third SRM method discussed in this Subchapter is CCT. Perhaps less so than SAI but comparable to MCB, CCT appears to be a technologically feasible and relatively inexpensive geoengineering method. In order to understand the purposes of CCT, it is important to briefly note that clouds generally reflect some incoming shortwave radiation whilst trapping a certain amount of outgoing longwave radiation.<sup>60</sup> This has resulted in the understanding that the location and high altitude of cirrus clouds result in such clouds having a warming effect—meaning that their dispersal, by scattering ice nuclei, could reduce global warming.<sup>61</sup> The presence of such ice nuclei in the atmosphere “would result in fewer, but larger ice particles being produced during cirrus cloud formation, thus causing them to sink more rapidly”.<sup>62</sup>

The primary advantage associated with CCT is that the material and costs involved in its deployment are relatively minimal. The ice nuclei would only be needed in low quantities and, unlike SAI methods, could be deployed using available commercial aircraft.<sup>63</sup> Recent studies related to CCT have, as with other methods, highlighted the scientific uncertainties and unpredictable consequences of CCT. Some of these studies have concluded that despite significant increases in scientific understanding of CCT in recent years, this method of geoengineering does “not achieve a significant climatic effect”,<sup>64</sup> whereas other studies point to evidence that CCT could lower average global temperatures by up to 1.4 °C.<sup>65</sup> Further complicating the picture of its usefulness, certain other studies have found that CCT, not unlike

<sup>57</sup>Partanen et al. (2016), p. 7607; Brent et al. (2019), p. 8.

<sup>58</sup>Robock et al. (2013); see also Ahlm et al. (2017), p. 13071; and Brent et al. (2019), p. 8.

<sup>59</sup>Lawrence et al. (2018), p. 10.

<sup>60</sup>Factors that affect whether short- or longwave radiation are blocked by clouds include the latitude of the clouds, their altitude and particle size. However, the deciding factor in determining whether a cloud locks short- or longwave radiation seems to be a cloud’s latitude (Rickels et al. 2011, p. 42).

<sup>61</sup>Reynolds (2019a).

<sup>62</sup>Rickels et al. (2011), p. 42.

<sup>63</sup>Rickels et al. (2011), p. 42.

<sup>64</sup>Lohmann and Gasparini (2016).

<sup>65</sup>Storelvmo et al. (2014), p. 4.

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MCB, carries with it the risk to increase, rather than decrease, average global temperatures. This risk is attributable to the over-seeding of ice nuclei that would result in optically thicker cirrus clouds which, in turn, provide a net warming effect instead of cooling.<sup>66</sup>

- 24 The constraints associated with large gaps in currently available scientific knowledge, including environmental side effects and overall effectiveness, means that an in-depth analysis of this method is unnecessary for this Chapter. Needless to say, it is predicted that any development or deployment of CCT methods will need to be bound by the same international governance regime applicable to SAI and MCB.

### Restoration of Sea Ice

- 25 As far back as 1965, it was suggested that threats associated with climate change could be addressed by “spreading very small reflecting particles over large oceanic areas” to increase the ocean’s reflectivity.<sup>67</sup> In recent years, a few studies have concluded that microbubbles or foam created at the surface of the ocean has the potential to increase ocean albedo.<sup>68</sup> Findings in these studies suggest that the creation of such foam and microbubbles at the ocean’s surface has the potential to substantially reduce average global temperatures, with particularly positive impacts in the ice-covered polar regions.<sup>69</sup> In this regard, the Ice911 Research project, which focuses on the Arctic, requires brief mention.

- 26 A new proposal by this research team suggests placing certain types of sheet or granular material (such as a hollow glass microsphere solution) on Arctic ocean surfaces.<sup>70</sup> It is envisaged that the use of such material or solution (described as having a low subsidiary environmental impact) would increase ice reflectivity in the region and consequently reduce currently projected temperature increases.<sup>71</sup> In February 2020, the Ice911 project, recently renamed the Arctic Ice project, began field-testing in Winnipeg, Canada.<sup>72</sup> It has been predicted that the use of this hollow glass microsphere solution has the potential to increase Arctic ice volumes by up to one per cent per year, as well as substantially reduce regional temperatures.<sup>73</sup> Supporters of this project have labelled this method as “soft-geoengineering” as it

<sup>66</sup>Lohmann and Gasparini (2017); Kristjánsson et al. (2015), p. 10,809.

<sup>67</sup>President’s Science Advisory Committee (1965).

<sup>68</sup>In this regard see the following studies: Evans et al. (2010), p. 155; Crook et al. (2016), p. 1549; and Seitz (2011), p. 365.

<sup>69</sup>Brent et al. (2019), p. 9; see also Desch et al. (2016), p. 107, where another method of restoring ice in the Arctic is discussed. This latter research study indicates the possibility of “enhancing Arctic sea ice production by using wind power during the Arctic winter to pump water to the surface, where it will freeze more rapidly”. This study concludes that “where appropriate devices are employed, it is possible to increase ice thickness above natural levels, by about 1 m over the course of the winter”.

<sup>70</sup>Field et al. (2018), p. 884.

<sup>71</sup>Field et al. (2018), p. 882.

<sup>72</sup>Arctic Ice Project (2021).

<sup>73</sup>Field et al. (2018), p. 896.

has less associated risks and is easily withdrawn from use compared to other geoengineering options.<sup>74</sup>

However, as with all methods of geoengineering currently under discussion, the long-term effects of increasing ocean albedo are not well known. Potential environmental impacts associated with such methods are numerous—including the potential to exacerbate ocean acidification, negatively influence ocean species as a result of changing temperature effects and reduced sunlight as well as potentially changing global and or regional precipitation patterns.<sup>75</sup> Considering the use of such (or similar) methods in the highly sensitive polar regions carries with it increased environmental risks,<sup>76</sup> where the disruption or a slowing of ice melting patterns may impact fragile ecosystems and the habitat and migration patterns of Arctic or Antarctic species found nowhere else on Earth. Apart from these environmental concerns, the proposal of the Arctic Ice Project discussed above may also pose human rights issues associated with indigenous peoples. Some commentators have expressed concern that the indigenous peoples of the Arctic have not consented to or do not fully appreciate the extent that geoengineering research and deployment in the Arctic may have on local ecology, which ecology may already be under pressure from existing extraction projects related to oil and gas wells and other forms of mining.<sup>77</sup>

The restoration of sea ice by increasing ocean or ice albedo (as in the Arctic Ice project) has received considerably less attention than other methods of geoengineering. In the absence of detailed scientific information, the uncertainties regarding this method of SRM make any evaluation of potential cost and effectiveness that much more complex.

### Space-Based Solar Reflectors

The last method of SRM detailed in this Chapter involves the installation of reflective mirrors between the Earth and the Sun to reduce incoming solar radiation.<sup>78</sup> Installation options include placing mirrors between the Earth and the Sun or in orbit around the Earth. Additional options include deploying either a ‘cloud’ of reflective spacecraft or an artificial equatorial ring of passive particles.<sup>79</sup> Not unlike other SRM techniques, the use of space-based solar reflectors offers to compensate for much of the warming caused by anthropogenic CO<sub>2</sub> emissions in a relatively short amount of time.<sup>80</sup>

<sup>74</sup> Geoengineering Monitor (2018).

<sup>75</sup> Robock (2011), p. 383; Brent et al. (2019), p. 9.

<sup>76</sup> The fragility of the Arctic is exemplified by findings that it is warming at twice the rate of the global average (see Clark and Lee 2019, p. 8490).

<sup>77</sup> Geoengineering Monitor (2019).

<sup>78</sup> Lunt et al. (2008), p. 1.

<sup>79</sup> Kosugi (2010), p. 242; Pearson et al. (2006), p. 46; see also Scott (2013), p. 329.

<sup>80</sup> Rickels et al. (2011), p. 40.

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- 30** However, it must be noted that this method has several disadvantages and is not considered in the same light as the previously discussed methods, primarily due to the associated practicalities, material needs and energy costs. Indeed, an informal meeting concerning space-based solar engineering in November 2019 found that “space-based solar geoengineering is not a plausible near-term goal or aspiration”.<sup>81</sup> The main disadvantages associated with this method are that whenever a section of the reflective material is in the Earth’s shadow, no radiation would be reflected. Additionally, current predictions indicate that uniform shading caused by the reflective system would be difficult to achieve and, depending on the location of its deployment, the position of the reflector may have to be continuously corrected to fully realise the intended benefits.<sup>82</sup> The use of reflectors in space also comes with several environmental risks, including potentially irreversible damage to the hydrologic cycle as well as the Atlantic deep-water formation.<sup>83</sup> Finally, the material used would need to be of sufficient mass to ensure that it is not immediately pushed out of orbit once deployed—particularly difficult given that there is considerable light-pressure force exerted by the very sunlight such a system is designed to scatter.<sup>84</sup> However, the material requirements to produce sufficient mass for the components of a reflective system naturally results in greater costs for both development and deployment. These many disadvantages resulted in the United States House of Representatives Committee on Space and Technology noting that “due to high projected costs, technological infeasibility and unacceptable environmental and political risks, the solar radiation management (SRM) strategy of space-based mirrors should be a low priority consideration for research”.<sup>85</sup>
- 31** The numerous prohibitive constraints associated with costs, timescales, practicalities and environmental side effects results in an in-depth analysis of this method being unnecessary for this Chapter. Current proposals for this SRM method rely on extensive future technological developments as well as a dramatic reduction in material transport costs.<sup>86</sup> That said, it is important to highlight that the implementation of this method of SRM is different to the previously discussed methods (deployment in space versus atmosphere/surface-based deployment) and the applicable governance regime is therefore predicted to have some notable differences.

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<sup>81</sup> Keith et al. (2020).

<sup>82</sup> Rickels et al. (2011), p. 40.

<sup>83</sup> Rickels et al. (2011), p. 40.

<sup>84</sup> Royal Society (2009), p. 32.

<sup>85</sup> U.S. House of Representatives Committee on Science and Technology (2010).

<sup>86</sup> Lawrence et al. (2018), p. 13.

### 9.3.2 Carbon Dioxide Removal

As with the individual SRM methods examined above, it bears mentioning once more that the risks associated with CDR generally are discussed below (¶ 65 *et seq*) while those risks associated with individual methods are discussed here. CDR methods aim to slow or reverse the current increase in future atmospheric CO<sub>2</sub> concentrations, accelerate the natural removal of atmospheric CO<sub>2</sub>, and increase the storage of carbon in land, ocean and geological reservoirs.<sup>87</sup> For this reason, CDR technologies are increasingly referred to as “negative emissions technologies” (NETs) or, as is often the case, the two terms are used synonymously.<sup>88</sup> There appears to be international consensus that NETs are “rapidly becoming a prominent feature of the international climate governance landscape”, and CDR methods have already progressed further than SRM methods in that field testing has occurred on a comparably large scale.<sup>89</sup> In response to this, CDR methods have attracted the bulk of the attention of the international community, which has opted in favour of establishing a “moratorium” on large-scale ocean fertilisation, a method that is detailed below (¶ 35 *et seq*). Despite this, however, the IPCC has recently concluded that all “pathways that limit global warming to 1.5 °C with limited or no overshoot project the use of CDR” and that CDR methods will “in most cases achieve net negative emissions to return global warming to 1.5 °C”.<sup>90</sup> NETs are also seen by the IPCC as well as the United Nations Environment Programme (UNEP)<sup>91</sup> as important in achieving the climate goals set in the Paris Agreement. This necessitates an understanding of the associated methods (discussed below) as well as detailed knowledge of the gaps in the current governance structure (¶ 71 *et seq*).

CDR approaches are based on the fact that CO<sub>2</sub> is naturally sequestered by way of certain physical, chemical and biological processes. The physical processes involved here include either accelerating the ventilation of the ocean by increasing circulation or by directly transporting CO<sub>2</sub> to the deep sea.<sup>92</sup> The chemical processes involve the natural and chemical weathering reaction with rock or soil (i.e. CO<sub>2</sub> becomes bound to minerals in rock and soil, meaning it is removed from the atmosphere).<sup>93</sup> Lastly, the relevant biological processes involve marine phytoplankton on the surface layers of the ocean which, by way of photosynthesis, convert approximately half the Earth’s CO<sub>2</sub> into organic carbon. After completion of its life cycle, a small portion of the biomass of marine phytoplankton sinks to great depths or the bottom of the

<sup>87</sup>Stocker et al. (2013), p. 98.

<sup>88</sup>McClaren (2012), p. 489.

<sup>89</sup>Craik and Burns (2019), p. 11,114.

<sup>90</sup>Allen et al. (2018), p. 17.

<sup>91</sup>United Nations Environment Programme (UNEP) (2017), p. 65.

<sup>92</sup>Rickels et al. (2011), p. 45.

<sup>93</sup>Rickels et al. (2011), p. 46.

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ocean before remineralisation processes transform the organic material into CO<sub>2</sub>, nutrients and other chemical forms.<sup>94</sup>

- 34** With these physical, chemical and biological processes in mind, CDR technologies aim to increase or enhance the natural sequestration of carbon as even a small increase in the ability of natural processes to act as CO<sub>2</sub> reservoirs may result in a large decrease in atmospheric CO<sub>2</sub> content.<sup>95</sup> This can be done in a number of different ways but, for the present Subchapter, those methods associated with biological and physical sequestration are of primary concern since their current governance structures are the most advanced, thereby offering significant insight into any potential geoengineering liability regime. The following Subchapters examine ocean fertilisation (a biological process), artificial upwelling/downwelling (a physical process) as well as carbon capture and storage (also a physical process). Given that many of the CDR methods associated with such processes are ocean-based, it is important to highlight that the governance regime established by the UNCLOS will, to a greater or lesser degree, always be relevant to the CDR methods discussed in this Subchapter.

### **Ocean Fertilisation**

- 35** The ocean sequesters approximately one-third of anthropogenic CO<sub>2</sub> emissions and is a major carbon sink.<sup>96</sup> The sequestration of carbon by the ocean is done in a number of ways, however, its role as a ‘biological carbon pump’ is the most pertinent for ocean fertilisation. As a biological process, the carbon pump can be summarised as follows:

The starting point for this process is the fixation of dissolved inorganic CO<sub>2</sub> in shallow ocean waters by phytoplankton in the process of photosynthesis, converting the CO<sub>2</sub> into an organic form. While the bulk of fixed organic carbon is remineralized in the upper layers of the ocean and released to the atmosphere, a portion is transported downwards by the sinking of dead phytoplankton biomass and zooplankton fecal pellets into the deep ocean and sediments (i.e., ocean floor). Carbon sinking to the level of sediments can be sequestered for decades to centuries, or even longer.<sup>97</sup>

- 36** With this process in mind, the aim of ocean fertilisation is to add nutrients to the ocean to increase biological production which, in turn, should increase the “subsequent sequestration in the deep ocean or sea floor sediments” of carbon.<sup>98</sup> It should be noted that ocean fertilisation also refers to methods that are aimed at enhancing fish stocks—i.e. the fertilisation of offshore waters to increase fish numbers.<sup>99</sup> However, this form of ocean fertilisation is not aimed at addressing anthropogenic

<sup>94</sup>Rickels et al. (2011), p. 47.

<sup>95</sup>Rickels et al. (2011), p. 44.

<sup>96</sup>Brent et al. (2019), p. 9.

<sup>97</sup>Brent et al. (2019), p. 10.

<sup>98</sup>de Connick et al. (2018), p. 346; the “biological carbon pump” is defined as the “transport of carbon containing biomass from the surface to the deep ocean” (Rickels et al. 2011, p. 47).

<sup>99</sup>For a detailed discussion of this and other ocean fertilisation methods, see GESAMP (2019), pp. 42–48.

climate change and is, therefore, not considered in this Subchapter as a geoengineering method. Rather, this Subchapter refers to the deliberate fertilisation of the ocean with micronutrients such as iron (ocean iron fertilisation) or macronutrients such as nitrogen and phosphorus. Ocean iron fertilisation seeks to increase iron nutrients available to phytoplankton and thereby increase the amount of carbon that can be exported via the biological carbon pump (more phytoplankton means more dead phytoplankton sinking to the bottom of the ocean).<sup>100</sup> As a geoengineering method, ocean iron fertilisation has generated substantial interest in recent years and is one of the few geoengineering proposals that has progressed to the field testing stage.<sup>101</sup>

Some claims have suggested that increasing the growth of phytoplankton in areas such as the Southern Ocean or the equatorial Pacific (as areas where phytoplankton growth is limited by iron deficiencies), may have the potential to offset as much as 25% of the world's annual carbon emissions.<sup>102</sup> However, more recent assessments have concluded that even large-scale use of ocean iron fertilisation may only sequester “a few gigatons of CO<sub>2</sub> annually, even with fertilisation of the entire Southern Ocean”.<sup>103</sup>

The large-scale of the proposed field testing has created considerable environmental concern as ocean fertilisation, whether by micro- or macronutrients, is expected to affect the entire food web since it is primarily aimed at the organisms at the very foundation of that web.<sup>104</sup> Any method that deliberately impacts the food web, thereby modifying systems in the global commons, is likely to have a transboundary impact regardless of its scale of application.<sup>105</sup> Certain studies have also linked ocean fertilisation to accelerated ocean acidification,<sup>106</sup> eutrophication and the production of toxin-producing dinoflagellates.<sup>107</sup> Additional environmental concerns include the fact that extensive and uncontrollable algal blooms will result in dead or oxygen-deficient zones (in both shallow and deep water), which could result in catastrophic consequences for biodiversity.<sup>108</sup> Societal risks associated with ocean fertilisation include the fact that by increasing the growth of phytoplankton, certain downstream ecosystems could be denied critical nutrients which are key to the continued survival of other marine resources, such as fish.<sup>109</sup> Any negative impacts on fisheries will have obvious and potentially dire consequences for the livelihoods of downstream communities and food security.

<sup>100</sup> McGee et al. (2017), p. 68.

<sup>101</sup> McGee et al. (2017), pp. 68–70.

<sup>102</sup> See Brent et al. (2019), p. 10 referencing Powell (2008), p. 4.

<sup>103</sup> Keller (2018), p. 261.

<sup>104</sup> de Connick et al. (2018), p. 346.

<sup>105</sup> Schäfer et al. (2015), pp. 27–28.

<sup>106</sup> Oschlies et al. (2010), p. 4026.

<sup>107</sup> Secretariat of the Convention on Biological Diversity (2009), p. 32.

<sup>108</sup> de Connick et al. (2018), p. 346.

<sup>109</sup> See Brent et al. (2019), p. 11.

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**39** The long-term effectiveness of ocean fertilisation as a geoengineering method is also questionable with some experts concluding that the extra absorbed carbon would be “returned to the atmosphere relatively rapidly, rather than being transported and stored in the deep ocean or in sea-floor sediments”.<sup>110</sup> However, the comparatively advanced scientific understanding of this method, compared to other geoengineering methods, together with the fact that ocean fertilisation has progressed to the field testing stage, has resulted in the establishment of the first geoengineering governance regime (§ 91 *et seq.*). This set of circumstances means that ocean fertilisation necessarily requires consideration in any study assessing the potential liability of geoengineering activities.

### **Artificial Upwelling/Downwelling**

**40** As with ocean fertilisation, artificial upwelling aims to stimulate the growth of phytoplankton by providing traditionally nutrient-poor marine regions with additional nutrients.<sup>111</sup> However, unlike ocean fertilisation, nutrient increases are not achieved by physically adding elements (such as iron or nitrogen), rather, artificial upwelling involves pumping large amounts of deeper ocean water (generally rich in nutrients) to the ocean’s surface. This stimulates phytoplankton growth and, subsequently, the uptake of CO<sub>2</sub> from the atmosphere.<sup>112</sup> Secondary benefits associated with artificial upwelling include increases in fish production,<sup>113</sup> the cooling of coral reefs<sup>114</sup> and the general cooling of ambient surface waters—potentially countering the effects of global warming at local or regional scales.<sup>115</sup>

**41** To date, a wide range of devices have been proposed to enable the upwelling process, including airlift pumps<sup>116</sup> and wave-powered systems,<sup>117</sup> however, artificial upwelling remains controversial and is currently not at the forefront of discussions considering feasible CO<sub>2</sub> removal techniques. There are a number of reasons for this, the first being that “nutrient-rich deeper ocean water is also rich in CO<sub>2</sub>, which is brought up to the surface and consequently counteracts the fertilisation effect”.<sup>118</sup> The second reason is that any climatic benefits associated with artificial upwelling will require large scale projects involving a very large number of pumps.<sup>119</sup> Additional environmental risks include possible disruptions to the ‘ocean thermocline’ which will alter cloud cover and atmospheric circulation

<sup>110</sup>Secretariat of the Convention on Biological Diversity (2012), p. 58; see also Royal Society (2009), p. 17.

<sup>111</sup>German Research Foundation (DFG) (2019), p. 35.

<sup>112</sup>German Research Foundation (DFG) (2019), p. 35; GESAMP (2019), p. 61.

<sup>113</sup>See generally Kirke (2003).

<sup>114</sup>See generally Hollier et al. (2011).

<sup>115</sup>GESAMP (2019), p. 61; Brent et al. (2019), p. 11.

<sup>116</sup>For airlift pump systems see Fan et al. (2013), p. 48; see also generally Meng et al. (2013).

<sup>117</sup>For wave powered systems generally see Kenyon (2007) and Fan et al. (2016).

<sup>118</sup>German Research Foundation (DFG) (2019), p. 35.

<sup>119</sup>Secretariat of the Convention on Biological Diversity (2016), p. 65.



patterns, meaning any initial cooling benefits may be followed by an increase in average global temperatures, increased risks of ocean acidification and the restructuring of marine ecosystems.<sup>120</sup>

In contrast to artificial upwelling, the idea behind artificial downwelling is to pump cold surface waters (saturated in CO<sub>2</sub>) to the ocean depths.<sup>121</sup> This would allow for ‘downwelled’ waters to laterally replace “warmer surface waters that subsequently cool and, in this process, take up CO<sub>2</sub> via cooling-enhanced solubility”.<sup>122</sup> At present, there is very limited knowledge of the environmental side-effects of downwelling, however, both artificial upwelling and downwelling have been described as having:

geo-political implications, which are related to where they might be deployed and the scale of the proposed operations. How they would intersect with present day oceanic resource extraction (e.g. fisheries) or proposed marine geoengineering approaches is not known. There is a widespread lack of information for most of these methods, which at present are at the ‘drawing board’ stage of an initial idea underpinned with some technological [research and development].<sup>123</sup>

Lastly, proposed deployment zones for artificial downwelling include the Arctic Ocean and, since the thickening of ocean ice may be a precursor to increasing successful downwelling, there is reason to believe that this CDR method may be directly or indirectly linked to SRM methods associated with the restoration of sea ice (¶ 25 *et seq.*).

### Carbon Capture and Storage

Carbon capture and storage (CCS) refers to a variety of different technologies that aim to physically capture carbon from the atmosphere or other CO<sub>2</sub> emitting sources (such as power plants and cement works) and then remotely store such captured CO<sub>2</sub> in human-made or natural reservoirs. Such carbon capture may also be referred to as carbon capture, utilisation and storage (CCUS) when the captured CO<sub>2</sub> is used in other products or services, including enhanced oil recovery. While a thorough review of all available CCS technologies is beyond the scope of the current report,<sup>124</sup> certain similarities can be drawn between all CCS methods. This includes the fact that most CCS projects will be transboundary in nature since any captured CO<sub>2</sub> is likely to be stored in States or locations other than where it was captured and/or

<sup>120</sup> Secretariat of the Convention on Biological Diversity (2016), p. 65; Kwiatkowski et al. (2015), p. 1; and Rickels et al. (2011), p. 46. As far as restructuring marine ecosystems go, Brent et al. (2019, p. 12) conclude that artificial upwelling could “substantially restructure ocean ecosystems, including favouring larger phytoplankton, such as diatoms, and resulting in a shift from oligotrophic (nutrient-poor) to eutrophic (nutrient-rich) species”.

<sup>121</sup> GESAMP (2019), p. 63.

<sup>122</sup> GESAMP (2019), p. 63.

<sup>123</sup> GESAMP (2019), p. 24.

<sup>124</sup> Detailed discussion of individual CCS methods can be found in GESAMP (2019), pp. 51–60; German Research Foundation (DFG) (2019), pp. 26–35; and Rickels et al. (2011), pp. 43 *et seq.*

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produced.<sup>125</sup> In this regard, the most attractive and often most available options include offshore storage—whether in/on the seabed, or by way of crop wastes and artificial platforms.<sup>126</sup>

- 45 Notwithstanding this, there is reason to believe that there may be increasing political interest in changing the current international handling of CCS.<sup>127</sup> In this regard, the International Energy Agency identifies CCS as the “only technology available to mitigate greenhouse gas emissions from large-scale fossil fuel usage in fuel transformation, industry and power generation”.<sup>128</sup> Similarly, the European Commission has concluded that:

the 2050 target [part of the EU 2050 Energy Roadmap] can only be achieved if the emissions from fossil fuel combustion are eliminated from the system, and here CCS may have an essential role to play, as a technology that is able to significantly reduce CO<sub>2</sub> emissions from the use of fossil fuels in both the power and industrial sectors.<sup>129</sup>

- 46 Despite the seemingly positive view held by some towards certain CCS technologies, considerable uncertainty surrounding the feasibility, costs, efficiency and environmental impact of storing CO<sub>2</sub> remotely remains. The environmental risks associated with CCS are dependent on the individual CCS technology under discussion. However, as with many CDR methods, the environmental risks associated with CCS technologies are generally rooted in scientific uncertainty, including their biological impacts (connected to ocean acidification and the altering of deep water ecosystems); the increased need for already under strain natural resources (such as freshwater); the stability of liquid CO<sub>2</sub> on/in the ocean floor; risks to both pelagic and deep-sea fishing (associated with both the storage and transport of captured CO<sub>2</sub>); risks to ground and river water chemistry; and the fact that CCS facilitates the continuous dependence on fossil fuels.<sup>130</sup>

- 47 Unlike SRM methods that are, at this stage, largely dependent on future technology developments, CDR techniques seem to have progressed somewhat further insofar as feasibility studies are concerned. This may, in part, be attributed to the increased discussion surrounding the governance of certain ocean-based CDR methods (§ 91 *et seq.*). However, no CDR method is free of risk, especially considering their potential impact on the marine environment as well as regional and local ecosystems around storage sites.

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<sup>125</sup> Langlet (2015), p. 395.

<sup>126</sup> Langlet (2015), p. 395; see also GESAMP (2019), pp. 51–60 for a discussion of different CCS methods.

<sup>127</sup> Langlet (2015), p. 399.

<sup>128</sup> International Energy Agency (IEA) (2013), p. 5.

<sup>129</sup> European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the Future of Carbon Capture and Storage in Europe, COM(2013) 180 Final (Brussels, 2013), p. 11.

<sup>130</sup> GESAMP (2019), pp. 51–60; Langlet (2015), p. 397; Secretariat of the Convention on Biological Diversity (2016), pp. 52–57; Stenzel et al. (2019).

The above has briefly examined a select group of SRM and CDR geoengineering methods, including a brief consideration of their associated and method-specific risks. With this in mind, the following Subchapter highlights the general risks associated with geoengineering as a whole and provides some examples as to what geoengineering damage scenarios may look like.

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### 9.3.3 *Risks Associated with Geoengineering*

In the absence of large-scale field-testing and deployment, geoengineering intervention has, except for ocean fertilisation, remained largely a theoretical prospect. The lack of experience with “real-world” damage events that have occurred as a result of geoengineering has led academia to envisage and analyse damage scenarios that may materialise from such activities in academic literature. Whether or not these scenarios will ever become a reality is, of course, impossible to establish, taking into account the relatively embryonic State of most, if not all, geoengineering methods. Therefore, the following Subchapter starts by accepting that geoengineering activities pose numerous risks of varying degrees to the environment and a wide variety of actors at various stages of implementation.<sup>131</sup> For the present Subchapter, the term ‘risk’ is understood as referring to the potential for a particular geoengineering activity to have adverse consequences which may result in damage, particularly environmental damage.

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The identified risks raise complex questions associated with social, ethical, legal, environmental and political concerns. However, those risks and damage scenarios associated with the environment are of particular importance in the context of the present liability study. Therefore, to evaluate any international liability regime that may potentially be applicable to geoengineering, the following Subchapter briefly outlines all conceivable risks that may be associated with geoengineering, while focussing particularly on the environmental risks associated with the development and/or eventual deployment of SRM and CDR methods.<sup>132</sup> Whilst focussing on such risks and damage scenarios, this Subchapter nevertheless takes note of the complicated relationship that currently exists between the risks and benefits of one and the same geoengineering method—one method may, for example, pose serious environmental risks but such risks do not exist independently of the benefits that the environment stands to gain from that same method.<sup>133</sup> Additionally, the specific environmental risks associated with some individual methods have already been

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<sup>131</sup>This variable risk also includes the scale of at which a particular activity is to be conducted. Large scale field testing and eventual deployment is predicted to cause different and a potentially greater risk of environmental harm than small scale research activities.

<sup>132</sup>Lawrence et al. (2018), p. 5; see also Scheer and Renn (2014), p. 305.

<sup>133</sup>See Heyen (2019), p. 91 where Heyen states that solar geoengineering is part of a broader social debate concerning “how to govern novel technologies that simultaneously hold huge promise and substantial danger”.

discussed above. The purpose of this Subchapter is thus to compliment those method-specific risks with the general risks that may impact the establishment of geoengineering liability and governance regimes.

51 Against this background, the following Subchapter first examines a number of the risks and damage scenarios that are generally applicable to geoengineering, be that during or after development and deployment. The risks and damage scenarios mentioned below should be understood as applying, either wholly or partially, to each of the individual SRM and CDR methods described in this study. After highlighting the general risks associated with these specific methods, the environmental risks associated with SRM and CDR, as the two categories of geoengineering, are then briefly discussed.

### **General Risks Associated with Geoengineering**

52 It must be stressed from the outset that all risks associated with geoengineering activities are grounded in scientific uncertainty—that is to say that individual risks associated with geoengineering cannot be separated from the uncertainties within which such risks operate and materialise.<sup>134</sup> Societal, political and other risks are often predicated on the uncertainty surrounding the associated environmental side effects. As research into these side effects advance, it may become clearer which States stand to benefit and which States stand to be more at risk from the deployment of geoengineering techniques. This increasing clarity has the potential to negate continued research into specific geoengineering activities as well as reduce the incentive for States to cooperate in the deployment or development of geoengineering activities generally.<sup>135</sup> However, “no amount of research will reduce uncertainty to zero”, and even where net benefits associated with a particular method can be measured, there remains a degree of difficulty in correctly attributing observed changes in the climate system to one specific geoengineering method—especially considering that such a method will be developed or deployed in the presence of other anthropogenic stressors on the climate system (including ocean acidification, pollution and the over-exploitation of natural resources).<sup>136</sup>

53 By way of illustration, consider the following fictional example: The year is 2050 and State A, in an attempt to fulfil its international climate obligations, has recently begun large-scale SAI under the auspices of Project Reduce. Scientists agree that State A should start seeing notable reductions in temperature and precipitation anomalies at a regional level within seven years. State B is known for having volcanic eruptions and has also experienced droughts in the past. Such droughts have never lasted longer than one season and have never occurred more than once every 50 years. State B, located some 2000 kilometres away from State A, protests against the action of State A because climate modellers predict Project Reduce will

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<sup>134</sup> See Zeckhauser and Wagner (2019), p. 108 for a general discussion on the relationship between risk and uncertainty in the context of SRM technologies.

<sup>135</sup> Heyen (2019), pp. 92–93.

<sup>136</sup> MacMartin et al. (2019), p. 4.

have a detrimental impact on regional precipitation patterns in State B. Such impacts would adversely affect State B’s agricultural industry, which makes up 16% of its GDP. In the wake of what is characterised as “the first drought in 45 years” as well as an increase in volcanic eruptions, State B suffers heavy and unprecedented flooding some six years after the commencement of Project Reduce. Leading up to this event, some climate models suggest that Project Reduce may be altering regional precipitation patterns, whilst other models predict no such link. State B alleges that Project Reduce—ignoring scientific evidence concerning its impact on regional precipitation patterns—is the cause of the flood. For its part, State A alleges that the increased frequency of volcanic eruptions coupled with normal human stressors on the environment is the primary reason for the flooding.

The above example does not present sufficient scientific data to offer a convincing conclusion. However, it demonstrates the problems that may be linked to scientific uncertainty and the difficulties inherent in attributing liability (or a portion thereof) to a specific geoengineering activity. Which international legal regime may govern, or ought to govern, such a scenario is discussed in more detail below (§ 113 *et seq*).

Given the objectives of this Chapter, it is prudent to shape a primary risk associated with geoengineering in terms of international liability and the concept of scientific uncertainty. Even if a particular geoengineering activity is deployed effectively and marked reductions in the negative effects of climate change are measured, “the salient point from an international law perspective is that geoengineering ‘would introduce new risks and would shift the overall burden of risks’, and fundamental uncertainties would remain”.<sup>137</sup> With this in mind, it is realistic to assume that in deciding on whether and how to use geoengineering techniques, States may disagree as to the potential uncertainties, risks and benefits that may result from a specific geoengineering activity (as in the example above). The relative speed and ease of deploying certain SRM methods in particular may allow individual States—notwithstanding their disagreement with other States over the extent of risks, benefits and uncertainty—to unilaterally deploy or develop a specific activity.<sup>138</sup> Due to this, geoengineering may generally increase the potential for international conflict and, therefore, increase conflicts over issues surrounding liability and compensation.<sup>139</sup> As part of the portfolio of responses to tackle climate change, there is the additional risk that the environmental side effects associated with

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<sup>137</sup> See Reichwein et al. (2015, p. 146) busy quoting Irvine et al. (2014), p. 842.

<sup>138</sup> Reichwein et al. (2015), p. 146. Such a situation has the potential to result in a climate “tug-of-war”. If State A’s ideal temperature points are far removed from those of State B, these two States may implement climate intervention techniques that oppose one another—each State expending resources to cancel out part (or all) of the other’s intervention so as to maintain (or attain) their ideal temperature points.

<sup>139</sup> Lawrence et al. (2018), p. 5.

geoengineering could cause novel conflicts and security implications for the international community.<sup>140</sup>

**56** The societal risks associated with geoengineering are connected to the dichotomy between negative public perception surrounding the impact of human intervention in the climate system and the potential need to respond to global warming relatively quickly. This becomes particularly salient if at-risk communities and species require swift action to secure their continued existence.<sup>141</sup> The way in which the international community perceives geoengineering necessitates (1) open and transparent discussion surrounding the development/deployment of individual geoengineering methods, (2) building public trust in the institutions involved as well as (3) strong political will to formulate and adhere to robust governance and liability regimes.<sup>142</sup> However, the inherent uncertainty in the scope and nature of the environmental risks associated with geoengineering adds to public scepticism and, ultimately, the extent of its acceptance.<sup>143</sup> Additionally, current governance regimes are scarce and existing mechanisms are either underdeveloped or struggle to find direct application to geoengineering. Another important social risk associated with geoengineering is related to the impact that any large-scale deployment of both SRM and CDR technologies may have on fundamental human rights. Craik and Burns capture this construct in the following manner:

delivery of a relatively modest three gigatons of CO<sub>2</sub> (GT CO<sub>2</sub>) equivalent negative emissions annually would require a land area of approximately 380-700 million hectares in 2100, translating into 7%-25% of agriculture land and 25%-46% of arable and permanent crop area. This level of emissions removal would be equivalent to a startling 21% of total current human appropriated net primary productivity. [...] Demands on land of this magnitude could substantially raise food prices on basic commodities. This could imperil food security for many of the world's most vulnerable, with many families in developing countries already expending 70%-80% of their income on food.<sup>144</sup>

Such large-scale operations may threaten the minimum standard of living and right to food guaranteed under various international human rights instruments.<sup>145</sup>

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<sup>140</sup>Maas and Scheffran (2012), p. 193; also Rickels et al. (2011, p. 31) mentioned the geopolitical objections to geoengineering—including that geoengineering methods may “serve as weapons of mass destruction”.

<sup>141</sup>For a discussion of the public perception of geoengineering (including Germany in particular), see Rickels et al. (2011), pp. 70–77.

<sup>142</sup>Rickels et al. (2011), p. 71.

<sup>143</sup>For a detailed discussion of some of the ethical risks associated with geoengineering at various stages (including the research/development stage; the large-scale implementation stage; and the post-implementation stage), see University of Montana – Ethics of Geoengineering Online Resource Center (undated).

<sup>144</sup>Craik and Burns (2019), p. 11,114; see also Corry et al. (2019).

<sup>145</sup>See the Universal Declaration of Human Rights, GA Res. 217A(III), Article 25 (1948); the International Covenant on Economic, Social, and Cultural Rights, 16 December 1966, 993 UNTS 3 (entered into force 3 January 1976), Article 11(2); and the Convention on the Rights of the Child, 20 November 1989, 1577 UNTS 3 (entered into force 2 September 1990) Articles 24(2)(c) & (e).

One area of political risk associated with geoengineering is centred on the ‘moral hazard debate’ and the ‘slippery slope argument’. The moral hazard debate proposes that geoengineering will undermine preferred climate mitigation and adaptation efforts.<sup>146</sup> Consequently, the political will to engage in new or already established joint international efforts to achieve emission reductions may be undermined. In other words:

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if individual states signal their preparedness to limit climate change by the deployment of a climate engineering technology, then this could bring with it a reduction in the readiness of other states to exercise control over emissions. Put simply, the “rest” of the world would then rely on those states having [climate engineering] technologies ready to be deployed to limit a rise in temperatures. The “rest” of the world would then correspondingly choose lower efforts to control emissions than would optimally be the case in view of the possible occurrence of serious consequences arising from climate change.<sup>147</sup>

The slippery slope argument, on the other hand, contends that any research into geoengineering has to be in line with existing emission reduction efforts, including relevant international treaties such as the UNFCCC.<sup>148</sup> The concern here is that failure to embed geoengineering research into existing mechanisms risks setting in motion political or economic forces that may influence future national and international decisions to continue and expand geoengineering research, potentially sliding into full-scale deployment, instead of adequately scrutinising the legitimacy of certain geoengineering activities.<sup>149</sup>

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The above discussion has highlighted the overarching uncertainties surrounding current geoengineering activities, uncertainties that are compounded by the various techniques available and their specific environmental impacts as well as the variable nature of Earth’s climate system in general. Such uncertainties give rise to a number of risks, environmental risks chief amongst them. It must be kept in mind that the above discussion has only highlighted general risks potentially attributable to geoengineering as a whole and that it is impossible to accurately assess and predict every possible risk. In order to complete the discussion on the risks associated with the identified geoengineering methods, the following discussion briefly mentions the environmental risks potentially attributable to both SRM and CDR methods and technologies.

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<sup>146</sup>For an examination of the moral hazard debate, see Lin (2013a), p. 673.

<sup>147</sup>Rickels et al. (2011), p. 112.

<sup>148</sup>Rickels et al. (2011), p. 115; United Nations Framework Convention on Climate Change, 9 May 1992, 1771 UNTS 107 (entered into force 21 March 1994) (UNFCCC).

<sup>149</sup>Rickels et al. (2011), pp. 115–119.

### Risks Associated with Solar Radiation Management

60 The recent IPCC Special Report on 1.5 °C Global Warming (2018) concludes that although “some SRM measures may be theoretically effective in reducing an overshoot, they face large uncertainties and knowledge gaps as well as substantial risks and institutional and social constraints to deployment related to governance, ethics, and impacts on sustainable development”.<sup>150</sup> There are clearly numerous risks associated with SRM technologies and the general risks highlighted above will apply wholly or in part to the development and deployment of all SRM methods. However, given this Subchapter’s focus on conceivable, albeit currently still hypothetical, risks and damage scenarios associated with environmental harm, those risks linked to societal, political and/or international peace and security are not discussed further here.<sup>151</sup>

61 Environmental risks include a vast number of direct and indirect impacts associated with scientific uncertainty and the regional specifics under which the implementation of various SRM methods occur as well as the so-called termination problem. While the limited research done into SRM has led to estimates that indicate the time it takes to deploy different SRM methods will vary considerably, the climate system is expected to react relatively quickly once deployment occurs. With this in mind, the Royal Society explains the termination problem—a risk that would persist during the entire period of implementation—by stating that once an SRM method is deployed, the Earth’s surface temperatures would return:

towards their pre-industrial conditions within a few years of deployment, depending on the amount and rate of reduction deployed (since a very rapid reduction might be undesirable). By the same token, however, should such a method, having been implemented for a significant period, subsequently fail or be abruptly stopped, then there would also be a very swift and sustained rise in temperature (an upward ‘step’, rather than a ‘spike’) and a rapid transition to the much warmer climate associated with the higher CO<sub>2</sub> levels then pertaining. This is referred to as the ‘termination problem’, although it cannot be foreseen whether or not such a rapid cessation might ever occur, or under what circumstances.<sup>152</sup>

62 Another environmental risk associated with SRM relates to geographic specifics and, therefore, the impact this has on the uniformity of certain methods. The deployment of a particular SRM method within one region or latitude band (as is the case with SAI, MCB as well as the restoration of ice) has the potential to result in large temperature gradient variations between areas in which such methods are deployed and those where they are not—resulting in, for example, excess cooling

<sup>150</sup> Allen et al. (2018), pp. 12–13.

<sup>151</sup> For a detailed discussion of the additional risks associated with SRM, see the complete studies of the Royal Society (2009), pp. 23–36; Secretariat of the Convention on Biological Diversity (2012); and Stavins and Stowe (2019).

<sup>152</sup> Royal Society (2009), p. 24.



in the tropics or excess warming in higher latitudes.<sup>153</sup> While noting that the international community has been able to agree to hold the average global temperature increase to well below 2 °C above pre-industrial levels, MacMartin et al. have highlighted that while “agreeing on one number is hard, agreeing on multiple goals would be harder still”.<sup>154</sup> The variable impacts on regional temperatures that may be caused by SRM methods will require States to independently manage multiple goals while acknowledging that “it will not be possible to design a deployment that can achieve every possible goal in every region of the world, and the trade-offs involved will require the ability to agree on more complex choices than simply a number”.<sup>155</sup> It is evident that the impacts of certain methods are unlikely to be uniform and certain methods may, therefore, pose significant and undesirable risks to biodiversity as well as to rare and/or fragile ecosystems.

There is also evidence that a reduction in global temperatures will decrease “plant respiration rates and therefore increase [the] net CO<sub>2</sub> uptake by the land biosphere”, resulting in “entirely new environmental conditions with impacts on biological systems”.<sup>156</sup> In this regard, increased CO<sub>2</sub> levels (affecting land primary productivity and river runoff) may have negative consequences for marine ecosystems due to ocean acidification.<sup>157</sup>

All the above potential risks take place in the overarching context of scientific uncertainty. In relation to SRM methods, such uncertainty includes the fact that an ‘SRM world’ introduces a new dynamic in that the heating effects of greenhouse gases and the cooling effects of sunlight reduction would exist simultaneously. The stability and impact of high concentrations of greenhouse gases in combination with a reduction in light quantity remain uncertain and underdeveloped.<sup>158</sup> Additionally, there is prevailing agreement that for the effectiveness of SRM methods to be adequately measured, large-scale field tests will be required.<sup>159</sup> Such a conclusion is relevant for two reasons. First, the international rules and principles usually associated with research and development, which are precaution-oriented and traditionally require initial research to be done on a small testing scale, may be inadequate if testing SRM via large-scale deployment/implementation causes significant harm. Second, large-scale field testing may be indistinguishable from what could be characterised as the gradual initiation of SRM technology.<sup>160</sup> With this in mind, it bears mention that a number of academics have recently advocated for an “International Non-Use Agreement on Solar Geoengineering”, calling for:

<sup>153</sup>Royal Society (2009), p. 34; see also Secretariat of the Convention on Biological Diversity (2012), pp. 26 & 45.

<sup>154</sup>MacMartin et al. (2019), p. 10.

<sup>155</sup>MacMartin et al. (2019), p. 10.

<sup>156</sup>Royal Society (2009), p. 34.

<sup>157</sup>Caldeira and Wickett (2003); see also Royal Society (2009), p. 34.

<sup>158</sup>Secretariat of the Convention on Biological Diversity (2012), pp. 26 & 46.

<sup>159</sup>Robock et al. (2010).

<sup>160</sup>Royal Society (2009), p. 39.

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immediate political action from governments, the United Nations and other actors, such as civil society organizations, to forestall further normalization of solar geoengineering as a future climate policy option. Governments and the United Nations need to take effective political control and restrict the development of solar geoengineering technologies.<sup>161</sup>

As a final note to the foregoing, it should be remembered that all SRM methods, while having the potential to rapidly reduce average global temperatures, do not reduce CO<sub>2</sub> and other greenhouse gas concentrations in the atmosphere.

### **Risks Associated with Carbon Dioxide Removal**

**65** Despite several recent studies on CDR technologies generally, there remains limited research into the direct impact that NETs may have on ecosystems and biodiversity. For this reason, the environmental risks of CDR enumerated here are discussed in terms of their climatic effectiveness, agricultural impacts and other indirect impacts. The variable nature of different CDR methods, including whether such methods are deployed on land or at sea, means that the following discussion only highlights some of the risks particular to CDR and does not represent an exhaustive list. Furthermore, the general risks associated with geoengineering that were discussed above also apply to CDR methods either wholly or in part.

**66** As with SRM methods, the IPCC Special Report on 1.5 °C Global Warming (2018) also highlights that the risks associated with CDR methods are accentuated by scientific uncertainty. In this regard, the IPCC concludes that limitations “to our understanding of how the carbon cycle responds to net negative emissions increase the uncertainty about the effectiveness of CDR to decline temperatures after a peak”.<sup>162</sup> The uncertainties surrounding the effectiveness of negative emissions technologies complicates any understanding of the numerous environmental risks that already surround such technologies. Many concerns associated with CDR methods centre around the fact that their potential benefits are generally slow-acting, may eventually prove to be only modestly beneficial or even ineffective and the environmental damage they cause may occur before any benefits are ever realised.<sup>163</sup> Human intervention in natural biological and chemical processes may have unintended consequences for both biodiversity as well as various ecosystems. These consequences for ecosystems will potentially be amplified when methods are used in particularly vulnerable areas, such as ocean iron fertilisation being used in the fragile Southern Ocean ecosystem. With respect to ocean-based CDR methods, a significant side-effect of increasing oceanic carbon uptake is the associated dissolution of CO<sub>2</sub> in water and the corresponding acidification of the oceans.<sup>164</sup> As atmospheric CO<sub>2</sub> concentrations have increased, surface waters have already

<sup>161</sup>Biermann et al. (2022), p. 4.

<sup>162</sup>Allen et al. (2018), p. 34.

<sup>163</sup>Secretariat of the Convention on Biological Diversity (2012), p. 54; see also Keller et al. (2018), p. 1135, where the authors state that “the technical ability of CDR methods to remove such enormous quantities of CO<sub>2</sub> on relatively short timescales (i.e., this century) is doubtful”.

<sup>164</sup>Rickels et al. (2011), p. 44.

become more acidic. However, if methods such as ocean fertilisation (§ 35 *et seq*) or those that involve the sequestration of carbon in the ocean (§ 40 *et seq*) are deployed, this effect could be reversed since the acidity of the surface ocean would decrease as CO<sub>2</sub> is removed from the atmosphere. Instead, the main problem associated with ocean-based CDR methods is that acidification will occur where the CO<sub>2</sub> is stored (generally at great depths where both the ecosystems and the impacts are largely unknown).<sup>165</sup>

### Negative Emissions Technologies: Fictitious Damage Scenario

The ‘Nautilus’ is a German flagged and government-funded research vessel that has recently begun a cooperative ocean iron fertilisation project in the high-seas region of the Pacific Ocean off the coast of South America. Together with Ecuador’s support, the Nautilus is set to disperse 250 tons of iron dust over a 10,000-square-kilometre area in order to facilitate a phytoplankton bloom in an area that is known to have iron deficiencies. The experiment is part of the German government’s ongoing research into assessing whether substantial CDR projects have the potential to meet global climate stabilisation objectives. There is scientific evidence to suggest that the project will not only increase the uptake of atmospheric CO<sub>2</sub> in the region but also the amount of marine life surrounding the Galapagos Archipelago.

Approximately one year after the Nautilus released the iron dust, Ecuador reported an increase in the number of fish around the Galapagos Archipelago and scientists measured slight decreases in local atmospheric CO<sub>2</sub>. However, Colombia claims that the geoengineering experiment has resulted in a loss of fish in a river that borders Ecuador and Colombia, resulting in food security concerns and economic loss to local fishing communities. Some 1,000 kilometres away, Panama reports an unprecedented increase in toxin-producing dinoflagellates which resulted in the temporary closure of the Panama Canal.

There is some scientific evidence that suggests the reason for the reduction in freshwater fish in the river bordering Ecuador and Colombia is the same reason for the unprecedented dinoflagellates in the Panama Canal. Some other scientific models suggest that, given the flow patterns in the Pacific Ocean, the ocean fertilisation experiment conducted by the Nautilus may have resulted in the dinoflagellates in the Panama Canal, however, it is doubtful whether the experiment had any impact on freshwater fish in regional rivers.

The above scenario highlights important questions that can arise as to where and how to attribute liability for environmental damage; how to define damage in the context of methods such as ocean iron fertilisation; the extent to which damage can

<sup>165</sup>Rickels et al. (2011), pp. 44–45.

be apportioned to cooperating but not deploying States (Ecuador in this case); and the rights of third States (such as Panama) affected by an alleged breach of international obligations, such as that to protect and preserve the marine environment.

69 Additional challenges surrounding current negative emissions technologies include difficulties inherent to establishing and quantifying environmental damage. Such challenges are exacerbated by the fact that most CDR methods are being studied and classified in isolation while there is currently limited discussion on the potential environmental effects that may result due to interactions between methods or “between multiple instances of the same techniques”.<sup>166</sup> Being able to attribute liability for environmental damage caused by specific CDR deployment will require detailed understanding and knowledge of the potential interactions between CDR methods that often take place within the same broad environmental context, as in the case with those that are ocean-based. Other environmental risks include the fact that several CDR methods, especially land-based methods, are water and other-resource intensive endeavours that may conflict with Sustainable Development Goals (SDGs) associated with the conservation of natural resources.<sup>167</sup> Lastly, although CDR methods reduce atmospheric CO<sub>2</sub>, greenhouse gas emission levels are unaffected and successfully storing captured CO<sub>2</sub> will have to overcome environmental hazards associated with issues such as “salinization through the permeation of saline water into aquifers and [the] acidification of drinking water”.<sup>168</sup> In the broader context of stabilising the climate, the “climatic benefits of [removing atmospheric CO<sub>2</sub>] are likely to be negated through further fossil fuel combustion and CO<sub>2</sub> release” associated with processes such as enhanced oil recovery.<sup>169</sup>

70 The risks, be they environmental, ethical, social, political or otherwise, associated with various geoengineering activities are all currently shrouded in uncertainty. For this Subchapter, such uncertainties allow two tentative conclusions to be drawn: first, identifying all the potential side effects and quantifying the damage that each risk poses to the Earth’s natural and societal systems is not possible. Second, such uncertainties do not automatically and generally preclude, or even discourage, the use of geoengineering methods. Rather, uncertainty arguably necessitates accepting the plethora of associated risks which will need to be managed by developing a far-reaching and dynamic governance regime where its effectiveness will largely be determined by its ability to hold responsible actors liable. With this in mind, the following Subchapter highlights the current regulatory regime applicable to geoengineering methods. It is important to note that the aim of this analysis is not to make a comprehensive assessment of the international legality or illegality of geoengineering. Rather, it serves to provide clarity for the aggregated results obtained in other relevant studies to provide the basis for a thorough examination into what an effective geoengineering liability regime may include.

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<sup>166</sup>GESAMP (2019), p. 28.

<sup>167</sup>Umweltbundesamt (2019).

<sup>168</sup>Umweltbundesamt (2019).

<sup>169</sup>Secretariat of the Convention on Biological Diversity (2016), p. 49.

## 9.4 Current Regulatory Landscape for Existing Geoengineering Methods

The primarily transboundary and partly global character of geoengineering necessitates that the legality of individual geoengineering methods is examined in accordance with the rules and principles of public international law. Following this, any legal assessment of geoengineering must both consider and, for the purposes of regulation, differentiate between the sources of international law, including international treaties and customary international law. In the context of a study dedicated to liability, understanding the regulatory framework is necessary since the parameters of what is classified as a legal activity constitutes a necessary starting point for evaluating both State responsibility, in cases where an activity violates prescribed regulations or laws, and liability in cases where environmental damage results despite the potential absence of a breach of international laws or regulations. 71

No international convention has ever been adopted for the specific purpose of regulating geoengineering.<sup>170</sup> Virtually all regimes providing regulation and international governance of geoengineering methods currently contain no norms specifically developed with the research and deployment of such methods in mind. Indeed, the only exception to this is the 2013 Amendment to the London Protocol (¶ 93 *et seq*). The fact that geoengineering activities are nonetheless to a greater or lesser degree addressed by existing international agreements is partly attributable to the framework approach consistent with international law-making. This is particularly the case in the context of global environmental issues associated with areas such as ozone, climate and biodiversity protection.<sup>171</sup> In this regard, framework conventions commonly contain general principles and rules, where generality is overcome by annexes to the convention or in subsequently adopted protocols. This often allows the rules and principles captured in the framework convention to be applied to new phenomena that were unknown when the treaty was first negotiated. This ability of international law to adapt is particularly relevant in this context as many of the implementation risks and opportunities associated with geoengineering will likely be quite different when realised from what is currently understood using today's research models.<sup>172</sup> For this reason, any application of existing international law will have to consider the extent to which such international laws are capable of adapting to and governing what are, at present, somewhat abstract technologies with 72

<sup>170</sup>Proelss (2012b), p. 205. In this regard, Schäfer et al. (2015), p. 89, highlights that due to “(1) the time it would take to negotiate [a geoengineering specific] instrument, (2) that ‘commons-based’ and ‘territorial’ climate engineering techniques raise different jurisdictional issues and would thus require different forms of international cooperation and decision-making, and (3) that a clear sense is yet to emerge of what the interests of different actors may be”, it seems both unlikely and undesirable that a single international instrument to regulate a variety of different methods under the general term “geoengineering” will, at this stage, be established.

<sup>171</sup>Proelss (2012b), p. 205; see also Rickels et al. (2011), p. 85.

<sup>172</sup>Brent et al. (2019), p. 17.

unforeseen outcomes. Over and above identifiable treaty-based obligations, any activity that poses a significant risk of harm to the environment is also subject to the broader rules and obligations found within international environmental law generally. Such rules and obligations applicable to the purposes of geoengineering may include the precautionary principle; the duty to cooperate (including the related duties associated with negotiation and information exchange); the principle of prevention; the obligation to undertake environmental impact assessments (EIAs); the principle to give due regard to other users; and the rules regarding State responsibility.<sup>173</sup>

73 The ensuing discussion on the legal regime applicable to geoengineering proceeds with two specific points in mind: (1) there is neither a comprehensive treaty regime in place nor an overarching legally binding definition of geoengineering, and the legality of any geoengineering method must, therefore, be judged according to each technology and based on the international rules and principles specifically applicable to it; (2) taking into account the general objective to limit global average temperature rise to well below 2 °C above pre-industrial levels, and in the absence of any prohibition or moratorium vis-à-vis geoengineering generally, international law cannot be held to be generally opposed to geoengineering research and deployment.<sup>174</sup>

74 With these points in mind, this Subchapter first examines conventions and instruments that are or could potentially apply to geoengineering. This discussion also includes a brief mention of the currently ongoing negotiations surrounding biological diversity in areas beyond national jurisdiction as an additional avenue for governing geoengineering in the marine environment (§ 103 *et seq.*). Following this, the applicability of a select number of customary international law rules is examined (§ 105 *et seq.*). The Subchapter concludes with a discussion of existing customary and instrument-specific international law which sets the foundation for the following Subchapter's analysis of the responsibility and liability for geoengineering activities that may cause damage (§ 113 *et seq.*).

#### 9.4.1 *Specialised International Instruments (Potentially Applicable to Geoengineering)*

75 At the fourth session of the United Nations Environment Assembly (UNEA) in March 2019, the Swiss government put forward a draft proposal requesting a limited role for the United Nations Environment Programme (UNEP) in preparing “an

<sup>173</sup>For a general discussion on some of these rules and obligations, particularly in relation to their applicability to geoengineering methods, see Scott (2013), pp. 333–350.

<sup>174</sup>Note though, the 10th COP to the CBD has often been referenced as imposing a general moratorium on research into and the deployment of geoengineering technologies (see Sikka 2020, p. 101).

assessment of the status of geoengineering technologies, in particular, carbon dioxide removal technologies and solar radiation management”.<sup>175</sup> After it became evident that there was insufficient support from those States present, Switzerland withdrew the proposal.<sup>176</sup> Craik and Burns argue that this failure to engage with the topic of geoengineering is proof that there is currently “little appetite for new international initiatives on [climate engineering]” while Corry questions whether this reaction has resulted in the global governance of geoengineering stumbling at the first hurdle.<sup>177</sup> This lack of engagement seems to suggest that greater emphasis needs to be placed on existing as well as new and more specific governance regimes to regulate both the research and potential deployment of individual geoengineering methods. With this in mind, geoengineering activities must be measured against the requirements of those treaties that are, depending on the factual situation, particularly affected and with the proviso that the State of origin is a party to them.<sup>178</sup>

There are a number of relevant international instruments which may play a direct or indirect role in the governance of geoengineering activities, especially considering that many of them codify various international environmental law principles applicable in various temporal spaces, namely the atmosphere, ocean or on land. The following discussion on the existing legal framework that may govern geoengineering must be read in the context of two specific points. First, the below discussion speaks of governance in general, however, it is important to remember that no CDR or SRM methods are currently being conducted other than small-scale field experiments. Additionally, the regimes discussed below are, to a greater or lesser extent, applicable to the governance of both the pre-deployment stages (research and development) and actual deployment of geoengineering methods.<sup>179</sup> Second, despite the absence of regimes established for the specific purpose of regulating geoengineering, the framework nature of international law-making mentioned above provides that even new phenomena are captured by the existing instruments, and, for this reason, geoengineering does not take place within a “legal black hole”.<sup>180</sup> The following discussion first analyses specialised

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<sup>175</sup> Corry et al. (2019) and Switzerland (2019).

<sup>176</sup> Corry et al. (2019).

<sup>177</sup> Craik and Burns (2019), p. 11,114; Corry et al. (2019).

<sup>178</sup> Proelss (2012b), p. 207. Note that according to the principle *pacta tertiis nec nocent nec prosunt* codified in Article 34 of the Vienna Convention on the Law of Treaties (VCLT), which is also recognised as customary international law, third States are not bound by a treaty to which they have not consented.

<sup>179</sup> In this regard, parallels could be drawn between the current exploration phase taking place within the context of deep seabed mining. This exploration phase (primarily for the purposes of research and understanding the risks and benefits that deep seabed mining presents) is a precursor to the exploitation phase where large-scale mining activities may potentially be implemented (see Annex D). With regards to solar geoengineering research governance specifically, Reynolds (2019a) states that “current solar geoengineering decision-making concerns not deployment but instead – for example – establishing and detailing norms, facilitating responsible and effective research, minimizing any harmful displacement of emissions abatement and preventing undue lock-in”.

<sup>180</sup> Scott (2013), p. 330.



international instruments applicable to all geoengineering proposals, with those instruments specific to either SRM or CDR methods being emphasised as necessary. The Subchapter ends with a brief mention of the ongoing negotiations surrounding biodiversity beyond national jurisdiction to understand the potential future implications for marine geoengineering governance.

### **International Climate Change Regime**

77 With 197 States parties, the 1992 UNFCCC is the primary legal instrument regulating the protection of the Earth's climate and is, therefore, an appropriate starting point for evaluating current regulatory regimes vis-à-vis their applicability to geoengineering. The ultimate aim of the UNFCCC is to stabilise greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the global climate system.<sup>181</sup> As a framework convention, the UNFCCC contains broad obligations mainly limited to procedural requirements associated with obligations to document and communicate information concerning emissions, national policies and best practices. In line with any framework convention, the UNFCCC is given more impetus by both the 1997 Kyoto Protocol<sup>182</sup> as well as the 2015 Paris Agreement.

78 The Kyoto Protocol, in operationalising the objectives of the UNFCCC, requires that the industrialised States listed in Chap. 11 of the UNFCCC ensure that their greenhouse gas emissions do not exceed the individually determined reduction commitments contained in Annex B to the Protocol itself.<sup>183</sup> Article 3(3) of the Kyoto Protocol provides two strategies to achieve the goal of stabilising atmospheric concentrations of greenhouse gases required under the UNFCCC, namely the reduction of greenhouse gas emissions at source and the removal of greenhouse gases through sinks. Relevant for the Kyoto Protocol and the present discussion is Article 1(8) of the UNFCCC, which defines a sink as “any process, activity or mechanism which removes a greenhouse gas, an aerosol or a precursor of a greenhouse gas from the atmosphere”. This definition covers geoengineering activities that are associated with greenhouse gas removal, most notably CDR methods.<sup>184</sup> For this reason, the objective of the UNFCCC does not seem to preclude the deployment of most CDR methods as these may serve as mechanisms to support the UNFCCC's overall objective, however, the UNFCCC's objectives appear “incompatible with SRM methods that do not seek to reduce atmospheric concentrations of CO<sub>2</sub>”.<sup>185</sup>

79 Other potentially applicable UNFCCC provisions include Articles 3(1) and 3(3) which deal with the principle of common but differentiated responsibilities

<sup>181</sup> UNFCCC Article 2.

<sup>182</sup> Kyoto Protocol to the United Nations Framework Convention on Climate Change, 11 December 1997, 2303 UNTS 162 (entered into force 16 February 2005) (Kyoto Protocol).

<sup>183</sup> Rickels et al. (2011), p. 87.

<sup>184</sup> Schäfer et al. (2015), p. 84; Proelss (2012b), p. 208; Du (2019), p. 44; Craik and Burns (2019), p. 11,122; Reynolds (2018), p. 67.

<sup>185</sup> Scott (2013), p. 330; see also Winter (2011), pp. 280–281.



and respective capabilities as well as the precautionary principle respectively. Additionally, Article 4(1)(c) may also play a role in the active removal of greenhouse gases by calling on States parties to promote and “cooperate in the development, application and diffusion, including transfer of technologies, practices and processes that control, reduce or prevent anthropogenic emissions of greenhouse gases”. These relatively general guidelines could be particularly relevant in regulating geoengineering activities in those cases where no specific regulation exists.<sup>186</sup> Lastly, it is worth noting that together with the Kyoto Protocol, the UNFCCC also creates a notable institutional structure for governing the Earth’s climate and that the climate change secretariat already cooperates with both the CBD secretariat as well as the secretariat of the UNCCD<sup>187</sup> on “mutually supportive activities”.<sup>188</sup>

Any contemporary assessment of the current climate change regime potentially applicable to geoengineering would be incomplete without mention of the 2015 Paris Agreement. The Paris Agreement is not a protocol as defined in Article 17 of the UNFCCC, however, it does have some of the same basic requirements, including the fact that only States parties to the UNFCCC may be parties to the Paris Agreement.<sup>189</sup> Under the Kyoto Protocol, the emission reduction commitments are tied to a specific time frame, the first of which has expired and the second of which is yet to enter into force.<sup>190</sup> Conversely, the Paris Agreement’s ‘core obligations’ do not expire and require that States commit to certain processes and targets. Therefore, the Paris Agreement, unlike the Kyoto Protocol’s period-based commitments, provides for a continuous and ongoing process of national submissions for climate action.<sup>191</sup> Pursuant to this, the Paris Agreement sets specific ‘climate criteria’ with the aim that States limit global temperature increase to well below 2 °C, ideally pursuing efforts to limit the increase to 1.5 °C, and establishes binding commitments for all States parties to prepare, communicate and maintain nationally determined contributions (NDCs).<sup>192</sup> In this regard, States parties “shall pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions”.<sup>193</sup> It should be stressed that the “key substantive elements [of the Paris Agreement] are determined at the discretion of each State and, once set, remain political not legal commitments”.<sup>194</sup> The Contracting parties to the Paris Agreement are not legally

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<sup>186</sup> Proelss (2012b), p. 208.

<sup>187</sup> United Nations Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa, 14 October 1994, 1954 UNTS 3 (entered into force 26 December 1996).

<sup>188</sup> Royal Society (2009), p. 41.

<sup>189</sup> Paris Agreement, Article 20(1); Craik and Burns (2019), p. 11,117.

<sup>190</sup> Craik and Burns (2016), p. 4.

<sup>191</sup> Sands and Peel (2018), p. 299.

<sup>192</sup> Paris Agreement Articles 2(1)(a) and 4.

<sup>193</sup> Paris Agreement Article 4(2).

<sup>194</sup> Craik and Burns (2019), p. 11,117.

obliged to achieve the NDCs which they have set for themselves,<sup>195</sup> and it is arguably also not possible to ‘apportion’ the average temperature goal to be achieved on the global level among the Contracting parties in the sense of an individual obligation or result.<sup>196</sup>

**81** Other important points to keep in mind concerning geoengineering and the governance regime established by the Paris Agreement include the fact that although geoengineering techniques are not expressly incorporated into the approaches to address climate change, certain CDR methods may have to be integrated into the Paris Agreement’s central mechanisms to achieve the Agreement’s central aims.<sup>197</sup> This is because Article 1 of the Paris Agreement incorporates the definitions in Article 1 of the UNFCCC, including the definitions of ‘sinks’ mentioned above, and ‘reservoirs’.<sup>198</sup> Given that these definitions are not restricted to naturally occurring processes,<sup>199</sup> this may include certain CDR technologies. Additionally, it seems that, like the UNFCCC, SRM technologies are largely outside the scope of the Paris Agreement and “do not appear to be easily amenable to [its] structure and approach”.<sup>200</sup> However, the procedural and institutional mechanisms of the Paris Agreement “may provide some opportunity to inform the Parties on the current status of [SRM] research, including its potential to address climate impacts and the associated risks of experimentation and deployment”.<sup>201</sup> This is especially true since SRM methods are aimed at responding to the negative effects of climate change and Articles 7 and 8 frame such responses as being the “collective responsibility” of States parties.<sup>202</sup> The extent to which either CDR or SRM methods will be regulated by the Paris Agreement rests on the decisions adopted by the Meeting of the Parties to the Paris Agreement, the central decision-making body tasked with implementing the Agreement.<sup>203</sup> Lastly, it is particularly important in the present context to mention that Article 8, which deals with loss and damage and specifically refers to the Warsaw International Mechanism for Loss and Damage, does not include liability and compensation. The decision that accompanied the adoption of the Paris Agreement in 2015 expressly states that Article 8 “does not involve or provide

<sup>195</sup> Mayer (2018), p. 135; Rajamani (2020), p. 169.

<sup>196</sup> Voigt (2016), p. 27.

<sup>197</sup> Paris Agreement Article 1 read with Articles 4 & 5.

<sup>198</sup> ‘Reservoir’ means a component or components of the climate system where a greenhouse gas or a precursor of a greenhouse gas is stored (UNFCCC Article 1(7)).

<sup>199</sup> Craik and Burns (2019), p. 11,122.

<sup>200</sup> Craik and Burns (2019), p. 11,128.

<sup>201</sup> Craik and Burns (2019), p. 11,129. In this regard, see also a recent report commissioned by the Swiss Federal Office for the Environment which highlights that the UNFCCC could contribute to the governance of SRM since, amongst other things, the UNFCCC’s scope could be interpreted liberally by focusing on its calls to protect the climate system (Arts 3(1) and 3(4) UNFCCC); SRM could help keep global warming within the Paris Agreement’s temperature goals and an amendment or protocol could broaden the UNFCCC’s objective (Reynolds 2020).

<sup>202</sup> Craik and Burns (2019), p. 11,125.

<sup>203</sup> Paris Agreement Article 16(4); see also Craik and Burns (2019), p. 11,127.

a basis for any liability or compensation”.<sup>204</sup> This decision resulted in several States submitting declarations (in accordance with Article 20(3) UNFCCC) when ratifying the Paris Agreement that the Agreement does not exclude the applicability of general rules of international law, including those associated with State responsibility and liability.<sup>205</sup>

The general structure of the international climate change governance regime, the risk preferences of individual States parties, the exclusion of liability and compensation from the Paris Agreement coupled with the various approaches to geoengineering represent a challenging mix of factors. This mix may prove difficult when it comes to coherently managing geoengineering, assuming the current climate change regime can do so at all, and further drives the need to establish an international liability regime for damage caused as a result of geoengineering activities. This is seemingly already being recognised as geoengineering has been a part of the agendas of several climate policy discussions<sup>206</sup> and the UNFCCC, together with the Paris Agreement, may prove to be the most obvious frameworks within which States could attempt early and effective governance of certain geoengineering techniques.<sup>207</sup>

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### The ENMOD Convention

The United Nations Convention on the Prohibition of Military or Any Hostile Use of Environmental Modification Techniques (ENMOD)<sup>208</sup> is probably the instrument most pertinent to geoengineering in terms of its specific subject matter.<sup>209</sup> Article II of ENMOD defines “environmental modification techniques” as “any technique for changing—through the deliberate manipulation of natural processes—the dynamics, composition or structure of the Earth, including its biota, lithosphere, hydrosphere and atmosphere, or of outer space”. At first glance, this definition seems broad enough to include several geoengineering activities which are, by their very nature, activities that intervene in natural processes. However, Article I of ENMOD limits the environmental modification techniques that are covered by the convention to those that are used for military or hostile purposes. This, coupled with the intention of the parties not to address the question of “whether or not a given use of environmental modification techniques for peaceful purposes is in accordance with

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<sup>204</sup> UNFCCC Decision 1/CP.21, Adoption of the Paris Agreement, UN Doc FCCC/CP/2015/10/Add.1 (29 January 2016) para. 51.

<sup>205</sup> These States included the Cook Islands, the Federated States of Micronesia, Nauru, the Philippines, Solomon Islands and Tuvalu (see [https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg\\_no=XXVII-7-d&chapter=27#EndDec](https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVII-7-d&chapter=27#EndDec), accessed 1 Apr 2022, for a list of declarations made when ratifying the Paris Agreement). See also Toussaint (2020), pp. 4 & 8.

<sup>206</sup> As can especially be seen in the IPCC’s assessment reports discussing both CDR and SRM geoengineering methods (see Ciais et al. 2013, pp. 546–552).

<sup>207</sup> Lawrence et al. (2018), p. 13.

<sup>208</sup> 1976 United Nations Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques, 10 December 1976, 1108 UNTS 151 (entered into force 5 October 1978) (ENMOD Convention).

<sup>209</sup> Scott (2013), p. 332.

generally recognized principles and applicable rules of international law”,<sup>210</sup> results in the conclusion that ENMOD is not applicable to geoengineering. This conclusion applies even in cases where the risks associated with geoengineering, environmental or otherwise, materialise into real-world problems, especially given the convention’s close connection to the concept of armed conflict which is decisive for the applicability of international humanitarian law.<sup>211</sup>

### **United Nations Convention on the Law of the Sea**

**84** UNCLOS enjoys broad support and engagement in its efforts to regulate all ocean space by attaining a balance between the various rights and obligations owed to and by a multitude of actors.<sup>212</sup> Despite the fact that a handful of States have not yet ratified UNCLOS, including the USA, many of its provisions have been accepted as reflecting customary international law. Like the Convention on Biological Diversity discussed below, UNCLOS has far-reaching application and may offer both direct and indirect opportunities to regulate various geoengineering activities, including ocean iron fertilisation, marine cloud brightening and methods associated with the restoration of ice in the polar regions. The UNCLOS framework is supplemented by a large number of regional and international instruments to deal with a variety of issues, including environmental protection, shipping and holding States as well as other actors responsible and/or liable for any harm caused. However, given the far-reaching ambit of UNCLOS and the various rights and obligations contained therein, a detailed analysis is beyond the scope of the current study.<sup>213</sup> Instead, the following Subchapter differentiates between ocean space beyond and within national jurisdiction to highlight the framework nature of UNCLOS and mentions those rights and obligations which may find general application to ocean-based geoengineering activities.

**85** The international law of the sea is founded on the principle of the freedom of the high seas. As an area beyond the jurisdiction of any State, the high seas cannot be made subject to any State’s claims of sovereignty (Article 89) and all States are entitled to exercise the non-exhaustive list of freedoms codified in Article 87 UNCLOS. In this regard, the freedom of navigation and the freedom of scientific research are particularly relevant to geoengineering activities.<sup>214</sup> Given that the freedoms codified in Article 87 are not an exhaustive list, any activity that is not prohibited and does not compromise the reservation of the high seas for peaceful purposes (Article 88) may be subject to the freedom of the high seas principle. Consequently, any geoengineering activity taking place in, on or under the high seas

<sup>210</sup>UN GAOR 1976, Report on the conference of the Committee on Disarmament, Vol. I, 91, Supplement No. 27, 31st Session (A/31/27); see also Rickels et al. (2011), p. 86.

<sup>211</sup>Proelss (2012b), p. 208.

<sup>212</sup>Scott (2015), p. 462.

<sup>213</sup>For a detailed analysis of the UNCLOS and marine geoengineering see Rickels et al. (2011), pp. 92–97; Scott (2015), pp. 462 *et seq*; and Brent et al. (2019).

<sup>214</sup>Rickels et al. (2011), p. 93.

is arguably subject to the same freedom.<sup>215</sup> However, this freedom is not absolute, inasmuch as States using the high seas must have due regard for the interests of other States (Article 87(2)). Such qualification of due regard is particularly relevant for geoengineering activities that the placement of ocean pipes or other structures, or that involve the injection of iron into the ocean, or the injection of sea salt particles above the ocean—may hinder the freedom of fishing or navigation, or that could cause pollution. Any geoengineering activity must therefore have due regard for other UNCLOS obligations, including those concerning the Area (Part XI),<sup>216</sup> the protection and preservation of the marine environment (Part XII) and marine scientific research (Part XIII). As such, these obligations may arguably limit the ability of States to conduct large-scale geoengineering activities on the high seas.<sup>217</sup>

Concerning geoengineering activities that take place in coastal State waters, States benefit from having exclusive jurisdiction over marine scientific research within their territorial sea, as a part of the territory of the State,<sup>218</sup> and within their exclusive economic zone (EEZ).<sup>219</sup> This means that coastal States can “consequently control the extent and nature of any marine geoengineering research they choose to carry out or authorize” in such maritime zones.<sup>220</sup> However, certain geoengineering methods, including MCB’s dispersal of sea salt particles to form low-level clouds over the ocean, have been identified as falling outside the scope of what is classified as marine scientific research and the deployment of vessels tasked with such sea salt dispersal in another State’s EEZ is, therefore, not subject to the consent of the coastal State.<sup>221</sup> The reason is that such activities, even when performed on an exploratory basis, do not increase knowledge about the marine environment—a mandatory requirement for any activity to qualify as marine scientific research.<sup>222</sup> Whether classified as marine scientific research or not, all geoengineering activities that take place on the high seas are subject to the principle of due regard.<sup>223</sup>

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<sup>215</sup> Scott (2015), p. 462.

<sup>216</sup> Article 1(1) UNCLOS defines the Area as “the seabed and ocean floor and subsoil thereof, beyond the limits of national jurisdiction”.

<sup>217</sup> Scott (2015), p. 462.

<sup>218</sup> Article 245 UNCLOS states that “[c]oastal States, in the exercise of their sovereignty, have the exclusive right to regulate, authorize and conduct marine scientific research in their territorial sea. Marine scientific research therein shall be conducted only with the express consent of and under the conditions set forth by the coastal State”. For a detailed discussion in this regard, see Huh and Nishimoto (2017).

<sup>219</sup> According to Article 246 UNCLOS, “[c]oastal States, in the exercise of their jurisdiction, have the right to regulate, authorize and conduct marine scientific research in their exclusive economic zone and on their continental shelf” and that marine scientific research “in the exclusive economic zone and on the continental shelf shall be conducted with the consent of the coastal State”.

<sup>220</sup> Scott (2015), pp. 462–463; see Articles 56(b)(ii), 245 & 246 UNCLOS.

<sup>221</sup> Proelss (2015), pp. 291–294.

<sup>222</sup> Proelss (2015), p. 293. See generally Matz-Lück (2017), para. 13; Soons (1982), p. 124.

<sup>223</sup> As far as EEZs are concerned, it has been suggested by Proelss and Hong (2012), p. 377, that Article 59 UNCLOS applies to any marine geoengineering activities which have left the experimental phase and are carried out for the purpose of CDR. This provision covers economic uses other

87 In this context, brief mention should be made of the ICJ's decision in the *Whaling Case*.<sup>224</sup> Although this case did not deal with geoengineering, it did deal with an interpretation of the term 'scientific research' which may have future implications for the classification of certain geoengineering activities as scientific research, particularly at their research/development stage. In this case, Australia alleged that Japan's whaling programme in the Southern Ocean (JARPA II) was not for the purposes of scientific research but a guise for commercial whaling.<sup>225</sup> Japan, for its part, argued that that the programme constituted scientific research under Article VIII of the International Convention for the Regulation of Whaling (ICRW).<sup>226</sup> Without providing a definition of 'scientific research', the ICJ ruled that:

an objective test of whether a programme is for purposes of scientific research does not turn on the intentions of individual government officials, but rather on whether the design and implementation of a programme are reasonable in relation to achieving the stated research objectives. [...] The research objectives alone must be sufficient to justify the programme as designed and implemented.<sup>227</sup>

88 Following the ICJ's ruling that JARPA II was not for the purposes of scientific research, Japan subsequently withdrew from the ICRW in July 2019.<sup>228</sup> This discussion is important in the present context for two reasons: First, it is an indication of the inherent difficulty in "policing the distinction between scientific research and other types of activity".<sup>229</sup> This is an issue to keep in mind when developing a regulatory regime for geoengineering as the regime's effectiveness will depend on its acceptance by a large number of States. Second, the ICJ's finding in the *Whaling Case* may have implications for the Assessment Framework for Scientific Research Involving Ocean Fertilization under the 1972 Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Convention) and the 1996 London Protocol (¶ 92 *et seq.*). In this regard, certain ocean fertilisation activities may be classified as 'scientific research' and, objectively, may fulfil their stated research objectives (as per the ICJ's reasoning in the *Whaling Case*).

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than those mentioned in Articles 56(1) and 58(1) as well as other non-economic uses of an EEZ. Given that Article 59 constitutes a conflict rule rather than assigning sovereign rights or jurisdiction to any of the groups of States concerned, activities covered by its terms are, in absence of a user conflict, generally to be considered as lawful.

<sup>224</sup> ICJ *Whaling in the Antarctic* (Australia v Japan; New Zealand Intervening) [2014] ICJ Rep 226 [the *Whaling Case*].

<sup>225</sup> ICJ *Whaling in the Antarctic* (Australia v Japan; New Zealand Intervening) [2014] ICJ Rep 226, para. 130.

<sup>226</sup> ICJ *Whaling in the Antarctic* (Australia v Japan; New Zealand Intervening) [2014] ICJ Rep 226, para. 49; International Convention for the Regulation of Whaling, 2 December 1946, 161 UNTS 72 (entered into force 10 November 1948) [ICRW].

<sup>227</sup> ICJ *Whaling in the Antarctic* (Australia v Japan; New Zealand Intervening) [2014] ICJ Rep 226, para. 97.

<sup>228</sup> Ministry of Foreign Affairs of Japan (2018).

<sup>229</sup> Brent et al. (2019), p. 21.

However, whether such activities will be viewed as ‘legitimate scientific research’ for the purposes of the London Convention/London Protocol remains to be seen. Needless to say, the harmonious application of the freedom to conduct marine scientific research as guaranteed in the UNCLOS with the London Convention’s/London Protocol’s current ban on ocean fertilisation activities for any reason other than legitimate scientific research would be desirable when establishing a uniform geoengineering governance framework.

### Convention on Biological Diversity

With 196 States parties, the Convention on Biological Diversity (CBD) enjoys nearly universal adherence and has been interpreted as forming “part of the corpus of general international law”.<sup>230</sup> The CBD is a multilateral environmental treaty whose broad mandate, strong institutional support and near-universal participation means that parties to the convention have the opportunity to address a wide range of projects that may have an impact on the environment.<sup>231</sup> Tasked with protecting and conserving biodiversity, the various environmental impacts associated with geoengineering are clearly matters that fall under the scope of the CBD. In this regard, the CBD has dealt with geoengineering governance in the form of several decisions taken at the conference of the parties (COP), particularly the 2008 decision on ocean fertilisation,<sup>232</sup> the 2010 decision on climate engineering,<sup>233</sup> several decisions adopted in 2012 related to geoengineering<sup>234</sup> and the 2016 reaffirmation of previous climate engineering decisions.<sup>235</sup> To a greater or lesser degree, all of these decisions have concretised the notion that:

in the absence of science based, global, transparent and effective control and regulatory mechanisms for geo-engineering, and in accordance with the precautionary approach and Article 14 of the Convention, that no climate-related geo-engineering activities that may affect biodiversity take place, until there is an adequate scientific basis on which to justify such activities and appropriate consideration of the associated risks for the environment and biodiversity and associated social, economic and cultural impacts, with the exception of small scale scientific research studies that would be conducted in a controlled setting in accordance with Article 3 of the Convention, and only if they are justified by the need to gather specific scientific data and are subject to a thorough prior assessment of the potential impacts on the environment.<sup>236</sup>

<sup>230</sup>PCA *South China Sea Arbitration* (Philippines v China) (2016) 33 RIAA 1, para. 956 [*South China Sea Arbitration*].

<sup>231</sup>Reynolds (2017), p. 809.

<sup>232</sup>COP to the CBD, IX/16 Biodiversity and climate change, UNEP/CBD/COP/DEC/IX/16 (9 October 2008) (CBD IX/16).

<sup>233</sup>COP to the CBD, X/33 Biodiversity and climate change, UNEP/CBD/COP/DEC/X/33 (29 October 2010) (CBD X/33).

<sup>234</sup>COP to the CBD, XI/20 Climate-related geoengineering, UNEP/CBD/COP/DEC/XI/20 (5 December 2012) (CBD XI/20).

<sup>235</sup>COP to the CBD, XIII/14 Climate-related geoengineering, CBD/COP/DEC/XIII/14 (8 December 2016) (CBD XIII/14).

<sup>236</sup>CBD X/33, para. 8(w); see also CBD XI/20, para. 1; CBD XIII/14, para. 1.



90 Notwithstanding the controversial question of whether or not these decisions must be taken into account as interpretative aids when interpreting the CBD,<sup>237</sup> they are relevant for two specific reasons: First, the COP of the CBD has addressed geoengineering generally, coupled with the broad mandate given to the COP (Article 23(4)(i) CBD) and the potential environmental impacts described above, suggest that the CBD is relevant to all activities currently being discussed under the umbrella term ‘geoengineering’.<sup>238</sup> Second, the near-universal acceptance of the CBD conveys the strong political will to engage in further discussion on the governance and regulation of geoengineering at the international level<sup>239</sup> even though the COP seems to have assumed an increasingly reserved role on geoengineering-related issues in recent years. Such international discussions will be grounded on the principles enunciated in the Convention, including the obligation to cooperate in areas beyond national jurisdiction and on other matters of mutual interest, for the conservation and sustainable use of biodiversity (Article 5) as well as the obligation to conduct EIAs where a project is likely to result in significant adverse effects to biodiversity (Article 14). Thus, the decisions of the CBD’s COP, together with its broad mandate, could guide the future regulation of geoengineering activities that may have adverse impacts on biodiversity.

### London Convention and Protocol

91 The general aim of both the London Convention and the London Protocol is that all practicable steps are taken to prevent pollution by the dumping of waste and other matter into the sea.<sup>240</sup> It must be noted that the Protocol is not a ‘traditional international protocol’ since it will eventually replace the London Convention.<sup>241</sup> It provides a more restrictive approach to the regulation of dumping than the Convention by generally prohibiting all forms of dumping.<sup>242</sup> In 2006, it was amended to include CO<sub>2</sub> streams from CO<sub>2</sub> capture processes for storage to the list of wastes or other matter that may be considered for dumping. Furthermore, in 2009 a new paragraph was added to Article 6 of the Protocol which has made it possible to export carbon dioxide streams for disposal in accordance with Chap. 11.<sup>243</sup> It is also worth mention in this context that the Protocol also directly

<sup>237</sup>For a new assessment see Proelss (in print). In the *Whaling Case*, the ICJ made the following pertinent statement: “These recommendations, which take the form of resolutions, are not binding. However, when they are adopted by consensus or by a unanimous vote, they may be relevant for the interpretation of the Convention or its Schedule” (ICJ *Whaling in the Antarctic* (Australia v Japan; New Zealand Intervening) [2014] ICJ Rep 226, para. 46).

<sup>238</sup>Bodle (2010), p. 314.

<sup>239</sup>Schäfer et al. (2015), p. 113.

<sup>240</sup>Article I London Convention; Article 2 London Protocol.

<sup>241</sup>Article 23 London Protocol.

<sup>242</sup>This is subject to limited exceptions on the so-called ‘reverse list’ (Article 4 London Protocol).

<sup>243</sup>Resolution LP.3(4) of 30 October 2009 on the Amendment to Article 6 of the London Protocol.



incorporates the precautionary approach, which was not accepted when the London Convention was adopted.<sup>244</sup>

Whether the introduction of substances are to be qualified as pollution of the marine environment under the London Convention and/or Protocol must be judged on the effects that such substances have on the marine environment rather than the substances' characteristics.<sup>245</sup> This is especially pertinent in the case of ocean fertilisation as well as carbon capture and storage (CCS) because their potential to have adverse impacts could lead these activities to be classified as the deliberate disposal at sea of wastes and other matter which, as such, qualifies them as dumping.<sup>246</sup> In response to ocean fertilisation specifically, the States parties to the London Convention and the London Protocol initially expressed concern about the activity's environmental impacts in 2007 and, in 2008, adopted Resolution LC-LP.1 agreeing that ocean fertilisation activities, other than those for legitimate scientific research, "should be considered as contrary to the aims of the Convention and Protocol and do not currently qualify for any exemption from the definition of dumping".<sup>247</sup> In Resolution LC-LP.2(2010), the States parties went one step further and adopted an Assessment Framework for Scientific Research Involving Ocean Fertilization which "provides criteria for an initial assessment of a proposal and detailed steps for completion of an environmental assessment, including risk management and monitoring".<sup>248</sup> In 2014, the ILC concluded in the context of its work on subsequent agreements and practice in relation to the interpretation of treaties that "the Conference of States Parties [sic!] under the London (Dumping) Convention has adopted resolutions interpreting that convention",<sup>249</sup> and that "interpretative resolutions by Conferences of States Parties which are adopted by consensus, even if they are not binding as such, can nevertheless be subsequent agreements under article 31, paragraph 3 (a), or subsequent practice under article 31, paragraph 3 (b) [VCLT]".<sup>250</sup> In short, Resolution LC-LP.1 expressly recalls the objectives of the London Convention and Protocol in its Preamble and that it introduces, as stated above, a distinction between "legitimate scientific research" and other (i.e., non-legitimate) research that

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<sup>244</sup> Article 3.1 London Protocol obliges States parties to "apply a precautionary approach to environmental protection from dumping of wastes or other matter" and this article will consequentially be amended to include "placement of matter for marine geoengineering activities which may be considered for permits according to annex 4" when the marine geoengineering amendments come into force (see the discussion below on the 2013 amendments to the Protocol); see also GESAMP (2019), p. 91.

<sup>245</sup> Rickels et al. (2011), p. 94.

<sup>246</sup> See Article III(1) London Convention and Article 1(4) London Protocol.

<sup>247</sup> Resolution LC-LP.1(2008) of 31 October 2008 on the Regulation of Ocean Fertilization.

<sup>248</sup> Resolution LC-LP.2(2010) of 14 October 2010 on the Assessment Framework for Scientific Research Involving Ocean Fertilization.

<sup>249</sup> UN Doc A/69/10, Report of the International Law Commission on the Work of its Sixty-Sixth Session (2014), Chapter VII, Commentary to Draft Conclusion 10, para. 12.

<sup>250</sup> UN Doc A/69/10, Report of the International Law Commission on the Work of its Sixty-Sixth Session (2014), Chapter VII, Commentary to Draft Conclusion 10, para. 38.

is further substantiated by Resolution LC-LP.2(2010). Given this, the argument can be made that the two resolutions can be relied upon as interpretative tools under Article 31(3) VCLT to make it possible for the responsible authorities of the Contracting parties to decide whether an ocean fertilisation experiment can be authorized or not.

**93** In 2013, the meeting of the parties of the London Protocol adopted several amendments to the Protocol which provide the first step towards legally binding regulation of ocean fertilisation and, at least potentially, marine geoengineering in general.<sup>251</sup> However, with only six acceptance instruments currently deposited with the International Maritime Organization (out of the two-thirds of States parties required for adoption), the 2013 amendments are yet to enter into force.<sup>252</sup>

**94** Despite this current lack of legal effect, a few brief points regarding the 2013 amendments are worth noting. First, for the first time in an international instrument, the 2013 amendments introduce a definition of ‘marine geoengineering’ (Article 1(5) *bis*) that is broad enough to include various geoengineering methods rather than just ocean fertilisation.<sup>253</sup> Second, the 2013 amendments introduce a geoengineering regulatory framework which stipulates that States “shall not allow the placement of matter into the sea from vessels, aircraft, platforms or other man-made structures at sea for marine geoengineering activities listed in Chap. 13, unless the listing provides that the activity or the subcategory of an activity may be authorized under a permit” (Article 6*bis*). Consequently, Article 6*bis* creates the presumption that geoengineering is not permitted, subject to those limited exceptions which are agreed upon by the States parties and listed in Chap. 13. Third, the regulatory framework instituted by Article 6*bis* is limited to the “placement of matter into the sea” and the extent to which SRM methods associated with the placement of reflective material *onto* (as opposed to *into*) the sea are covered by its terms is highly questionable.<sup>254</sup> The same applies with regard to methods that use “the oceans as a tool from which to effect geoengineering but which do not involve the placement of matter therein”, as in the case of marine cloud brightening.<sup>255</sup>

<sup>251</sup> Resolution LP.4(8) of 18 October 2013, Amendment to the London Protocol to Regulate the Placement of Matter for Ocean Fertilization and other Marine Geoengineering Activities. The Amendment is included as Annex 4 in LC 35/15. For an initial assessment see Ginzky and Frost (2014), pp. 82 *et seq*; see generally also Boschen (2015); and Ringbom et al. (2018), pp. 59–63.

<sup>252</sup> With 53 States currently party to the London Protocol, 36 States would need to ratify the 2013 amendment for it to be adopted. The most recent acceptance instrument for the 2013 amendment was deposited by Germany in March 2020.

<sup>253</sup> The Article 1(5)*bis* of the 2013 Amended London Protocol amendment (not yet in force) defines marine geoengineering as “a deliberate intervention in the marine environment to manipulate natural processes, including to counteract anthropogenic climate change and/or its impacts, and that has the potential to result in deleterious effects, especially where those effects may be widespread, long lasting or severe”.

<sup>254</sup> Scott (2015), p. 459.

<sup>255</sup> Scott (2015), p. 459; see also Proelss (2015), pp. 291–294. However, see the rather dubious and unfounded view taken in GESAMP (2019), p. 23, stating that the “deposition of salt particles on the ocean surface [could constitute] a deposit of ‘wastes or other matter’ under the [London Protocol]”.

Lastly, it is also worth mentioning that the 2013 amendments, the London Convention and the London Protocol all fail to define what is meant by ‘legitimate scientific research’. That said, the 2013 amendments do make specific reference to the Assessment Framework adopted in 2010 which “provides a tool for assessing proposed activities on a case-by-case basis to determine if the proposed activity constitutes legitimate scientific research that is not contrary to the aims of the London Convention or Protocol”.<sup>256</sup> However, given the previously discussed (§ 92 *et seq*) difficulties in distinguishing between scientific research and other legitimate types of activities, the lack of a specific definition of scientific research in both the Convention and the Protocol, even in the latter’s 2013 amendment, is regrettable. Related to this last issue is the fact that the 2010 Assessment Framework, as referred to in the 2013 amendments, is only applicable to the governance of geoengineering research but not to its large-scale deployment.<sup>257</sup> Given the difficulty in distinguishing between large-scale field testing and what could be characterised as the gradual initiation of a certain geoengineering activity, the parameters of what would classify as ‘legitimate scientific research’ will need to be developed further in future.

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Despite agreement by the Contracting parties to regulate ocean fertilisation and, at least potentially, marine geoengineering more generally, the same agreement has not been forthcoming with regards to the development of procedures concerning responsibility and liability. Both the London Convention and the Protocol make specific reference to responsibility and liability, with Article X of the London Convention stating that:

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In accordance with the principles of international law regarding State responsibility for damage to the environment of other States or to any other area of the environment, caused by dumping of wastes and other matter of all kinds, the Contracting Parties undertake to develop procedures for the assessment of liability and the settlement of disputes regarding dumping.

The equivalent in the London Protocol is found in Article 15 which states that:

In accordance with the principles of international law regarding State responsibility for damage to the environment of other States or to any other area of the environment, the Contracting Parties undertake to develop procedures regarding liability arising from the dumping or incineration at sea of wastes or other matter.

Over the years, liability issues have repeatedly been considered by specific groups, as can be seen in the examples of the ‘ad hoc group of legal experts on dumping’ and the ‘Task Team on Liability’. However, disagreements persist concerning the role of civil liability schemes versus a State liability regime, the assessment of the damage resulting from dumping as well as time limitations for the operator’s liability and the related question of obtaining insurance cover on

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<sup>256</sup>GESAMP (2019), p. 82.

<sup>257</sup>GESAMP (2019), p. 78.

the market.<sup>258</sup> In 2018, the consultative meetings of the Contracting parties of both the Convention and the Protocol “considered whether the absence of a specific liability regime for LC/LP constituted a barrier to accession and/or harmonised implementation of the treaties and whether there was a need for the governing bodies to develop such procedures”.<sup>259</sup> Consequently, at the meeting in 2019, numerous options were noted for consideration including (1) nonbinding liability procedures since neither the Convention nor the Protocol obligate States to develop a separate liability protocol or binding procedures; (2) the relevant existent principles of State responsibility that could guide future discussions of the governing bodies and be used as a basis for the development of a State liability regime or procedures regarding liability; and (3) recourse to existing dispute settlement procedures such as those described in Article 16 of the London Protocol.<sup>260</sup> Recent meetings have highlighted that establishing international liability procedures could lead to “increased transparency for third parties and the public, access to information, public participation, and access to justice for victims of pollution and eventually be an incentive for further accessions”.<sup>261</sup> However, despite continued inclusion on the meeting agendas, the establishment of procedures related to liability and responsibility under the London Convention and Protocol continues to elude the Contracting parties.

**98** Given that the 2013 amendments have yet to enter into force, the London Convention and the Protocol (without its 2013 amendments) remain the applicable legal regime for ocean pollution caused by dumping. The provisions of these instruments must be read in conjunction with Part XII UNCLOS which distinguishes between different types of pollution and designates corresponding legal obligations for each.<sup>262</sup> In view of the fact that the fertilisation of a specific marine area could

<sup>258</sup> International Maritime Organization, Any Other Business: Liability Issues (Note by the Secretariat), 41st Consultative Meeting of Contracting Parties to the London Convention & 14th Meeting of Contracting Parties to the London Protocol. Doc. No. LC 41/15 (2019), pp. 2–4. See also de La Fayette (1998); de La Fayette (2003), p. 232; Chen (2012).

<sup>259</sup> International Maritime Organization, Report of the Forty-first Consultative Meeting and the Fourteenth Meeting of Contracting Parties, 41st Consultative Meeting of Contracting Parties to the London Convention & 14th Meeting of Contracting Parties to the London Protocol. Doc. No. LC 41/17 (2019), p. 49; see also Birchenough and Haag (2020), p. 276.

<sup>260</sup> International Maritime Organization, Report of the Forty-first Consultative Meeting and the Fourteenth Meeting of Contracting Parties, 41st Consultative Meeting of Contracting Parties to the London Convention & 14th Meeting of Contracting Parties to the London Protocol. Doc. No. LC 41/17 (2019), p. 50. Interestingly, the Meeting noted that the Advisory Opinion of ITLOS (ITLOS *Request for an Advisory Opinion Submitted by the Sub-Regional Fisheries Commission (SRFC)* (Advisory Opinion), 2 April 2015, ITLOS Report 2015, 4) could be applied by analogy and Article 16 of the London Protocol could then be used to settle a dispute arising from the breach of an obligation under the Protocol.

<sup>261</sup> International Maritime Organization, Any Other Business: Liability Issues (Note by the Secretariat), 41st Consultative Meeting of Contracting Parties to the London Convention & 14th Meeting of Contracting Parties to the London Protocol. Doc. No. LC 41/15 (2019), p. 6.

<sup>262</sup> Article 210(6) UNCLOS; see Rickels et al. (2011), p. 94.

also be seen as dumping, Article 210 UNCLOS comes into consideration as the pertinent protection norm. Article 210(1) obligates States to adopt regulations to “prevent, reduce and control pollution of the marine environment by dumping”, which must be “no less effective [ . . . ] than the global rules and standards” (Article 210(6)). Article 210(6) UNCLOS has been accepted as referring to both the London Convention and the London Protocol,<sup>263</sup> while the adoption of the 2013 amendments may bring ocean fertilisation, and potentially other marine geoengineering activities, directly under the purview of the UNCLOS.

The above said, it appears that for the immediate to medium-term future, States will not be subject to any specific marine geoengineering regime established by the London Convention and Protocol. However, given the broad definition of ‘marine geoengineering’ provided in the 2013 amendments, the London Protocol seemingly offers more potential for future geoengineering governance than any other existing international instrument. The Protocol took ten years to come into force and it would seem realistic that the 2013 amendments will itself take some time to enter into force.<sup>264</sup> In the meantime, however, the general obligations associated with environmental protection and marine scientific research, especially as found in the UNCLOS, will continue to (indirectly) govern geoengineering activities taking place in and around ocean space.

### Legal Regime for Outer Space

The legality of installing reflectors in outer space (¶ 29 *et seq*) is judged according to the international treaties governing the protection and use of outer space, particularly the 1967 Outer Space Treaty.<sup>265</sup> This treaty applies to all SRM methods that aim to reduce solar radiation with reflectors or mirrors that are placed at a distance of more than 120 km from the Earth. This, according to the accepted view of where outer space starts, puts all such objects in outer space rather than in airspaces subject to the sovereignty of States.<sup>266</sup> Article I (1) of the Outer Space Treaty qualifies the research and use of outer space as the “province of all mankind” and any State’s geoengineering activity in outer space may therefore not adversely impact other States. Such adverse impacts include environmental damage that may be caused as a result of unintended climate consequences associated with the

<sup>263</sup> LEG/MISC/3/Rev.1, 6 January 2003, Implications of the Entry into Force of the United Nations Convention on the Law of the Sea for the International Maritime Organization, p. 48; agreeing Wacht (2017), para. 20. However, see Churchill and Lowe (1999), p. 369, interpreting Articles 210 to 216 UNCLOS as incorporating the standards set out in the Convention rather than the Protocol (and therefore not the amendments); see also Proelss (*in print*), stating that it would seem to be questionable whether it can really be assumed that the States parties to the UNCLOS intended to include in the Convention such a broad reference to future developments, which are, as far as States that decide *not* to participate in these developments are concerned, completely beyond their control.

<sup>264</sup> GESAMP (2019), p. 21.

<sup>265</sup> Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space Including the Moon and Other Celestial Bodies, 27 January 1967, 610 UNTS 205 (entered into force 10 October 1967) (Outer Space Treaty).

<sup>266</sup> Rickels et al. (2011), p. 87.

deployment of space-based solar reflectors, damage to orbital assets as a result of collisions; or damage caused as a result of such reflectors falling from space back to Earth.<sup>267</sup> The liability which may result if any of these scenarios come to pass is regulated by the Space Liability Convention, which is discussed elsewhere in this book (Chap. 11).

**101** Article IX of the Outer Space Treaty further restricts SRM activities in outer space as it requires that States parties conduct research in and use outer space in a way that avoids “harmful contamination and also adverse changes in the environment of the Earth resulting from the introduction of extraterrestrial matter”. The stipulation that all “harmful contamination” of outer space is to be prevented applies not just to the contamination itself but also includes every negative modification of outer space, the moon and other celestial bodies. At which point a modification can be qualified as negative is a matter of ongoing interpretation and a full discussion of this is beyond the scope of this study.<sup>268</sup> That having been said, Article IX does contain elements of precaution, even though the precautionary principle was unknown in international law at the time the Outer Space Treaty was adopted in the 1960s. The central characteristics of this principle, namely scientific uncertainty, environmental hazard and a duty to consult, can be identified in Article IX. For this reason, particular attention should be paid to the effects of the precautionary principle (¶ 110 *et seq*) in the context of potential SRM activities in outer space.<sup>269</sup>

### **Convention on Long-Range Transboundary Air Pollution**

**102** The lawfulness of introducing reflective aerosols or other particles into the stratosphere for various SRM technologies should be assessed based on, *inter alia*, the Convention on Long-Range Transboundary Air Pollution (CLRTAP).<sup>270</sup> CLRTAP has 51 States parties and was negotiated in the 1970s when increasing air pollution and acid rain were particularly salient issues. While this background may prompt the assumption that the CLRTAP does not have direct legal implications for geoengineering, the ‘open’ character of its norms provides latitude for its potential application to certain SRM activities. Article 2 CLRTAP states that parties “shall endeavour to limit and, as far as possible, gradually reduce and prevent air pollution”. Accompanying this, air pollution is defined in Article 1(a) as the “introduction by man [...] of substances or energy into the air”, which not only includes sulphur particles but also all other particles and aerosols which are being discussed for introduction into the stratosphere.<sup>271</sup> Furthermore, Article 1(a) CLRTAP also states that the materials being introduced must result “in deleterious effects of such a nature as to endanger human health, harm living resources and ecosystems and

<sup>267</sup> Sands and Peel (2018), p. 290.

<sup>268</sup> For an overview see Rickels et al. (2011), pp. 88–89.

<sup>269</sup> Rickels et al. (2011), p. 89.

<sup>270</sup> Convention on Long-Range Transboundary Air Pollution, 13 November 1979, 1302 UNTS 217 (entered into force 16 March 1983) (CLRTAP).

<sup>271</sup> Proelss (2012b), p. 207.

material property and impair or interfere with amenities and other legitimate uses of the environment”. CLRTAP thus requires that a negative impact results from the introduced substances for them to be qualified as air pollution. It should be noted that the ‘deleterious effects’ must reach a certain threshold, the ‘endangerment’ a certain magnitude and the effects must have already occurred.<sup>272</sup> While such negative consequences of certain SRM methods, specifically SAI, cannot be excluded,<sup>273</sup> CLRTAP contains no indication that the potential to cause damage would be sufficient for the substances used to be classed as pollutants. Due to the lack of reference to features of precaution, it is thus necessary that adverse effects on the environment must be proven for the CLRTAP to be applicable. This becomes somewhat problematic as such evidence may be available for some substances under discussion for atmospheric dispersal, SO<sub>2</sub> for example, but not for others.

### **Ongoing Negotiations Surrounding Biodiversity Beyond National Jurisdiction**

The ongoing negotiations regarding an international legally binding instrument under the UNCLOS on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction (BBNJ) require brief mention. Although this instrument has not yet been formally adopted, it presents an opportunity to examine how relevant actors make use of specialised treaty instruments to develop rules, including indirect rules, applicable to geoengineering—specifically marine geoengineering in this case. This is evidenced by several statements made during preparatory committee meetings. In this regard, the African Group indicated in 2016 that marine geoengineering activities that take place on the high seas should automatically be subject to EIAs.<sup>274</sup> This sentiment was built on by the High Seas Alliance, which argued that any EIAs relating to geoengineering activities should be subject to an international decision-making process under the BBNJ Agreement.<sup>275</sup> Whilst a thorough assessment of the content of this agreement is beyond the scope of the present study, the current draft text includes climate change as a consideration when defining the ‘cumulative impacts’ which must be taken into account when conducting EIAs. As far as marine geoengineering is concerned, this has led commentators to state that the development of new rules under the BBNJ Agreement has the potential to be “overly restrictive and prevent responsible research and development of marine geoengineering”.<sup>276</sup> However, it should be noted that even under current customary law, the inclusion of potential negative impacts of ocean-related activities must always be considered in the context of EIAs. Any failure to do so would not be compatible with the central principles of international environmental law, in particular, the principles of prevention and precaution (¶ 105 *et seq*).

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<sup>272</sup> Reynolds (2019b), p. 98.

<sup>273</sup> Proelss (2012b), pp. 207–208.

<sup>274</sup> International Institute for Sustainable Development (IISD) (2016).

<sup>275</sup> International Institute for Sustainable Development (IISD) (2017).

<sup>276</sup> Brent et al. (2019), p. 51.



**104** None of the above-identified treaties provides clear answers as to the legality of individual geoengineering methods, perhaps with the exception of ocean iron fertilisation. However, most treaties seem to indicate that those activities which are likely to have a negative impact, be that environmental or otherwise, should be considered unlawful by the respective State parties. This should be done in accordance with the terms of the specific agreements concerned and after consideration of the impacts of the specific method being proposed. Having considered specialised treaties and their level of applicability to geoengineering, the next Subchapter briefly examines customary international law in a geoengineering context.

### 9.4.2 Rules and Principles of Customary International Law

**105** With regards to customary international law and geoengineering, the obligation not to cause significant transboundary harm, namely the prohibitive dimension of what is referred to as the ‘no harm rule’, and the principle of prevention require specific mention.<sup>277</sup> The relationship between these two concepts has a somewhat intricate history. That said, the principle of prevention has generally been accepted as containing a duty of conduct rather than one of result, which obligates a State undertaking an activity to take measures to prevent transboundary harm and thus to act with due diligence.<sup>278</sup> In the context of geoengineering, States are similarly required to act with due diligence and any failure to do so may result in the responsibility of that State (¶ 115 *et seq.*). Reference can be made here to the ITLOS SDC advisory opinion which describes the due diligence obligation as variable and susceptible to “change over time as measures considered sufficiently diligent at a certain moment may become not diligent enough in light, for instance, of new scientific or technological knowledge. It may also change in relation to the risks involved in the activity”.<sup>279</sup> Therefore, as research into certain geoengineering methods advances, the threshold of due diligence may increase or decrease accordingly.

**106** The obligation not to cause significant transboundary harm was originally elaborated on in the *Trail Smelter Arbitration* which held that “no State has the right to use or permit the use of territory in such a manner as to cause injury [...] to the territory of another”.<sup>280</sup> It has been argued by commentators that the *Trail Smelter*

<sup>277</sup> Saxler et al. (2015), p. 122.

<sup>278</sup> ICJ *Pulp Mills on the River Uruguay* (Argentina v Uruguay) [2010] ICJ Rep 14, para. 101; Boyle and Redgwell (2021), pp. 163–167; Viñuales (2020), pp. 116–117. A similar duty of conduct, and therefore an associated duty to act with due diligence, can be found in the liability regime discussed above in relation to deep seabed mining under Part XI UNCLOS (see Annex D of this book).

<sup>279</sup> ITLOS *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Report 2011, 10, para. 117. For analysis see Papanicolopulu (2020), pp. 152–154.

<sup>280</sup> *Trail Smelter Case* (United States v Canada) (1941) 3 RIAA 1905, 1965.



*Arbitration* established a duty of result which has not been referred to in international case law since.<sup>281</sup> In contrast, the ILC seems to have acted on the premise that the decision in the *Trail Smelter Arbitration* did not address a separate obligation not to cause significant transboundary harm as it only relied on what is today called the principle of prevention.<sup>282</sup> Both positions indicate that no duty of result can be applied to cases of transboundary damage and that the no harm concept is thus arguably limited to the obligations deriving from the principle of prevention.<sup>283</sup> It may thus be reasoned that a State which causes transboundary harm by conducting a certain activity can generally not be held responsible based on customary international law if it has acted with due diligence.<sup>284</sup> In this regard, international courts and tribunals have interpreted the prevention principle, having its origins in the obligation of due diligence, as including certain procedural obligations concerned with EIAs and the duties to consult and notify.<sup>285</sup> The ICJ in the *Certain Activities Case* went a step further by recognising a preliminary obligation to ascertain the risks involved, an obligation that needs to be fulfilled prior to conducting an EIA.<sup>286</sup>

Given the potentially severe consequences that may arise from the deployment or large-scale field tests of most, if not all, geoengineering methods, such ‘preliminary risk assessment’ seems to indicate that every geoengineering activity will be subject to an EIA. However, it has to be highlighted that although recognition of this need to conduct an EIA as a customary international law obligation is welcome, international jurisprudence has fallen short in providing guidance as to what the minimum content of such an assessment should entail.<sup>287</sup> By leaving the determination of the content to the discretion of individual States, the customary international law requirement to conduct an EIA appears to have “no real substantive content”.<sup>288</sup> This is particularly problematic given that the current understanding of geoengineering and its impacts are grounded in scientific uncertainty, which may be more or less acceptable

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<sup>281</sup> Proelss (2012a), p. 621. For in-depth discussion see Krieger and Peters (2020), pp. 356–362.

<sup>282</sup> ILC Draft Articles on Prevention of Transboundary Harm from Hazardous Activities with Commentaries, Yearbook of the International Law Commission Vol. II Part Two (2001), p. 148, General Commentary, para. 4.

<sup>283</sup> For an in-depth assessment see Brunnée (2020), pp. 115–162; see also Proelss (2017a), pp. 81–84.

<sup>284</sup> Consenting Brunnée (2020), pp. 150–153, clarifying that “[w]hether or not transboundary harm is caused matters, of course, but *not* because harm is an element of the primary obligation. Rather, it is relevant in assessing the consequences of a breach of the preventive duty” (157).

<sup>285</sup> ICJ *Certain Activities Carried Out by Nicaragua in the Border Area* (Costa Rica v Nicaragua) and *Construction of a Road in Costa Rica along the San Juan River* (Nicaragua v Costa Rica) [2015] ICJ Rep 665, para. 168; ICJ *Pulp Mills on the River Uruguay* (Argentina v Uruguay) [2010] ICJ Rep 14, para. 204; see generally Brent et al. (2015).

<sup>286</sup> ICJ *Certain Activities Carried Out by Nicaragua in the Border Area* (Costa Rica v Nicaragua) and *Construction of a Road in Costa Rica along the San Juan River* (Nicaragua v Costa Rica) [2015] ICJ Rep 665, para. 153.

<sup>287</sup> ICJ *Pulp Mills on the River Uruguay* (Argentina v Uruguay) [2010] ICJ Rep 14, para. 205; see also Saxler et al. (2015), p. 123.

<sup>288</sup> Sands and Peel (2018), p. 679.

depending on the specific requirements set for EIAs by the governing domestic legislation.<sup>289</sup>

**108** In this context, mention should also be made of the recent ILC Draft Guidelines on the Protection of the Atmosphere (Atmosphere Guidelines). Provisionally adopted by the ILC in May 2021, Guideline 7 states that:

Activities aimed at intentional large-scale modification of the atmosphere should only be conducted with prudence and caution, and subject to any applicable rules of international law, including those relating to environmental impact assessment.

**109** The commentaries to the Atmosphere Guidelines make evident that ‘activities’ in the context of Guideline 7 should be understood as referring to geoengineering, including those technologies classified as either CDR or SRM.<sup>290</sup> The commentaries to Guideline 7 also make clear that it does not seek to “authorize or to prohibit such activities” but acknowledges that any benefit generally must be balanced with the potentially “unexpected effects on existing climatic patterns that are not confined by national boundaries”.<sup>291</sup> While legally non-binding, the specific reference to activities aimed at intentional large-scale modification of the atmosphere in the Atmosphere Guidelines of the ILC provides yet another example of the variable nature of due diligence as well as the difficulty in establishing standardised criteria to identify breaches of a State’s due diligence obligations.

**110** In addition to the principle of prevention, the precautionary principle must be taken into account as it has been encapsulated in various international instruments already mentioned, such as the London Protocol, the UNFCCC and the UNCLOS. At its most general level, the precautionary principle means that States:

agree to act carefully and with foresight when taking decisions that concern activities that may have an adverse impact on the environment. A more focused interpretation provides that the principle requires activities and substances, which may be harmful to the environment, to be regulated, and possibly prohibited, even if no conclusive or overwhelming evidence is available as to the harm or likely harm they may cause to the environment.<sup>292</sup>

**111** The following discussion accepts that there is considerable disagreement concerning the principle’s acceptance as either an ‘approach’ or a ‘principle’,

<sup>289</sup> Although the adequacy of domestic legislation may be evaluated in assessing whether or not a State has fulfilled its due diligence obligations (see PCA *South China Sea Arbitration* (Philippines v China) (2016) 33 RIAA 1, para. 990 in this regard).

<sup>290</sup> UN Doc. A/76/20 (2021), Report on the Work of the ILC of the Seventy-second Session, Chapter 4: Draft Guidelines on the Protection of the Atmosphere, <https://legal.un.org/ilc/reports/2021/english/chp4.pdf>, accessed 1 Apr 2022, 33 (Commentary to Guideline 7, para. 3).

<sup>291</sup> UN Doc. A/76/20 (2021), Report on the Work of the ILC of the Seventy-second Session, Chapter 4: Draft Guidelines on the Protection of the Atmosphere, <https://legal.un.org/ilc/reports/2021/english/chp4.pdf>, accessed 1 Apr 2022, 34 (Commentary to Guideline 7, paras. 7 & 9).

<sup>292</sup> Sands and Peel (2018), p. 234.

however, a consideration of this discussion is beyond the scope of this report.<sup>293</sup> Notwithstanding this, the precautionary principle may prove to be a fundamental component in decision-making processes that involve the implementation and development of geoengineering. This is a realistic view as geoengineering activities are still subject to uncertainty and have the potential for significant detrimental environmental impacts.<sup>294</sup> The ITLOS SDC has acknowledged the growing acceptance and application of the precautionary approach by referring, first, to its intrinsic link to a State's due diligence obligation and, second, by highlighting an international "trend towards making this approach part of customary international law".<sup>295</sup>

As with the specific international instruments examined above (§ 75 *et seq.*), customary international law finds general application to all geoengineering activities. However, the lack of accepted minimum requirements for EIAs, the variable nature of the due diligence obligation (intrinsically linked to the customary international law obligation not to cause significant transboundary harm) and the uncertainties surrounding the validity, content and legal effects of the precautionary principle/approach results in the conclusion that the relevance of the norms of customary international law in assessing liability or responsibility for geoengineering activities should generally not be overestimated.<sup>296</sup> With this in mind, the next Subchapter looks at the potential responsibility and liability that may materialise as a result of damage caused by geoengineering activities.

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## 9.5 Responsibility and Liability for Damage Caused by Geoengineering Activities

Proposals to develop and deploy geoengineering technology call into question the capability of international law to adequately govern and regulate innovative and contemporary technologies.<sup>297</sup> To incentivise the behaviour of States, as well as other actors, any legal framework for geoengineering will have to encompass distinct

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<sup>293</sup> Reference to the term 'approach' instead of 'principle' is preferred by commentators who argue in favour of a more flexible handling of environmental risks, the occurrence of which is subject to scientific uncertainty. However, this understanding can arguably not be held to be reflected in binding international law; see Boyle and Redgwell (2021), pp. 172–173; Proelss (2017a), p. 89.

<sup>294</sup> Scott (2015), p. 463; Proelss (2017a), pp. 84–96; see also Krieger and Peters (2020), p. 363.

<sup>295</sup> ITLOS *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Report 2011, 10, paras. 132 & 135.

<sup>296</sup> Note, though, that some commentators have advanced the view that the precautionary principle/approach should be operationalized in a multi-faceted manner under which decisions on geoengineering testing and deployment must be taken on the basis of a balancing of the (environmental) risks involved. See Proelss (2017a), pp. 89–96; Proelss (2010), p. 81; Du (2019), pp. 202–213; Schröter (2015), pp. 293–320.

<sup>297</sup> Brent (2018), p. 161.

and practical rules for the attribution of liability.<sup>298</sup> It is, therefore, surprising that the issue of liability for damage caused by geoengineering research or deployment, unlike the question of the international legality of the activities concerned, has received little attention in legal scholarship to date.<sup>299</sup> Of the three recent legal monographs addressing geoengineering,<sup>300</sup> only one goes beyond superficially dealing with liability for environmental and other forms of harm.<sup>301</sup> Therefore, the following observations are intended to contribute to closing this gap in academic literature.

**114** In accordance with what has been elaborated on in Chap. 3 of this book, it is necessary to differentiate between situations where a geoengineering activity violates international law and where this is not the case. As has been demonstrated above, while geoengineering as a scientific field is not generally prohibited under international law, individual field experiments and operational activities may well prove to be incompatible with the legal requirements arising from the relevant international agreements or customary international law. Furthermore, it is also crucial to distinguish instances where a geoengineering experiment or deployment is organised and conducted by a State from instances where the relevant activity is carried out by private actors. In addition to these distinctions, the degree of liability arising in a given case as a result of geoengineering activities will depend on the nature of the geoengineering project, the type and extent of damage that such project may allegedly cause and the laws applicable to a specific project.<sup>302</sup> The following Subchapters highlight the relationship between geoengineering activities and, on the one hand, State responsibility (§ 115 *et seq*) and, on the other hand, State liability (§ 126 *et seq*) with the latter discussion distinguishing between specialised and general liability regimes applicable to geoengineering. Subsequent to this discussion, Sect. 9.5.3 addresses the challenges in attributing liability and/or causation to a particular geoengineering activity before turning to an examination of operator liability for damage caused as a result of geoengineering activities (§ 140 *et seq*).

### 9.5.1 State Responsibility

#### Attribution

**115** Irrespective of a given scenario's details, if it involves a geoengineering activity that violates a rule or principle codified in an international treaty, or this is accepted

<sup>298</sup> Hester (2018), p. 224.

<sup>299</sup> The few exceptions include: Horton et al. (2015), Saxler et al. (2015), Brent (2018), Hester (2018) and Pfrommer et al. (2019).

<sup>300</sup> Krüger (2020), Du (2019) and Reynolds (2019b).

<sup>301</sup> Reynolds (2019b), pp. 178–195; Krüger (2020), pp. 114–119, only addresses liability for activities carried out in outer space.

<sup>302</sup> Hester (2018), p. 224.

as being valid under customary international law, the activity in question will entail the responsibility of the State if it is attributable to that State. The State concerned is then under an obligation to “make full reparation for the injury caused by the internationally wrongful act” and the scope of compensable damage is, as a matter of principle, directly related to the general rules of State responsibility.<sup>303</sup> Generally speaking, an action is attributable to a State if it has acted through one of its organs.<sup>304</sup> In contrast, private behaviour is usually not attributable to a State unless it involves situations where private actors, such as companies or private research institutes, have been empowered by domestic law to exercise governmental authority (see Article 5 ASR). However, even under these circumstances the law on State responsibility only recognises two situations where private conduct must be attributed to a State: First, according to Article 8 ASR, attribution can be established if the State has effectively controlled the activity concerned. Second, the private conduct is attributable to the State if the latter, either expressly or tacitly through its conduct, “acknowledges and adopts the conduct in question as its own” (Article 11 ASR).<sup>305</sup>

In the current context, it will normally not be possible to assume that either of these two situations exists. Having regard to the case law of the ICJ, the requirements to be met under the aforementioned provisions are very high. In particular, the granting of a permit to a private operator to carry out a certain geoengineering experiment or activity in the context of an authorisation procedure prescribed by law does not lead to that activity being attributable to the State. Indeed, the acts of a private actor cannot be deemed as sovereign acts unless the authorisation or approval concerned allocates the right to exercise elements of governmental authority to the private actor.

While Article 11 ASR “provides for the attribution to a State of conduct that was not or may not have been attributable to it at the time of commission, but which is subsequently acknowledged and adopted by the State as its own”,<sup>306</sup> it is not sufficient that the State only supports or endorses the activity.<sup>307</sup> Rather, Article 11 ASR “makes it clear that what is required is something more than a general acknowledgement of a factual situation, but rather that the State identifies the conduct in question and makes it its own”.<sup>308</sup>

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<sup>303</sup> Article 31(1) ASR; see also ICJ *Corfu Channel Case* (United Kingdom v Albania) [1949] ICJ Rep 4, 23; ICJ *Gabčíkovo-Nagymaros* (Hungary v Slovakia) [1997] ICJ Rep 7, para. 149.

<sup>304</sup> Article 4 ASR.

<sup>305</sup> ILC, Draft Articles on Responsibility of States for Internationally Wrongful Acts, with Commentaries, Yearbook of the ILC 2001-II/2, p. 54, Commentary to Article 11, para. 9.

<sup>306</sup> ILC, Draft Articles on Responsibility of States for Internationally Wrongful Acts, with Commentaries, Yearbook of the ILC 2001-II/2, p. 52, Commentary to Article 11, para. 1.

<sup>307</sup> ILC, Draft Articles on Responsibility of States for Internationally Wrongful Acts, with Commentaries, Yearbook of the ILC 2001-II/2, p. 53, Commentary to Article 11, para. 6.

<sup>308</sup> ILC, Draft Articles on Responsibility of States for Internationally Wrongful Acts, with Commentaries, Yearbook of the ILC 2001-II/2, p. 53, Commentary to Article 11, para. 6.

**118** The situation could be assessed differently if a geoenvironmental experiment is carried out by a public research institute acting under the relevant national legislation. In such cases, the issue of attribution must arguably be addressed in the same way as cases involving State-owned enterprises (SOEs). However, the ILC commentaries on the ASR are of little help as far as acts of SOEs are concerned. In particular, the ILC considered the fact that while “an entity can be classified as public or private according to the criteria of a given legal system” this is *not* decisive for attribution under Article 5 ASR. From the ILC’s perspective, the opposite is true as attribution under the rule codified in Article 5 ASR requires “that these entities are empowered, if only to a limited extent or in a specific context, to exercise specified elements of governmental authority”.<sup>309</sup> Taking into account that governmental authority usually becomes manifest in the exercise of powers (‘empowered’) vis-à-vis private actors,<sup>310</sup> research activities that are undertaken to gain new scientific insight cannot be held to be of such nature. Thus, it must be concluded that even public research institutes should usually be considered as private actors.

### Scope of Due Diligence Obligations of States

**119** Situations where it is not possible to attribute private conduct to a State must be distinguished from cases where the State may have omitted to properly supervise private actors acting within its sphere of jurisdiction. In such cases, the question is whether the State has violated its own due diligence obligations arising from international law, namely whether a breach of a rule or principle of international law has occurred which gives rise to the international responsibility of the State concerned. In such cases, the relevant conduct of the State giving rise to its responsibility takes the form of an omission, typically regarding aspects of regulation, supervision, monitoring, enforcement and so forth. As far as the scope of due diligence is concerned, the ICJ famously held that:

Due diligence entails not only the adoption of appropriate rules and measures, but also a certain level of vigilance in their enforcement and the exercise of administrative control applicable to public and private operators, such as the monitoring of activities undertaken by such operators.<sup>311</sup>

**120** This is particularly relevant in the context of geoenvironmental activities since certain methods, especially those that may be relatively cheap and technically easy to deploy, may be conducted by private operators.<sup>312</sup> Taking into account that there is no uniform standard of due diligence that would apply independent of the

<sup>309</sup> All quotations from ILC, Draft Articles on Responsibility of States for Internationally Wrongful Acts, with Commentaries, Yearbook of the ILC 2001-II/2, p. 43, Commentary to Article 5, para. 3.

<sup>310</sup> See also ILC, Draft Articles on Responsibility of States for Internationally Wrongful Acts, with Commentaries, Yearbook of the ILC 2001-II/2, p. 43, Commentary to Article 5, para. 7: “The internal law in question must specifically authorize the conduct as involving the exercise of public authority; it is not enough that it permits activity as part of the general regulation of the affairs of the community”.

<sup>311</sup> ICJ *Pulp Mills on the River Uruguay* (Argentina v Uruguay) [2010] ICJ Rep 14, para. 197.

<sup>312</sup> Hubert (2020), p. 51.

circumstances of the specific case,<sup>313</sup> it is not easy to identify general criteria for when a State has violated its due diligence obligations in a geoengineering context. That said, it must be borne in mind that as far as the realm of international environmental law is concerned, the obligation to exercise due diligence is conceptually related to the principle of prevention (§ 106 *et seq*). A State is therefore obliged to take all possible and reasonable measures to avoid likely transboundary environmental damage. This has also been confirmed by the ILC in its Draft Articles on Prevention of Transboundary Harm from Hazardous Activities:

The obligation of the State of origin to take preventive or minimization measures is one of due diligence. It is the conduct of the State of origin that will determine whether the State has complied with its obligation under the present articles. The duty of due diligence involved, however, is not intended to guarantee that significant harm be totally prevented, if it is not possible to do so. In that eventuality, the State of origin is required, as noted above, to exert its best possible efforts to minimize the risk. In this sense, it does not guarantee that the harm would not occur.<sup>314</sup>

If applied to the geoengineering context, these authoritative statements can only be understood in such a way that whenever the organs of a State have active knowledge of a geoengineering activity planned by private individuals or corporations which is likely to result in significant transboundary harm and yet fail to prevent the activity concerned, the State violates its due diligence obligation. This also applies when a State does not adequately monitor a geoengineering experiment that has been authorised by one of its agencies.<sup>315</sup> If a State, by way of regulation, creates incentives (presumed to be lawful) for private behaviour that could lead to transboundary environmental damage, it is obliged to take all possible steps to ensure that no damage occurs in accordance with its international obligations. It is not completely clear whether or not the same can be said in situations where a State makes no effort to regulate certain conduct that, if engaged in, is likely to cause environmental damage. On the one hand, a State cannot be expected, by reference to its duty of care, to regulate all conduct without there being real evidence that the conduct in question will result in environmental damage. Once such evidence exists, because a geoengineering experiment has been publicly announced or the competent authority becomes aware of it by other means, the State is obligated to take preventive action arising from its due diligence obligations.

As far as the specific measures are concerned that must be taken in such a situation, the ICJ clarified in the *Pulp Mills Case* that “due diligence, and the duty

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<sup>313</sup>ITLOS *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Report 2011, 10, para. 117.

<sup>314</sup>ILC, Draft Articles on on Prevention of Transboundary Harm from Hazardous Activities, Yearbook of the ILC 2001/II-2, p. 148, Commentary to Article 33, para. 7.

<sup>315</sup>See also ICJ *Pulp Mills on the River Uruguay* (Argentina v Uruguay) [2010] ICJ Rep 14, para. 197; ITLOS *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Report 2011, 10, para. 138.



of vigilance and prevention which it implies, would not be considered to have been exercised” if an activity which may potentially affect the environment of another State or BBNJ is not subjected to an EIA on the potential effects of that activity before it is carried out (§ 106 *et seq*). The standard of due diligence to be applied by a State may also be specified by reference to the relevant documents adopted by international actors such as the COPs/MOPs of the pertinent multilateral environmental agreements whose treaty mandates cover the potential negative effects of geoengineering.<sup>316</sup> In this respect, CBD Decision X/33 calls upon States parties to the CBD to ensure that no geoengineering activities take place “with the exception of small scale scientific research studies that would be conducted in a controlled setting [. . .], and only if they are justified by the need to gather specific scientific data and are subject to a thorough prior assessment of the potential impacts on the environment”.<sup>317</sup> While this Decision is not legally binding *sensu stricto*, the ILC stated in the context of its work on subsequent agreements and subsequent practice in relation to the interpretation of treaties that “interpretative resolutions by Conferences of States Parties which are adopted by consensus, even if they are not binding as such, can nevertheless be subsequent agreements under article 31, paragraph 3 (a), or subsequent practice under article 31, paragraph 3 (b) [VCLT]”.<sup>318</sup> Consequently, there is good case to argue that the requirements contained in this Decision, which was adopted by consensus, can be relied upon when assessing whether or not a State has acted in line with its due diligence obligation to prevent significant transboundary harm. Similarly, States parties to the London Protocol are arguably not free to disregard the resolutions that have been adopted by the MOP vis-à-vis geoengineering (§ 93 *et seq*) and future developments in relevant fora will further impact what can be expected from States when analysing whether they have observed the pertinent standard of due diligence. In view of the foregoing, it must be kept in mind that “[t]he standard of due diligence has to be more severe for the riskier activities”.<sup>319</sup> Thus, in light of the environmental and other risks involved, the distinction between testing and deployment of geoengineering cannot as easily be drawn as with other cutting-edge technologies such as seabed mining (Chap. 13). As such, the due diligence standard to be applied in the geoengineering context may indeed need to be stricter and less flexible than with regard to other activities.

### Causal Relationship

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Aside from the issue of attribution in terms of the law on State responsibility, proof of the factual basis of a causal relationship between a geoengineering activity

<sup>316</sup>See also Boyle and Redgwell (2021), pp. 165–166; Dupuy and Viñuales (2015), p. 313.

<sup>317</sup>CBD X/33, para. 8(w).

<sup>318</sup>UN Doc A/69/10, Report of the International Law Commission on the Work of its Sixty-Sixth Session (2014), Chapter VII, Commentary to Draft Conclusion 10, p. 76, para. 38. Note that the ILC made specific reference to resolutions adopted by the parties to the London Convention and protocol vis-à-vis geoengineering; *ibid.*, para. 12.

<sup>319</sup>ITLOS *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Report 2011, 10, para. 117.



and harm that has occurred afterwards may be particularly difficult given the complexity of climatic systems and the multitude of human stressors currently affecting the environment. For example, one of the environmental risks associated with ice restoration (§ 25 *et seq*) is ocean acidification but ‘attributing’, in the sense of establishing a causal nexus, an increase in ocean acidity with ice restoration activities will be difficult since ocean acidification also has multiple sources, including the high levels of atmospheric CO<sub>2</sub> caused by other human activities.<sup>320</sup> As has been alluded to earlier, if a geoengineering activity to restore ice is undertaken by private actors, the fact that a State has authorised such activity does not necessarily mean that any negative consequences of such an activity can be attributed to that State. While the existence of damage is usually *not* a precondition for responsibility under the law of State responsibility, a causal nexus is required when determining the compensation owed by a State due to its violation of international law. This issue will be discussed in more detail in Sect. 9.5.3 below (§ 140 *et seq*).

### Circumstances Precluding Wrongfulness

Finally, even if it is possible in individual cases to establish attribution in connection with geoengineering within the meaning of Articles 4–11 of the ASR and there have been violations of a rule or principle of international law, not all such unlawful acts will necessarily lead to the responsibility of the State. In this regard, the ASR list six circumstances that preclude the wrongfulness of conduct that would otherwise be a breach of the accepted primary obligations of the State concerned. In the context of geoengineering, two of these circumstances require brief mention.<sup>321</sup> First, Article 25 ASR provides that a State may rely on necessity as a defence for its conduct if it “is the only way for the State to safeguard an essential interest against a grave and imminent peril” and such conduct “does not seriously impair an essential interest of the State or States towards which the obligation exists, or of the international community as a whole”. In the words of the ILC, necessity “arises where there is an irreconcilable conflict between an essential interest on the one hand and an obligation of the State invoking necessity on the other”.<sup>322</sup> Extrapolated to geoengineering, there is perhaps some scope that a State may invoke necessity to safeguard an essential interest, such as reducing the impact of climate change, which is irreconcilable with a State’s international obligations not to cause significant environmental harm. However, the State in question can only invoke the defence of necessity if it did not itself *contribute* to the situation of necessity.<sup>323</sup> If the ultimate aim is to reduce the impacts of anthropogenic climate change, it seems doubtful that any State will be successful in arguing that it has not contributed to climate change and is therefore entitled to invoke the defence of necessity.<sup>324</sup> That

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<sup>320</sup>Brent et al. (2019), p. 40.

<sup>321</sup>For an in-depth discussion see Krüger (2020), pp. 55–60.

<sup>322</sup>ILC, Draft Articles on Responsibility of States for Internationally Wrongful Acts, with Commentaries, Yearbook of the ILC 2001-II/2, p. 80, Commentary to Article 25, para. 2.

<sup>323</sup>Article 25(2)(b) ASR.

<sup>324</sup>Reichwein et al. (2015), p. 174.

said, there arguably remains some restricted scope for a particularly vulnerable State to present creative legal arguments using their limited contribution to climate change and their necessity in developing or deploying a specific geoengineering method.

**125** Second, Article 20 ASR provides that consent given by a State “to the commission of a given act by another State precludes the wrongfulness of that act in relation to the former State to the extent that the act remains within the limits of that consent”. A full discussion of consent as a basis for precluding wrongfulness is beyond the scope of this study,<sup>325</sup> however, whether or not a State has validly given consent is generally accepted as being a “matter addressed by international law rules outside the framework of State responsibility”.<sup>326</sup> In order to rely on consent as a basis for precluding wrongfulness, the consent must be given freely and the responsible State must operate within the ambit of such consent.<sup>327</sup> In the context of geoengineering, contributing to the adoption of either binding/non-binding decisions or recommendations within existing legal frameworks, including the UNFCCC and the London Convention/Protocol, may serve as proof of a particular State’s consent.<sup>328</sup> If, for example, the COP of the UNFCCC adopts a decision calling on States to make use of certain CDR methods to reduce global CO<sub>2</sub> concentrations, States which demonstrate a certain amount of political will by supporting such an adoption may be seen as consenting to the adoption of these CDR methods. While the circumstances surrounding such consent will have to be evaluated on a case-by-case basis, it is plausible that one State which suffers damage as a result of another State’s geoengineering activity may be precluded from holding the latter State internationally responsible because the injured State previously gave its consent. This is not to say that a State is exempt from any particular primary obligation, such as preventing harm to the environment, rather, “the primary obligation continues to govern the relations between the two States, but it is displaced on the particular occasion or for the purposes of the particular conduct by reason of the consent given”.<sup>329</sup>

<sup>325</sup> For a comprehensive study of consent in the context of State responsibility see Abass (2004), pp. 211–225.

<sup>326</sup> ILC, Draft Articles on Responsibility of States for Internationally Wrongful Acts, with Commentaries, Yearbook of the ILC 2001-II/2, p. 73, Commentary to Article 20, para. 4.

<sup>327</sup> Abass (2004), p. 214.

<sup>328</sup> Although within the context of customary international law, while not viewing consent as a preclusion for wrongfulness, the ICJ held that the “effect of consent to the text of [. . .] resolutions cannot be understood as merely that of a ‘reiteration or elucidation’ of [a] treaty commitment [. . .]. On the contrary, it may be understood as an acceptance of the validity of the rule or set of rules declared by the resolution by themselves” (ICJ *Military and Paramilitary Activities in and against Nicaragua* (Nicaragua v United States of America) [1986] ICJ Rep 14, para. 188).

<sup>329</sup> ILC, Draft Articles on Responsibility of States for Internationally Wrongful Acts, with Commentaries, Yearbook of the ILC 2001-II/2, p. 73, Commentary to Article 20, para. 4.

### 9.5.2 *State Liability*

As far as State liability beyond State responsibility is concerned, it is first necessary to analyse whether specific liability regimes applicable to individual geoengineering activities exist before considering whether general international law provides for relevant rules and principles that could be applied in view of the specific nature and potential consequences of geoengineering.

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#### **Liability Regimes Specifically Applicable to Geoengineering**

Geoengineering activities that are conducted in outer space, which would apply to the deployment of installations or structures such as mirrors, may be covered by the terms of the Convention on International Liability for Damage Caused by Space Objects (“Liability Convention”). As is analysed in Annex B of this book, the Liability Convention is the only existing international agreement that comprehensively provides for State liability and the liability of international organizations for space-based activities. According to the definition of ‘space object’ enshrined in Article I(d) of the Convention, even components that were a part of a larger object can be classed as space objects and are covered by its terms. Taking into account that the term ‘space object’ must be understood as including any object that is launched into outer space, whatever its purpose, any geoengineering installations or structure deployed in outer space must be held to fall within the scope of the Convention. Also, with a view to geoengineering activities, the “mixed”, or “dual” liability standard on which the agreement is based is of particular interest.<sup>330</sup> Article II imposes absolute State liability on the launching State for damage caused on the Earth’s surface as well as to aircraft in flight. In contrast, Article III establishes fault-based liability which applies to damage inflicted on space objects belonging to other launching States which are not located on the Earth’s surface. According to Article I (a), the Convention only covers damage to persons and property, not damage to the environment. As far as geoengineering activities in outer space are concerned, this is particularly problematic, since the introduction of installations or structures in space could affect global climate in a manner that negatively impacts parts of the environment on Earth. This problem could potentially be tackled by way of interpreting the term ‘damage’ in such a way that it also includes environmental harm that specifically affects the territory of a contracting State, and thus the ‘property’ of that State. In this sense, Canada substantiated its claim for compensation for the damage caused by the crash of the Soviet satellite Cosmos 954,<sup>331</sup> however, the fact remains that the Convention has so far not played any prominent role in State practice. This demonstrates that States will remain reluctant to accede to a treaty that provides for strict

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<sup>330</sup>For assessment see Horton et al. (2015), pp. 245–250.

<sup>331</sup>See Claim Against the Union of Soviet Socialist Republics for Damage Caused by Soviet Cosmos 954, ILM 18 (1979), p. 899 (905, para. 15); see also Frantzen (1991), p. 619 (with note 127); Gehring and Jachtenfuchs (1988), p. 107.

State liability, a fact that undermines the potential for success of any attempts to make the Liability Convention applicable to geoengineering activities.

**128** With respect to the other geoengineering activities relevant here, no specific applicable liability regime is in place. As regards the sub-seabed storage of CO<sub>2</sub>, the only existing liability regime that could potentially be applicable is enshrined in Part XI UNCLOS and its substantiating instruments (Chap. 13). However, as has been demonstrated above, the pertinent provisions only apply to “activities in the Area”, which is defined in Article 1(1)(3) UNCLOS as “all activities of exploration for, and exploitation of, the resources of the Area”. The SDC held in its 2011 advisory opinion that such activities need to be directly related to the recovery of minerals from the seabed and their lifting to the water’s surface.<sup>332</sup> This would include, as enumerated in Article 145(a) UNCLOS, “drilling, dredging, excavation, disposal of waste, construction and operation or maintenance of installations, pipelines and other devices related to such activities”,<sup>333</sup> although arguably not the sequestration of CO<sub>2</sub> into sub-seabed geological structures which were previously used for purposes related to the exploitation of mineral resources in the Area. In contrast to the disposal of water and materials of no commercial interest that are separated from deep seabed resources during the process of resource exploitation,<sup>334</sup> the activity relevant here constitutes a *separate* activity not *directly* linked to the exploitation of the deep seabed resources.<sup>335</sup> As can be demonstrated by reference to the different purposes, sequestration of CO<sub>2</sub> under the seabed would only take place during or following mineral-exploitation activities in the area.

**129** Furthermore, neither the 1972 London Convention nor the 1996 Protocol, which specifically apply to both CO<sub>2</sub> sequestration and, subject to the entry into force of the 2013 amendment on marine geoengineering, to ocean iron fertilisation (¶ 92 *et seq*), contain stipulations on State liability. While both the Convention (Article X) and the Protocol (Article 15) require that the Contracting parties “undertake to develop procedures for the assessment of liability”, they have so far refrained from implementing this regulatory mandate.<sup>336</sup>

**130** Concerning marine geoengineering experiments, it is worth mentioning that Part XIII of the UNCLOS on marine scientific research (¶ 86 *et seq*) contains a provision

<sup>332</sup>ITLOS *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Report 2011, 10, para. 94.

<sup>333</sup>ITLOS *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Report 2011, 10, para. 85.

<sup>334</sup>ITLOS *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Report 2011, 10, paras. 95 & 97.

<sup>335</sup>See also Proelss and Güssow (2011), p. 156, arguing that marine CCS activities conducted in areas beyond the limits of national jurisdiction are covered by the principle of freedom of the high seas in terms of Article 87(1) UNCLOS and not by the regime of the Area.

<sup>336</sup>The 2012 Specific Guidelines for the Assessment of Carbon Dioxide for Disposal into Sub-seabed Geological Formations of 2 November 2012 (IMO Doc. LC 34/15, Annex 8) are also silent on the issue.

that is specifically dedicated to responsibility and liability. In particular, Article 263(3) UNCLOS stipulates that “States and competent international organizations shall be responsible and liable pursuant to article 235 for damage caused by pollution of the marine environment arising out of marine scientific research undertaken by them or on their behalf”. This provision, as well as the other paragraphs of Article 263 UNCLOS, must be read in conjunction with Article 304 UNCLOS that states the “provisions of this Convention regarding responsibility and liability for damage are without prejudice to the application of existing rules and the development of further rules regarding responsibility and liability”. Thus, while any new developments to the law on State responsibility are automatically applicable to both the law of the sea in general and Article 263 UNCLOS in particular,<sup>337</sup> the latter provision cannot be interpreted as establishing an autonomous regime of responsibility and liability with regard to activities that qualify as marine scientific research under the UNCLOS.<sup>338</sup> Even though the regime of Part XIII UNCLOS is based on the assumption that every private research project is automatically transformed into a research project of the applying State due to its involvement in the consent application procedure for conducting marine scientific research,<sup>339</sup> the rules of attribution, in particular, the principle of effective control embodied in Article 8 ASR, are not superseded by Article 263(1) UNCLOS.<sup>340</sup> Taking the opposite view would confuse both issues of attribution and of due diligence responsibility which, in turn, ignores the clear distinction between these two categories that is generally accepted in international practice and legal doctrine.<sup>341</sup> The ICJ clarified in the *Srebrenica Case* that responsibility based on attribution on the one hand and responsibility due to a violation of a due diligence provision on the other must be distinguished and are mutually exclusive.<sup>342</sup> Consequently, a State can only be held responsible for infringements of the UNCLOS caused by private actors, such as research entities, if the activity in question is attributable to the State in line with what has been analysed above. Additionally, while Article 263(1) UNCLOS creates “an indirect duty to monitor the activities of actors whose conduct would not be attributable to States and international organizations under the regular rules of attribution”,<sup>343</sup> the ‘researching State’ can only be held responsible to the extent that it has violated its due diligence duty to monitor the relevant private actor’s conduct.<sup>344</sup>

<sup>337</sup>Hofmann and Proelss (2015), p. 182.

<sup>338</sup>See also Stephens (2017), paras. 7, p. 23; Tams and Devaney (2017), paras. 17–19.

<sup>339</sup>For reasoning and further references see Hofmann and Proelss (2015), p. 174.

<sup>340</sup>*Contra* Wegelein (2005), p. 350.

<sup>341</sup>Hofmann and Proelss (2015), p. 183.

<sup>342</sup>ICJ *Application of the Convention on Prevention and Punishment of the Crime of Genocide* (Bosnia and Herzegovina v Serbia and Montenegro) [2007] ICJ Rep 43, para. 382.

<sup>343</sup>Tams and Devaney (2017), para. 12.

<sup>344</sup>See ITLOS *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Report 2011, 10, para. 109: “not every violation of an obligation by a sponsored contractor automatically gives

**131** As far as the introduction of substances with high albedo into the atmosphere is concerned, no special regime is in place which would govern State liability for damage that has arisen in the context of activities that take place or which produce effects in the atmosphere. As previously mentioned, there is still uncertainty with regard to the exact location of the border between air space, which is subject to State sovereignty, and outer space, which has become to be accepted as a common space by virtue of the Outer Space Treaty. However, it is generally accepted that the atmosphere ends at an altitude of somewhere between 80 and 120 km,<sup>345</sup> meaning the geoengineering methods discussed here are not covered by the Liability Convention mentioned above. In contrast, the 1979 Convention on Long-Range Transboundary Air Pollution (CLRTAP), which is potentially applicable to the geoengineering methods relevant here (see Sect. 9.4.1, § 102), expressly clarifies in a footnote to Article 8 that it “does not contain a rule on State liability as to damage”.

**132** Finally, brief mention should be made of State liability regimes applicable in the polar regions as such liability regimes would be particularly relevant in the context of geoengineering methods associated with the restoration of sea ice. While no specific liability regime exists for the Arctic, the Antarctic Liability Annex (Chap. 12) applies to “environmental emergencies in the Antarctic Treaty area which relate to scientific research programmes, tourism and all other governmental and non-governmental activities”. An ‘environmental emergency’ is defined as “any accidental event that [...] results in, or imminently threatens to result in, any significant and harmful impact on the Antarctic environment”. Following this, it is clear that the deliberate act of restoring sea ice would not be covered by the Antarctic Liability Annex. Additionally, the Antarctic Liability Annex is yet to enter into force and the strict liability standard set by the Annex suggests that it faces the same hurdle as the Space Liability Convention, namely that States remain reluctant to ratify international agreements that provide for strict liability.

### **Are General Liability Rules Applicable to Geoengineering?**

**133** Notwithstanding the lack of liability regimes specifically applicable to geoengineering, one may ask whether States can still be held liable for any damage in light of the serious environmental, political and social risks involved in the activities concerned (§ 49 *et seq*). This would require that the standard of strict State liability be generally accepted for such situations. *Prima facie*, the concept of ‘ultra-hazardous activities’ could potentially be referred to as a legal basis for this liability standard.

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rise to the liability of the sponsoring State. Such liability is limited to the State’s failure to meet its obligation to “ensure” compliance by the sponsored contractor”.

<sup>345</sup> Arguably, the fact that “complete and exclusive sovereignty over the airspace” allocated to each State by Article 1 of the Chicago Convention on International Civil Aviation of 7 December 1944 (15 UNTS 295) can only be exercised where aircraft traffic is technically possible, militates in favour of accepting that the delimitation of air space and outer space should be based on the flight dynamic criteria reflected in the “Kármán line” located at an altitude of 83,6 km. See Proelss (2017b), pp. 369–371.

In its Draft Articles on the Prevention of Transboundary Harm from Hazardous Activities,<sup>346</sup> the ILC regarded as ‘ultra-hazardous’ any activities that are characterised by “a danger that is rarely expected to materialize but might assume, on that rare occasion, grave (more than significant, serious or substantial) proportions”.<sup>347</sup> Relevant factors to determine whether the consequences of a certain activity are to be considered as ‘grave’ include the number of injured persons, the scale of damage to property and the like, the significance of environmental impacts as well as the duration and territorial extent of the damage.<sup>348</sup> Examples of relatively commonplace activities where such criteria could apply are the peaceful use of nuclear energy, the bulk transport of oil and the handling of hazardous wastes.<sup>349</sup>

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Current assumptions concerning the potential negative side effects of, say, the introduction of light-reflecting substances into the atmosphere illustrate that large-scale field tests and deployment of this geoengineering method could potentially lead to disastrous consequences for humankind, the climate and ecosystems (¶ 52 *et seq.*, 60 *et seq.*). Given that even activities with a low probability of causing ‘grave’ damage can be considered as ‘ultra-hazardous’, this must *a fortiori* be the case for activities where the probability to cause damage may not easily be determined but if it does occur, has the potential to be catastrophic. It has thus been argued that activities with significant uncertainty regarding the likely occurrence of catastrophic harm should be classed as having a higher level of ‘ultra-hazardousness’ than activities with a definably low probability of doing so.<sup>350</sup> Against this background, there is good case to argue that some SRM geoengineering techniques must be categorised as ‘ultra-hazardous’.

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However, even with regard to ‘ultra-hazardous’ activities, State practice does not yet seem to sufficiently support the existence of strict State liability for otherwise lawful acts.<sup>351</sup> With the single exception of the space liability regime (¶ 100 *et seq.*), the pertinent international agreements establish civil liability of the operator, ship-owner and so forth but not, at least not specifically, State liability.<sup>352</sup> The extent to which, or even if, these agreements provide for residual State liability, cannot be held to reflect a general rule of customary international law (Chap. 3 ¶ 14 *et seq.* (Sect. 3.3.2)). As stated by the SDC of the ITLOS, “[a] gap in liability which might occur in

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<sup>346</sup> ILC, Draft Articles on Prevention of Transboundary Harm, Yearbook of the ILC 2001-II/2, p. 148. Article 1 clarifies that the Draft Articles “apply to activities not prohibited by international law which involve a risk of causing significant transboundary harm through their physical consequences”.

<sup>347</sup> ILC, Draft Articles on Prevention of Transboundary Harm, Yearbook of the ILC 2001-II/2, p. 149, Commentary to Article 1, para. 2. See also Jenks (1966), p. 107.

<sup>348</sup> Dederer (2013), p. 16 (note 5).

<sup>349</sup> Dederer (2013), p. 16.

<sup>350</sup> Saxler et al. (2015), pp. 125–126.

<sup>351</sup> Saxler et al. (2015), pp. 126–128, referring to Montjoie (2010), p. 507 and Boyle and Redgwell (2021), p. 228.

<sup>352</sup> Beyerlin and Marauhn (2010), p. 367; additional arguments against the existence of a customary legal regime of strict State liability are discussed by Montjoie (2010), pp. 507 *et seq.*



such a situation cannot be closed by having recourse to liability of the sponsoring State under customary international law. The Chamber is aware of the efforts made by the International Law Commission to address the issue of damages resulting from acts not prohibited under international law. However, such efforts have not yet resulted in provisions entailing State liability for lawful acts”.<sup>353</sup> Similarly, State liability for damage arising from ‘ultra-hazardous’ activities can also not be regarded as a general principle of law in terms of Article 38(1)(c) of the ICJ Statute. While strict standards of liability for particularly dangerous activities have indeed come to be accepted in several domestic legal systems, as well as international agreements addressing civil liability,<sup>354</sup> these instruments are not based on a sufficiently uniform approach so as to regard them as generally accepted.<sup>355</sup>

### Challenges in “Attributing” Responsibility/Liability for Geoengineering Activities

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A precursor to establishing the responsibility or liability of a State for damage which has arisen in the context of a geoengineering activity is resolving the crucial issues of the existence of a causal nexus between damage that has occurred and a certain activity, be it unlawful or lawful. Within the realm of ‘attribution science’, this nexus has come to simply be described by the term attribution,<sup>356</sup> however, reference to the term ‘causation’ is arguably preferable to avoid the issue concerned being confused with attribution in the sense of the law of State responsibility. While the deployment of a particular geoengineering method will usually be relatively easy to allocate to a particular actor, whether that particular deployment is the cause of damage that has occurred would be challenging to prove, especially if the damage occurred on the opposite side of the globe and at a much later date. Nevertheless, making such an attribution will be necessary for the purposes of determining compensation.<sup>357</sup> In other words, plaintiffs may face difficult challenges in proving that the deployment of a specific method was the cause of the damage rather than a

<sup>353</sup> ITLOS *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Report 2011, 10, para. 168. By guaranteeing that victims of damage are compensated in cases where the operator cannot provide full compensation, residual State liability could still play a supplementary role with regard to future geoengineering liability regimes. It should be remembered that States are of course still required to fulfil their own due diligence obligations where the standard, according to the SDC of ITLOS, “has to be more severe for the riskier activities” and which require sponsoring States to adopt “‘laws and regulations’ and to take ‘administrative measures which are, within the framework of its legal system, reasonably appropriate for securing compliance by persons under its jurisdiction’” (ITLOS *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Report 2011, 10, paras. 117–119).

<sup>354</sup> For references see Saxler et al. (2015), p. 127.

<sup>355</sup> See COM(93)47 of 14 May 1993, Green Paper on Remedying Environmental Damage, para. 2.2.1. For further references see Boyle and Redgwell (2021), pp. 228–230.

<sup>356</sup> See for example, the National Academies of Sciences, Engineering, and Medicine (2016).

<sup>357</sup> Svoboda and Irvine (2014), p. 158; Hester (2018), p. 246; Lin (2013b), p. 140.



natural climate phenomenon or some other human activity. As described above (Chap. 3 ¶ 64 *et seq* (Sect. 3.4.4)), the issue relevant here was briefly addressed by the ICJ in the *Wetland Compensation Case*,<sup>358</sup> although the Court refrained from providing any general guidelines that could be used for ‘attribution’ of harm in geoengineering cases due to the specificities of that case.

Establishing a causal link between an activity and damage in the context of responsibility and liability has two legal dimensions: First, violations of multinational environmental agreements can sometimes only be determined if a causal relationship exists between pollution and harm. For example, the CLRTAP obliges its States parties to limit, reduce and prevent air pollution as far as possible.<sup>359</sup> According to the definition of the term ‘air pollution’ in Article 1(a), the introduction of substances has to result “in deleterious effects of such a nature as to endanger human health, harm living resources and ecosystems and material property and impair or interfere with amenities and other legitimate uses of the environment”. It is thus necessary that a causal link exists between the introduction of substances on the one hand and deleterious effects on the other to assume pollution has occurred.<sup>360</sup> Secondly, as can be demonstrated by reference to the *Wetland Compensation Case*, and notwithstanding the fact that the existence of damage is usually *not* a precondition for responsibility under the law of State responsibility, a causal nexus is required when determining the compensation owed by a State due to a violation of international law attributable to it. In the words of the ICJ:

In order to award compensation, the Court will ascertain whether, and to what extent, each of the various heads of damage claimed by the Applicant can be established and whether they are the consequence of wrongful conduct by the Respondent, by determining ‘whether there is a sufficiently direct and certain causal nexus between the wrongful act [...] and the injury suffered by the Applicant.’<sup>361</sup>

The difficulty in proving a causal nexus between a particular activity and damage is compounded by the fact that no universally valid standard of proof exists in international law.<sup>362</sup> Accepted categories include ‘proof beyond a reasonable doubt’,<sup>363</sup> ‘(clear and) convincing evidence’,<sup>364</sup> ‘conclusive evidence’<sup>365</sup> and

<sup>358</sup> ICJ *Certain Activities Carried Out by Nicaragua in the Border Area* (Costa Rica v Nicaragua) [2018] ICJ Rep 15, para. 34.

<sup>359</sup> See CLRTAP Article 2.

<sup>360</sup> Rickels et al. (2011), p. 90; see also Bodle et al. (2014), pp. 61–63; Saxler et al. (2015), p. 120.

<sup>361</sup> ICJ *Certain Activities Carried Out by Nicaragua in the Border Area* (Costa Rica v Nicaragua) [2018] ICJ Rep 15, para. 32.

<sup>362</sup> Saxler et al. (2015), p. 120.

<sup>363</sup> Rome Statute of the International Criminal Court, 17 July 1998, 2187 UNTS 3, Article 66(3); see also ICTY *Prosecutor v Tadic* (Final Judgment) (Appeals Chamber) IT-94-1-A, 15 July 1999, para. 233.

<sup>364</sup> *Trail Smelter Case* (United States v Canada) (1941) 3 RIAA 1905, 1965.

<sup>365</sup> ICJ *Pulp Mills on the River Uruguay* (Argentina v Uruguay) [2010] ICJ Rep 14, para. 265.

‘preponderance of evidence’<sup>366</sup> However, even the lowest of these standards (‘preponderance of evidence’) relies on probabilities and uses a ‘more likely than not’ threshold.<sup>367</sup> In assessing whether particular damage could be caused by a particular geoengineering activity, there is currently no option other than relying on the projections of climate models where their reliability is subject to intense debate. For the time being, it remains unclear whether the ‘preponderance of evidence’ standard can be used in a way to provide satisfactory proof of a causal link between the damage and certain geoengineering activities for the actors that would be involved. At the same time, the discussion held in Chap. 8 shows that much is in flux here. It has recently been proposed to apply the Fraction of Attributable Risk (FAR) to geoengineering,<sup>368</sup> a methodological approach currently used to tackle the problem of causation in climate litigation.<sup>369</sup> The reasoning here is that it is possible to operationalise FAR estimates to provide evidence in the context of inter-State court trials by recourse to a slightly modified version of a set of criteria governing the admissibility of evidence, a process which has become accepted in the US legal system in the shape of the Daubert standard.<sup>370</sup> According to this standard, which was applied by the US Supreme Court in *Daubert v Merrell Dow Pharmaceuticals*, a seemingly new scientific methodology is valid and can thus potentially serve as admissible evidence before a court if: (i) the theory or technique in question can be and has been tested; (ii) it has been subjected to peer review and publication; (iii) its known or potential error rate is considered; (iv) standards controlling its operation exist and are maintained; and (v) it has attracted widespread acceptance within the relevant scientific community.<sup>371</sup> The details of this standard which, if slightly modified would allow for an assessment of climate models,<sup>372</sup> cannot be discussed in detail here. However, the approaches that have been applied in international case law to date, in particular, the ‘preponderance of evidence’ standard,<sup>373</sup> seem to be flexible enough to make recourse to the Daubert or other potentially relevant criteria possible.<sup>374</sup> This view also appears to be justifiable given the lack of both a sophisticated theory of causality and evidence requirements that could be applied

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<sup>366</sup> ICJ *Case concerning the Land, Island and Maritime Frontier Dispute* (El Salvador v Honduras; Nicaragua intervening) [1992] ICJ Rep 351, para. 248. On the variety of the standards of proof referred to by the ICJ see Benzing (2019), p. 1234, para. 108; Del Mar (2012), p. 99.

<sup>367</sup> This threshold has been applied by domestic courts in the UK and US; for references see Saxler et al. (2015), p. 121.

<sup>368</sup> Horton et al. (2015), pp. 261–264.

<sup>369</sup> Allen (2003), p. 891; Allen et al. (2007), pp. 1353–1400.

<sup>370</sup> Pfrommer et al. (2019), pp. 67–84.

<sup>371</sup> US Supreme Court *Daubert v Merrell Dow Pharmaceuticals* (1993) 509 U.S. 579, pp. 593–594.

<sup>372</sup> Pfrommer et al. (2019), pp. 75–80.

<sup>373</sup> See also Frank (2014), p. 6, claiming that “preponderance of evidence” should be used as the standard of proof in the context of determining causality between greenhouse gas emissions and environmental damage.

<sup>374</sup> See Tomka and Proulx (2015), stating that “the Court does not operate on the basis of any preliminary evidentiary filter to weed out inadmissible evidence at the outset; rather, the Court

in proceedings at the international level.<sup>375</sup> All this leads to the conclusion that the challenges in ‘attributing’ responsibility/liability for geoengineering activities can indeed be overcome.

### 9.5.3 Operator Liability

Some of the existing civil liability regimes which address different kinds of transboundary hazardous activities may be applicable to accidents arising from, or in the context of, geoengineering activities. For example, in a scenario where a shipping accident occurs on the high seas in connection with the transfer of liquid CO<sub>2</sub> to a sequestration facility, operator liability could arise, subject to its entry into force under the 1999 Basel Protocol on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes and their Disposal. Article 3(3)(c) of this Protocol clarifies that it is also applicable to certain damage that occurs in areas beyond national jurisdiction, such as the high seas. However, this only applies to ‘traditional’ forms of damage, namely loss of human life, personal injury and property as well as the costs of taking preventive measures. In contrast, the costs for taking the necessary measures to restore the impacted environment in such areas are not included, probably because it is unclear how such restoration could be carried out on the high seas. As demonstrated above, the Basel Protocol establishes a standard of strict liability for actors subject to the jurisdiction of either the State of export or the State of import and who act as a notifier, exporter, importer or disposer of the wastes concerned. In contrast, the ‘carrier’, that is any person who merely carries out the transport of hazardous wastes or other wastes, is only subjected to fault-based liability (Chap. 15 ¶ 17 (Sect. 15.2.3)). This standard would thus usually apply in the conceivable scenarios relevant in a geoengineering context.

In contrast, the International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea (HNS Convention),<sup>376</sup> which has similarly not yet entered into force, would not be applicable to maritime accidents involving the discharge of liquefied CO<sub>2</sub>. While the Convention establishes the liability of the shipowner under its Article 7 and, per se, covers damage caused in the EEZs of any of the States parties<sup>377</sup> and to

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possesses a wide margin of appreciation in ascribing different weight to different evidentiary elements originating from varied sources” (11).

<sup>375</sup>Tomka and Proulx (2015), p. 3: “the rigidity of evidentiary rules found in some municipal legal systems has not been transposed integrally to the international legal order. Quite the contrary, the rule of thumb for evidentiary matters before the Court is flexibility”.

<sup>376</sup>Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea, 3 May 1996, available at: [https://www.hnsconvention.org/wp-content/uploads/2018/08/2010-HNS-Convention-Consolidated-text\\_e.pdf](https://www.hnsconvention.org/wp-content/uploads/2018/08/2010-HNS-Convention-Consolidated-text_e.pdf) (accessed on \$).

<sup>377</sup>See Article 3(b) HNS Convention.

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the high seas as far as any damage other than the contamination of the environment is concerned.<sup>378</sup> However, liquefied CO<sub>2</sub> is not a substance that must be treated as hazardous or noxious under the Convention. Article 1(5) of the Convention defines hazardous and noxious substances by reference to other IMO Conventions and Codes and, as far as can be seen, liquefied CO<sub>2</sub> is not included in any of these documents. Furthermore, it is not mentioned in Chapter 17 of the International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk (IBC Code),<sup>379</sup> which is referred to by the HNS Convention with respect to dangerous liquid substances, nor is it listed in Chapter 19 of the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code),<sup>380</sup> which is the relevant document under the HNS Convention concerning liquefied gases.

**142** With the exception of the aforementioned treaties, no specific operator liability regime can be envisaged to be applicable to the mitigation of geoengineering-related damage, no matter which damage scenario is involved. As has been demonstrated in Chap. 4 (Chap. 4 ¶ 7 *et seq* (Sect. 4.2.1)), general international law does not yet accept the concept of direct international liability of private actors, even though the legal situation in this regard is, arguably, evolving. This assessment also applies to geoengineering activities conducted by entities such as private research institutes. Thus, if a geoengineering experiment undertaken and controlled by private actors results in environmental damage, provided that the institution's home State has complied with its due diligence obligation to avoid falling foul of State responsibility, no legal basis for a liability claim exists. While such a legal basis could be created by concluding an international treaty establishing the strict direct liability of private actors, no such agreements have yet come into existence in the context of geoengineering. That said, in line with what has been analysed in Chap. 8 in relation to climate litigation, it is still possible that companies or institutions causing damage may be held liable under the domestic law of their home States via tort litigation even if the damage has occurred in another part of the world.

## 9.6 The Way Forward: State Responsibility and Liability for Geoengineering Damage

**143** Against the background of the analysis undertaken in the preceding Subchapters, this Subchapter discusses potential future developments concerning the development of a liability regime for geoengineering. The development of a suitable liability regime

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<sup>378</sup> But only if damage has been caused by a substance carried on board a ship registered in a State party or, in the case of an unregistered ship, on board a ship entitled to fly the flag of a State party. See Article 3(c) HNS Convention.

<sup>379</sup> IMO Resolution MSC.4(48) of 17 June 1983.

<sup>380</sup> IMO Resolution MSC.5(48) of 17 June 1983.

for geoengineering faces numerous challenges. Besides the problem of establishing a causal relationship between a geoengineering activity on the one hand and damage which has occurred on the other, a problem which does appear to be solvable (§ 123), these challenges can be summarised into the following six points:

First, what is the ‘climate baseline’ against which damage, potentially caused by geoengineering, is to be evaluated?<sup>381</sup> When assessing the harm, it will be necessary to establish a baseline from which to measure the damage. Should the baseline be the preindustrial climate change environment, the climate immediately prior to the deployment of the specific geoengineering method or the climate that would likely exist should the activity in question not have been conducted? **144**

Second, the attribution of responsibility and liability presents societal issues. For example, a State that benefits from or simply prefers a warmer climate may choose to claim for harm suffered by the cooling effects of SRM methods. Alternatively, requiring a developing State with historically low emissions that nevertheless engages in CDR activities to safeguard its own climate change interests to pay compensation to a traditionally high-emitting industrialised State that suffers harm seems incompatible with theories of social justice and fairness. **145**

Third, outcomes that damage one actor may be beneficial to other third actors, creating one victim but several beneficiaries. Would such third-party beneficiaries be required to assist in paying compensation in the absence of an international fund or in the event that the actor deploying the particular geoengineering method is unable to pay the damages awarded? Fourth, disagreement concerning why victims should be compensated has the potential to impact policy-making. In this regard, approaches that “are based on ex post corrective justice, for example, would differ substantially from those based on altering actors’ ex ante incentives to encourage socially optimal outcomes”.<sup>382</sup> Fifth, States are generally reluctant to pay compensation and even less willing to acknowledge international legal liability. Lastly, compensation is almost always provided by means of a monetary remedy. In line with current environmental agreements, State liability for a particular geoengineering activity would typically only result in monetary damages to be paid and, unless the regime of State responsibility applies, would not allow a claimant State to prevent or stop the damaging geoengineering activities of another State.<sup>383</sup> All this has prompted one commentator to take a particularly sobering view concerning the development of a suitable liability regime: **146**

As a result, any liability regime is unlikely to make whole those nations and individuals harmed by geoengineering. For many of the same reasons, an environmental assurance bond requirement similar to that proposed for nanotechnology would not be a suitable primary mechanism for governing geoengineering. The potential harms are simply too irreversible, irremediable, and catastrophic for monetary damages to suffice. Just as common law tort provides for injunctive relief in situations where damages are inadequate, the difficulty of

<sup>381</sup> Lin (2013b), p. 140.

<sup>382</sup> Reynolds (2019a).

<sup>383</sup> See Lin (2013b), p. 140, holding that “[m]onetary damages are likely to be a poor remedy for many of the harms that result from geoengineering”.

establishing, measuring, and making up for adverse consequences calls for a cautious approach to geoengineering.<sup>384</sup>

147 Other commentators disagree with this position, arguing that “[h]istorical antecedents and contemporary methodological and legal innovations provide a strong basis for constructing a liability regime”.<sup>385</sup> Indeed, while there cannot be any doubt that the call for a cautious approach to geoengineering deserves approval in light of the risks involved in virtually any of the geoengineering approaches discussed above (¶49 *et seq*), this should not be used as an argument to refrain from efforts to develop an appropriate liability regime. Quite the opposite, it is crucially important that a liability system be modelled in such a way that it provides the right incentives for any actors deciding to carry out geoengineering so the methods used are deployed in a way that ensures the greatest possible protection of other goods and values, including the environment and climate. At the same time, a liability system established at the *international* level requires States to be willing to agree to it and, if the liability risk is too high, no matter for which actor, States may decide to boycott the underlying regime, a possibility that militates in favour of a flexible approach.<sup>386</sup> The central challenge is, therefore, that an attempt must be made to ‘square the circle’: the liability regime must be as strict as possible but as flexible as necessary. The obvious question is, how could the balance between these requirements be achieved? It is submitted that the only feasible option is to ask for lessons that can be learned from legal approaches which have been implemented vis-à-vis activities that are, in one way or the other, comparable to geoengineering, and to follow the historical precedents of those approaches which have succeeded.

148 As regards certain SRM techniques, in particular SAI, it has been argued that the closest similarity is to the regime of peaceful use of nuclear energy, particularly taking into account the risk of potentially catastrophic transboundary consequences involved with the two activities.<sup>387</sup> Even though it has to be kept in mind that the impacts of nuclear accidents are, due to the Chernobyl and Fukushima disasters, far better studied than those of SRM, both activities are indeed characterised by complex technological and scientific challenges and uncertainties. More generally, the urgent need to find a balance between the interests of the different actors involved, as well as between what is desirable and what is feasible, militates in favour of a “mixed” liability system under which different standards could be

<sup>384</sup> Lin (2013b), p. 141; see also Robock (2012), p. 203.

<sup>385</sup> Horton et al. (2015), p. 227.

<sup>386</sup> But see Horton et al. (2015), p. 226, arguing that in the “absence of a credible liability system, the international community would (arguably) be unlikely to agree to any form of SAI implementation”. If this assumption is correct (what seems debatable), then one may say that the existing reservation to develop an appropriate liability regime represents a political strategy to prevent that geoengineering approaches will be carried out in future.

<sup>387</sup> The nuclear liability regime consists of two sets of sub-regimes: the Paris Regime developed under the auspices of the Nuclear Energy Agency of the OECD, and the Vienna Regime established by the International Atomic Energy Agency (IAEA).

applied to different situations and actors. An effective liability regime should also take into account the requirement of providing for financial securities and establishing residual mechanisms such as funds. These basic requirements can be substantiated based on those elements that are common to existing international liability regimes and which could therefore also form the core of a future liability regime for geoengineering.<sup>388</sup>

With regard to the liable actors, most international liability regimes initially focus on one single type of actor, that is first and foremost, exclusively and strictly liable.<sup>389</sup> The actor concerned is usually the entity in control of the activity when an incident occurs, or the entity instituting the transport of hazardous goods respectively.<sup>390</sup> These actors, being responsible for the safety of their operations, are the closest related to the activity concerned and thus best suited to appropriately manage the hazards and take action in case of an incident. Furthermore, exclusive liability avoids the complicated task of establishing which of the several actors involved in, for example, the transport of hazardous material, is liable and it may also prevent the fragmentation of insurance capacity as not every actor involved has to take out insurance.<sup>391</sup> At the same time, all existing regimes acknowledge the existence of exemptions from liability<sup>392</sup> and most regimes also allow for a consideration of any

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<sup>388</sup>The following description of common liability elements is based on Saxler et al. (2015), pp. 140–145.

<sup>389</sup>See Horton et al. (2015), p. 244, stating that “it is necessary to recognize that strict liability (as opposed to fault-based) has become the standard in international law, and would almost certainly apply to any SAI liability regime”.

<sup>390</sup>Operator: Art 3 of the Paris Convention on Third Party Liability in the Field of Nuclear Energy of 29 July 1960 (Paris Convention), as amended by the Additional Protocol of 28 January 1964 (956 UNTS 263); Article II(1) of the Vienna Convention on Civil Liability for Nuclear Damage of 21 May 1963 (1063 UNTS 265); Article 3 of the Annex to the Brussels Convention Supplementary to the Convention on Third Party Liability in the Field of Nuclear Energy of 31 January 1963 (Brussels Supplementary Convention), as amended by the Additional Protocol of 28 January 1964 (1041 UNTS 358); Article II(1)(2) of the Convention on the Liability of Operators of Nuclear Ships of 25 May 1962 (Nuclear Ships Convention), American Journal of International Law 57 (1963), p. 268; Articles 6 & 7 of the Lugano Convention. Shipowner: Article III(1) of the Convention on Civil Liability for Oil Pollution Damage of 29 November 1969 (973 UNTS 3), amended by the Protocol to the International Convention on Civil Liability for Oil Pollution Damage of 19 November 1976 (1225 UNTS 355), and revised by the Protocol to amend the International Convention on Civil Liability for Oil Pollution Damage, of 27 November 1992 (1956 UNTS 255); Article 3(1) of the International Convention on Civil Liability for Bunker Oil Pollution Damage (Bunkers Convention) of 23 March 2001, ILM 40 (2001), 1493; Article 7(1) of the HNS Convention.

<sup>391</sup>See International Atomic Energy Agency (IAEA) (2017), p. 1.

<sup>392</sup>E.g., Article 9 of the Paris Convention; Article IV(3) of the Vienna Convention; Article 3(5) of the Annex to the Supplementary Compensation Convention; Article VIII of the Nuclear Ships Convention; Article III(2) of the Oil Civil Liability Convention; Article 3(3) of the Bunkers Convention; Article 7(2) of the HNS Convention; Article 4(5) of the Basel Protocol.



contributory fault on the part of the victim of harm<sup>393</sup> and fault-based liability of other actors.<sup>394</sup>

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As far as the covered damage is concerned, all existent regimes refer to damage to persons and property.<sup>395</sup> Treaties that were concluded more recently include certain kinds of economic loss<sup>396</sup> and measures of prevention following the occurrence of an incident to minimise and/or prevent further harm.<sup>397</sup> These agreements also address damage to the environment, albeit in different ways. While all treaties provide for compensation of measures of reinstatement,<sup>398</sup> in most instances this only includes actions necessary to reinstate or restore the harmed environment. In contrast, some regimes go beyond that by referring to the introduction of “equivalent [environmental] components into the environment”<sup>399</sup> if the restoration of the original environment is not possible. Furthermore, some regimes, be it expressly or tacitly, include compensation for scientific assessment of the damaged environment.<sup>400</sup> Compensation for harm to the environment which is unrelated to pure economic loss or damage to persons and property is not regulated by any of the regimes concerned.<sup>401</sup>

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Concerning limitations to liability, all the relevant agreements contain provisions on time limits. In particular, an absolute time limit generally applies which is calculated by referring to the occurrence of the incident in question as the starting

<sup>393</sup> Article IV(2) of the Vienna Convention; Article 3(6) of the Annex to the Supplementary Compensation Convention; Article II(5) of the Nuclear Ships Convention; Article III(3) of the Oil Civil Liability Convention; Article 3(4) of the Bunkers Convention; Article 7(3) of the HNS Convention; Article 4(3) of the Kiev Protocol; Article 9 of the Lugano Convention.

<sup>394</sup> See Article III(4) of the Oil Civil Liability Convention; Article 7(5) of the HNS Convention; Article 5 of the Basel Protocol.

<sup>395</sup> E.g., Article 3(a)(i) & (ii) of the Paris Convention; Article I(7) of the Nuclear Ships Convention; Article 1(6)(a) & (b) of the HNS Convention.

<sup>396</sup> E.g., Article I(f)(iii), (v) & (vii) of the Supplementary Compensation Convention; Article I(6)(a) of the Oil Civil Liability Convention; Article I(9)(a) of the Bunkers Convention; Article 1(6)(c) of the HNS Convention; Article 2(2)(c)(iii) of the Basel Protocol; Article 2(2)(d)(iii) of the Kiev Protocol.

<sup>397</sup> E.g., Section I B(vii)(6) & (ix) of the Protocol to Amend the Convention on Third Party Liability in the Field of Nuclear Energy of 29 July 1960, as amended by the Additional Protocol of 28 January 1964 and by the Protocol of 16 November 1982, of 12 February 2004 (2004 Paris Protocol), [https://www.oecd-nea.org/law/paris\\_convention.pdf](https://www.oecd-nea.org/law/paris_convention.pdf), accessed 1 Apr 2022; Article I(f)(vi) & (h) of the Supplementary Compensation Convention; Article 1(9)(b) & (7) of the Bunkers Convention; Article I(6)(b) & (7) of the Oil Civil Liability Convention.

<sup>398</sup> E.g., Section I B(vii)(4) & (viii) of the 2004 Paris Protocol; Article I(f)(iv) & (g) of the Supplementary Compensation Convention; Article I(6)(a) of the Oil Civil Liability Convention; Article 1(9)(a) of the Bunkers Convention; Article 1(6)(c) of the HNS Convention.

<sup>399</sup> Article 2(8) of the Lugano Convention.

<sup>400</sup> Article 2(2)(d) of the Basel Protocol.

<sup>401</sup> It has been stated that the Lugano Convention, which provides for the introduction of equivalents into the damaged environment, comes “very close to providing compensation for damage to the environment *per se*, for introducing the ‘equivalent’ into the environment is qualitatively different from restoring the environment to its exact pre-existing state” (de La Fayette 2010, p. 340).



point.<sup>402</sup> Almost all regimes establish limits concerning monetary compensation, shaped either by way of minimum<sup>403</sup> and/or maximum amounts with some agreements foreseeing that the limitation of compensation depends on the establishment of a fund by the liable actor.<sup>404</sup> Finally, some liability regimes have a general requirement that the operator provides some kind of financial security.<sup>405</sup> Some agreements contain further obligations relevant to one or several funds that have to be established in advance or establish such funds themselves to provide supplementary compensation. Financial resources are to be provided either by the State party that authorises the activity, by the State party on whose territory the activity is carried out,<sup>406</sup> by the State parties collectively<sup>407</sup> or by the recipients of the hazardous material.<sup>408</sup> With regard to SRM, it has been suggested that operators within the fossil fuel industry should be required to provide funds sufficient for potential future compensation.<sup>409</sup>

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<sup>402</sup> See, e.g., Article 8(a) of the Paris Convention; Article VI(1) of the Vienna Convention; Article 9(1) of the Annex to the Supplementary Compensation Convention; Article V(1) of the Nuclear Ships Convention; Article VIII of the Oil Civil Liability Convention; Article 8 of the Bunkers Convention; Article 37(3) of the HNS Convention.

<sup>403</sup> See Article 7(b) & (c) of the Paris Convention; Article V of the Vienna Convention; Article 4 of the Annex to the Supplementary Compensation Convention.

<sup>404</sup> Article V(1) – (3) of the Oil Civil Liability Convention; Article 9(1) – (3) HNS Convention.

<sup>405</sup> Article 10 of the Paris Convention; Article 3(b)(i) of the Brussels Supplementary Convention; Article VII of the Vienna Convention; Article III(2) & (3) of the Nuclear Ships Convention; Article VII of the Oil Civil Liability Convention; Article 7 of the Bunkers Convention; Article 12 of the HNS Convention; Article 14 of the Basel Protocol; Art 11 of and Annex II Part II to the Kiev Protocol. According to Article 12 Lugano Convention, financial security is “[w]here appropriate, taking due account of the risks of the activity”, compulsory.

<sup>406</sup> See Section I K (c) of the 2004 Paris Protocol; Article 3(b)(ii) of the Brussels Supplementary Convention.

<sup>407</sup> Article 3(b)(iii) & Article 12 of the Brussels Supplementary Convention; Article III(1)(b) & Article IV of the Supplementary Compensation Convention.

<sup>408</sup> Articles 2(2), 4 & 10 of the Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (Oil Fund Convention) of 18 December 1971 (1110 UNTS 57), amended by the Protocol to the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage of 19 November 1976 (1862 UNTS 509) and revised by the Protocol to amend the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage of 27 November 1992 (1953 UNTS 330). In particular due to the existence and specific design of the compensation funds foreseen by the aforementioned agreements, the oil pollution liability regime is strongly advocated as a model for geoengineering by Horton et al. (2015), pp. 250–259.

<sup>409</sup> Horton et al. (2015), p. 258.

## 9.7 Conclusion

**152** The aforementioned elements offer some useful insights into how a potential future regime of liability for geoengineering damage could be shaped. In particular, the flexible character of many existent agreements facilitates their continued application to changing circumstances as well as newly emerging knowledge and activities. Furthermore, their very existence is evidence of a certain degree of acceptability concerning their underlying guiding principles and institutional architecture. At the same time, it has to be kept in mind that some of the aforementioned treaties have not yet entered into force, a fact that again indicates the existing reluctance on behalf of the community of States towards accepting *any* general framework establishing their liability for harm arising from engaging in ‘ultra-hazardous’ activities.

**153** Therefore, in the absence of an adequately tailored geoengineering liability regime, it can be assumed that the developments identified in Chap. 7 regarding tort litigation will apply to geoengineering activities should any damage occur as a result of a large-scale experiment or deployment. This assumption is justified in view of the comparatively close interrelationship between the climate regime on the one hand and geoengineering on the other, especially considering that the various approaches are all consistent in their aim to contribute to the objectives of the Paris Agreement. This assumption is also reasonable in view of the fact that the challenges posed in the context of climate litigation in connection with establishing a causal nexus between activity and damage are almost equally relevant to geoengineering. Adding to the viability of this approach is the fact that the enforcement of liability claims before national courts does not involve objections that often apply at the level of public international law. In this respect, insofar as the respective tort claims are directed against private actors carrying out the activities in question and in accordance with the polluter-pays principle, it is neither possible to invoke the principle of State immunity nor can the jurisdiction of the courts be challenged by the parties to the dispute. Against this background, geoengineering could, in the future, prove to be a model with regard to international corporate liability for environmental harm.

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# Chapter 10

## Synthesis



Peter Gailhofer, David Krebs, Alexander Proelß, Kirsten Schmalenbach,  
and Roda Verheyen

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## 10.1 Aim and Course of Book

Building on a comprehensive study commissioned by the German Federal Environmental Agency in 2018, this book seeks to identify the legal preconditions of the liability of private enterprises for transboundary environmental damage. This goal required an accurate description of the situation *de lege lata*, i.e. an examination of

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whether and if so, to what extent existing norms and institutions in international and national law can adequately and effectively address transboundary environmental damage caused by economic actors. However, such an examination would be both incomplete and soon outdated if current and emerging legal developments along with their implications were not also considered in appropriate depth. In addition to the stated goal of identifying existing legal norms and principles, this book has simultaneously endeavoured to focus on current scholarly debates, legal controversies and policy discussions about how liability for environmental damage could and should evolve *de lege ferenda*.

- 2 The present research has pursued these objectives by looking at a very broad and varied range of legal systems, fora, environmental issues and debates regarding liability for environmental damage. Problems of corporate liability concern numerous legal issues touching, *inter alia*, international and national public environmental law, human rights and constitutional law, private international law, national tort and corporate law as well as issues such as jurisdiction and choice of law. Factoring in this list of legal issues also requires a detailed understanding of the diverse environmental problems and various governance systems already in play regarding corporate liability. However, given the sheer number and variety of relevant issues and the complexities involved, the somewhat selective framing of the subject matter of this study was unavoidable.
- 3 Having said that, all involved in this research believe that the choice of the legal systems, concepts and challenges set out in the preceding eight chapters do indeed cover the most relevant issues. The book begins with a brief introduction to the goals and functions of environmental liability and a summary of standard models, specifically in ‘law and economics’ before considering how liability functions (Chap. 2). From here, this research turns its attention to the pertinent concepts and principles of public international law (Chap. 3) where the relevant aspects of international law on State responsibility and liability have been analysed. Proceeding further, the increasing interrelations between human rights and environmental law, as well as current debates and initiatives regarding the international legal status of transnational corporations and other enterprises (Chap. 4) have also been examined. The next chapter focuses on existing specific liability regimes established by individual international agreements, analyses their substantive content and identifies the addressees of the respective obligations (Chap. 5). The potential of using national law to tackle civil liability for transboundary damage (Chap. 6) has also been detailed before an analysis is offered regarding specific regulatory options, *de lege ferenda*, for anchoring environmental due diligence obligations in national home State laws (Chap. 7). These laws, which are effective across State borders, may serve, *inter alia*, as a standard of care for civil liability claims in transnational value chains. Finally, open questions and practical legal problems regarding climate change litigation as a reference area for environmental liability are addressed and assessed (Chap. 8) before the preconditions and design options with respect to the increasingly important problem of geoengineering are put under the microscope (Chap. 9).
- 4 Given this plethora of issues and challenges, it should come as no surprise that the findings presented here draw a multi-faceted picture of the conditions and prospects

of international liability for environmental damage. Rather than proposing a systematic arrangement of coherent norms and principles, the argument is made here that it is possible to identify trends in the dynamic evolution of specific norms and concepts in various legal spheres. This may, at first glance, seem less than ideal given the existing pessimism about the power of international law to avert environmental collapse.<sup>1</sup> However, a dynamic evolution currently underway offers more than meets the eye and cautious optimism is justified for many reasons, including historical comparison: In the first study on international environmental liability commissioned by the Federal Environmental Agency published 22 years before the present analysis, *Wolfrum and Langenfeld* came to a rather sobering conclusion that there was little likelihood of any significant evolution in international environmental liability law in the foreseeable future. Apart from selective progress in the development of international environmental liability, which was limited to specific legal sectors, they found little reason to predict there would be any significant evolution in the field.<sup>2</sup> *Prima facie*, our analysis of the legal situation seems to support such a disillusioned diagnosis. A closer look at a broader range of legal phenomena and dynamics, however, arguably justifies a more expectant outlook as legal inertia has given way to considerable impetus.

## 10.2 Tendencies: Convergence of Human Rights and Environmental Law as the Main Driver of Legal Development

According to the present analysis, this more optimistic outlook is not based on the development of genuine environmental liability rules for private parties in international law *per se*. However, an assessment of the status of corporate liability for transboundary environmental damage that solely looks at the slow progress in international environmental law would create an erroneous perception. Significant trends have emerged concerning two interrelated factors beyond the realm of the rules and principles of international environmental liability. First of all, there has been a shift in normative development toward the domestic level. This is evidenced by businesses' obligations to prevent, retribute or compensate for transboundary environmental damage now being regulated by States using domestic laws with extraterritorial effect and national enforcement mechanisms. Secondly, given the historic intransigence of international law to change, a dynamic evolution of international environmental liability now taking place at the intersection of human rights and environmental law is both remarkable and arguably unprecedented. This dynamic is predominantly driven by national and international courts and other decision-making bodies as well as by national legislation. It may point to the

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<sup>1</sup>Banda (2019), p. 1956.

<sup>2</sup>Wolfrum and Langenfeld (1998), p. 435.

emergence of an environmental standard of care which can be referred to, *inter alia*, by national civil courts around the world to determine the liability of corporations and other businesses for transboundary environmental damage.

6 Having said that, an isolated consideration of the current state of international environmental liability law seems to indicate little progress is being made. This assessment is supported, first of all, with respect to the general question of whether international corporations and other businesses can be regarded as duty-bearers under international environmental law. With the notable exception of UNCLOS (Chap. 13 ¶ 15 *et seq* (Sect. 13.2.3)), none of the rules and principles of international environmental law analysed in this book, be they general or more specific, are directly binding on international corporations and other businesses. This, of course, does not imply that international law is irrelevant for these private actors. Indeed, the increasing specificity of environmental as well as product-related norms regulating environmental risks caused by private enterprises which operate in States other than the State of origin is quite evident, both in terms of hard and soft law. International environmental treaties in particular are increasingly integrating clear and predictable obligations for corporations with respect to specific environmental risks. To become legally effective, however, these obligations still predominantly require implementation and sanctioning by States. The current dynamics of the juridification of environmental norms seem to point to a gradual and selective change in the legal status of private actors. While this is an improvement on the previous state of affairs, international environmental law continues to deal with non-State conduct indirectly, i.e. through the intermediation of domestic law and State action.

7 The situation *de lege lata* regarding State liability and responsibility may also seem to support a sceptical outlook regarding the chances of there being any significant evolution of international environmental liability law. For example, current plans to interfere with the climate system via geo- and climate engineering indicate that there is a clear need to agree on standards for international environmental liability, however, the prospects of adopting a relevant treaty instrument are low (Chap. 9). States are reluctant to agree to both the adoption of new and the strengthening of existing instruments concerning civil liability and, as such, this reticence becomes even more entrenched regarding new instruments addressing State liability.

8 The liability of States for transboundary harm is neither a *de lege lata* nor *ferenda* option due to the general unwillingness of States to accept any liability for lawful but harmful acts. This unwillingness persists despite State responsibility for the violation of the no-harm rule being widely accepted as customary international law. It is State responsibility that, according to our analysis, should be the first vehicle driving the development of international norms focusing on extraterritorial instruments and obligations. While the practical relevance of the rule is rather limited, the normative relevance of the no-harm rule, which contains due diligence obligations for States towards the environment, is undisputed. Measured against the total amount of transboundary environmental damage subject to the no-harm rule, both the number of cases and the portion of that damage ruled on by international courts and tribunals have remained low. The Rio Declaration, including the principle of prevention, is

now almost 30 years old but its real-world application remains a matter of potential rather than fact. Customary international law still does not recognise any general duties of home States to ensure companies under their jurisdiction use their management control instruments to prevent environmental harm in the host States. This is particularly problematic in cases where environmental harm does not also impair human rights. Consequently, State responsibility only covers cases where environmental harm originates from the home State's territory (Chap. 3).

However, and despite its limits, the no-harm rule still has great potential for legal development, all the more so since the ICJ, among others, has proven in the last few decades that it can be very dynamically applied. With a view to these prospects, it is argued in Chap. 3 that the combined environmental principles of both polluter-pays and prevention have the potential to bring about a new rule according to which States must ensure that public and private polluters ultimately bear the cost of their action or inaction. This rule would see States lose the ability to selectively and arbitrarily exclude public and private polluters from their environmental responsibility and liability. A comparison of existing international civil liability regimes and related non-binding instruments makes it possible to identify similarities regarding relevant normative concepts and preconditions of environmental liability and provides useful insights into how more specified regimes of civil liability for environmental damage may be shaped in the future (Chap. 5). While existing civil liability regimes reflect the polluter-pays principle, this principle does not legally prescribe any specific liability model when addressing environmental damage. Instead, it sets the ultimate goal that the polluter bears the cost of the damage caused by the pollution via different liability and remediation tools available under international and national law, e.g. by choosing a civil, administrative or criminal liability model, or a combination thereof. This makes further development of the combined principles of prevention and polluter-pays, which will limit unreasonable polluter-protective legislation, all the more important.

The shift to States' obligations to regulate companies whose operations have negative extraterritorial impacts would be facilitated by further development of the prevention principle and the polluter pays principle. In contrast to international environmental law, human rights law is already cautiously embracing a duty for home States to ensure that companies subject to their jurisdiction use their corporate influence over suppliers and subsidiaries to ensure respect for human rights standards in host States.<sup>3</sup> Given the sobering track record of international cooperation on pressing issues of environmental degradation, such juridical progress on international obligations towards the environment is long overdue and very much in line with the objectives and functions of both human rights and international environmental law. It is also not unduly demanding to require States to comply with broadly

<sup>3</sup>Human Rights Committee, General comment No. 36 (2018) on Article 6 of the International Covenant on Civil and Political Rights, on the right to life – Doc. CCPR/C/GC/36, 2018, para 22 (footnotes omitted). Committee on Economic, Social and Cultural Rights, General comment No. 24 (2017) on State obligations under the International Covenant on Economic, Social and Cultural Rights in the context of business activities – Doc. E/C.12/GC/24, para 30 et seq.



accepted procedures to assess risks of extraterritorial human rights violations, to observe global scientific consensus about indispensable measures to prevent environmental catastrophes and to issue adequate regulations to prevent corporations under their jurisdiction from contributing to serious human rights abuses.

11 Such juridical progress can be explained and gain relevance as the overlap between environmental law and human rights grows, a process that may be seen as both regime congruence and regime convergence. The concept of regime congruence was proposed by *Banda* to grasp the productive mechanisms of mutually supportive regimes in cases where two bodies of law seek to regulate the same subject matter.<sup>4</sup> Regime convergence refers to an integration of legal concepts, principles and doctrines by separate regimes which potentially broadens the intersection of their normative scopes and, thus, also increases regime congruence.

12 Many of the cases and debates described in this book refer to productive intersections between human rights and environmental law in line with the idea of regime congruence. Human rights litigation is increasingly willing to integrate primary environmental norms and standards to define a standard of care that shapes the content of what duty-holders of human rights owe to individual rights-holders.<sup>5</sup> As obligations of conduct to prevent rights violations human rights obligations are not breached simply because environmental damage has occurred.<sup>6</sup> In contrast, courts have to clarify the normative standard to determine whether the conduct of a State was adequate in light of the given risks to human rights. The fact that courts now seem to be willing to establish this standard of care by drawing on general principles, substantial and procedural obligations according to international environmental law as well as international soft law, can be viewed as one of the most promising aspects of the transformative spread of ideas we are currently witnessing across in human rights and environmental law.<sup>7</sup> For example, courts and other decision-making bodies have specified that the precautionary principle is conclusive for determining whether a State has complied with its obligations to protect human rights and delineates States' duties to prevent violations of human rights arising from environmental harm caused by private actors under their jurisdiction (Chaps. 3, 4 and 8).<sup>8</sup>

13 As a consequence of regime congruence, recourse to human rights may improve the chances of meaningfully enforcing transnational environmental norms and standards. Conversely, by integrating core environmental norms into a human

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<sup>4</sup>Banda (2019); Chap. 4.

<sup>5</sup>See Banda (2019), p. 1884; Chap. 4.

<sup>6</sup>IACtHR (2020), p. 207.

<sup>7</sup>Cf. Banda (2019).

<sup>8</sup>Prominently, the Supreme Court of the Netherlands in its decision *Urgenda Foundation v the State of the Netherlands* (2019) 19/00135 stressed the importance of the precautionary principle in this respect, which it considered a binding principle. Making reference to the UNFCCC and to the decision in ECtHR *Tătar v Romania* App No 67021/01 (2009), the court noted that, contrary to what the State argued, it is precisely the uncertainty of future events—especially with regard to the existence of dangerous tipping points—that requires the State to adopt proactive and effective climate policies, cf. Verschuuren (2019).

rights-based standard of care, the content of what measures are required to meet human rights obligations in the face of environmental risks is substantiated. Thus, human rights law, which more readily facilitates individual claims than environmental law, has the potential to give “teeth to the international environmental law regime”.<sup>9</sup> Access to justice in instances such as those related to climate change litigation (Chap. 8), may result in the strengthening and extending of environmental rights and obligations. Judgments, decisions and legal opinions, such as the much-debated advisory opinion of the Interamerican Court of Human Rights on the Environment and Human Rights,<sup>10</sup> support the assumption that substantial human rights law is indeed “capable of evolution in its understanding of extraterritoriality and would support the application of human rights treaties to transboundary environmental harm” (Chaps. 3 and 4).<sup>11</sup>

Traditionally, such productive intersections have been limited due to a narrow understanding of the interdependency of human rights and the environment.<sup>12</sup> Environmental interests without direct and imminent connection to life, health or property are, at least under most human rights instruments, not considered as protected by human rights. Mediated or dispersed harm, particularly if it affects a large number of people in a wide area, can often not be translated into an issue of human rights law. Many of the cases examined in this book, however, illustrate that national and international courts, as well as other authorities, are very much prepared to interpret the scope of protection of human rights guarantees in ways that make it possible to understand impairments due to environmental problems or climate change as human rights violations. The legal debate on the existence, scope and content of environmental human rights is now increasingly focused on potential avenues to strengthen the intersections between human rights, climate and the environment. Most prominently, this is emphasised by advocating the existence of a human right to a healthy environment. In a similar vein, a recent decision by the Inter-American Court of Human Rights illustrates how a version of collective environmental rights could take shape when the Court found that there had been a violation of, among other things, a right to a healthy environment for indigenous peoples.<sup>13</sup> The recent decision of the German Federal Constitutional Court on the German Climate Protection Act<sup>14</sup> points to another opportunity to strengthen the link between the environment and human rights. Here, the Court recognised an intertemporal dimension to fundamental rights which may require avoiding future violations of rights due to a present deficit of legal instruments to protect both the

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<sup>9</sup>Banda (2019).

<sup>10</sup>IACtHR *The environment and human rights* (Advisory Opinion) OC-23/17 (2017), available at [http://www.corteidh.or.cr/docs/opiniones/seriea\\_23\\_esp.pdf](http://www.corteidh.or.cr/docs/opiniones/seriea_23_esp.pdf) (in Spanish), accessed 26 Apr 2022.

<sup>11</sup>Banda (2019).

<sup>12</sup>Cf. Chap. 4.

<sup>13</sup>IACtHR (2020), p. 203, cf. Tigre (2020).

<sup>14</sup>Federal Constitutional Court I BvR 2656/18 (2021), Rn. 1-270, [http://www.bverfg.de/e/rs20210324\\_1bvr265618.html](http://www.bverfg.de/e/rs20210324_1bvr265618.html) accessed 26 Apr 2022; Chap. 8 ¶ 8 (Sect. 8.1.2).

climate and environment. This emergence of an intertemporal aspect could further contribute to a significant expansion of redress against environmental damage. Such decisions prove that the increasing scientific certainty of the existential importance of environment and climate on human rights is already being reflected in a certain degree of disruption in traditional doctrines and the embrace of new legal ideas.

**15** It remains to be seen to what extent environmental standards of care derived from and developed for constitutional and human rights purposes will become relevant for issues of the liability of transnational corporations and other businesses. There are numerous indications, however, that the productive interplay between human rights with environmental norms and standards will increasingly reverberate in cases involving transnational tort litigation before national civil courts. National tort law, as the most important “enforcer of human rights”<sup>15</sup> in relationships between private actors, seems very much able to take up and further evolve regime congruence between human rights and the environment.

**16** Recent case law is an example of how international human rights, in both hard and soft law, can become relevant for national judges as a starting point to develop environmental standards of care. Prominent cases of climate litigation indicate that national judiciaries may be better placed to look at duties of care than international courts whose ability to move beyond the merits is limited by their jurisdiction. This can be demonstrated by reference to relevant cases decided by Dutch, Irish and German courts where judgments explicitly referred to resolutions and decisions of Human Rights bodies. Landmark cases (e.g. *Urgenda*, *Shell* and similar cases in the US) point to the potential of national tort law regimes to integrate certain standards, such as scientifically proven and internationally endorsed greenhouse gas emission reduction targets, as a basis for private duties of care (Chap. 8). Even if many individual questions remain open and confronted by obstacles, especially in private international law, substantive civil law does not seem to be plagued by insurmountable obstacles that prevent it from dealing with more cases in the future. Importantly, doctrines of fault-based liability in national tort law regimes are able, in principle, to deal with transboundary environmental damage arising from activities in global value chains involving various and diverse actors. The standard of care, given substance by civil courts on a case-by-case basis, can integrate environmental norms and standards from various sources to determine a defendant’s obligations to prevent harm (Chap. 6).

**17** The development of the transboundary environmental liability of corporations and other businesses can also be driven forward by domestic legislation which, currently, constitutes the epicentre of legislative dynamics regarding the transboundary liability of private actors. Home State regulation (Sect. 7.2) plays an important role in the evolving convergence between human rights and environmental protection. Most importantly, as described in detail in Chap. 7, new legislation and current proposals require corporations to carry out specific due diligence procedures to prevent infringing human rights and harm to the environment arising

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<sup>15</sup>Cf. van Dam (2011), pp. 243, 254; Chap. 2.

from activities in their global value chains. During the preparatory stages of this book, there was remarkable political and legislative momentum in this area, a phenomenon that has persisted to the time of completion and shows little sign of slowing. The adoption in 2021 of the German Supply Chain Due Diligence Act, the Norwegian Transparency Act and the development of drafts for an EU Directive by the European Parliament, coupled with the European Commission's proposal on corporate sustainability due diligence in 2022, are arguably the most striking examples of this legislative trend.<sup>16</sup> From an international perspective, such approaches may be seen as measures by States to discharge the potential, albeit still contested, obligation to adopt *ex ante* legislation to prevent damage to human rights and the environment.<sup>17</sup> From the perspective of national civil liability regimes, these laws could strengthen and specify a minimum standard of care for domestic businesses and ensure access to justice for victims of environmental damage. In doing so, these efforts could fill, or at least minimize, remaining gaps in national liability regimes for transboundary environmental damage. The integration of civil liability clauses in some of these regulations to enable victims of transboundary harm to seek redress before home State courts thus seems particularly consequential.

Even though a healthy scepticism towards regulatory instruments relying on traditional home State control may be justified,<sup>18</sup> the emerging trend towards extraterritorially effective home State regulation is presented here as a plausible approach to simultaneously meet the international requirements of the polluter-pays principle, the prevention principle and human rights obligations. The fact that national regulations often do not meet the requirements of these standards does not undermine this theoretical potential. The urgent need for ambitious and globally coordinated measures, however, highlights the necessity for States' domestic regulation of business enterprises with extraterritorial effects to be rooted in international law. In this respect, too, current developments are pointing the way. The open-ended intergovernmental working group on transnational corporations and other business enterprises with respect to human rights (OEIGWG), established by the UN Human Rights Council, initially pursued relatively radical innovations aimed at establishing direct human rights obligations for transnational business enterprises. However, it mollified its approach in more recent drafts that now emphasise States' extraterritorial duty to regulate human rights risks caused by the behaviour of their citizens. The drafts also emphasise that the notion of human rights abuse includes any harm which impedes the full enjoyment of the right to a safe, clean, healthy and sustainable environment while also making clear that obligations to prevent such harms should be enforceable in home-State courts via transnational tort litigation (Chap. 4 ¶ 39 *et seq.*, ¶ 70 (Sects. 4.2.3 and 4.3.3)).

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<sup>16</sup>Cf. Chap. 7 ¶ 20, 38, and 62.

<sup>17</sup>Recent case law of the German Federal Constitutional Court suggests such an obligation of Germany could be based on human rights obligations in the German constitution, see above, Sect. 7.2 referring to Federal Constitutional Court '*BND-Gesetz*' 1 BvR 2835/17 (2020).

<sup>18</sup>Cf. Morgera (2009), pp. 30–34 and Sect. 7.2.

### 10.3 Prospects: An Emerging Transnational Environmental Standard of Care?

- 19 The evolution of what can be defined as a transnational environmental standard of care could be seen as one of the most striking developments in the context of environmental liability law. Notwithstanding the many differences between the cases and legal constellations considered in this book which concern different parties, legal institutions, fields and levels of law, a number of common features can be described in terms of an environmental standard of care.
- 20 The normative foundation of the standard of care lies in environmental human rights and their relation to fundamental rules and principles of environmental law, such as the prevention principle and the precautionary principle. This standard of care is transnational as it potentially covers and further develops norms on both the national and international levels as well as private norms and standards. These rules and principles, whether specified in transnational private standards, home State norms or binding or non-binding international norms, are increasingly considered to reflect legally relevant norms and expectations with respect to corporate accountability.<sup>19</sup> As such, they are legally relevant reflections of what is considered the standard of care that is necessary and feasible to prevent damage.
- 21 This inclusive nature of the standard of care may be explained by a range of conceptual properties: In particular, it refers to substantial standards, rules or principles ('primary norms', cf. Chap. 2), but does not necessarily by itself constitute a primary norm. In other words, the respective substantial standard depends on and is substantiated by a primary obligation, which applies to the defendant and is directed at protecting a right or legal interest. Climate litigation (Chap. 8), for example, illustrates how a standard of care addressing private entities will differ, depending on the underlying legal norm. While the *Client Earth v. Enea* case concerning directors' duties (Chap. 8 ¶ 120 (Sect. 8.3.3)) demonstrates that climate change is already creating and influencing the standard of care in the internal relationship between shareholders and corporate management, the standard of care in other cases is entirely different in character and may, for example, be directed to the protection of the general public (see e.g. the *Shell* case).
- 22 The most auspicious candidate for an overarching standard of care is the concept of value chain due diligence specified by the UN Guiding Principles on Business and Human Rights (UNGPs); incrementally, the Guiding Principles can be seen as the "global authoritative policy standard" to address governance gaps in business enterprises' global value chains.<sup>20</sup> Due diligence in this context has been defined as the "comprehensive, proactive attempt to uncover human rights risks, actual and potential, over the entire life cycle of a project or business activity, with the aim of

<sup>19</sup>Glinski (2018), pp. 75–91.

<sup>20</sup>See above, Sects. 4.2.2 and 7.2, cf. Sherman (2020).

avoiding and mitigating those risks”.<sup>21</sup> Notwithstanding its original focus on international human rights, this concept, as Chap. 7 analyses in great detail, can be transferred to a model which regulates environmental risks beyond their overlap with human rights. Recent approaches to home-State regulation (§ 17 *et seq*; Sect. 7.2) integrate such environmental due diligence obligations as a separate requirement to human rights due diligence. While, under liability law, due diligence can form a specific standard of care,<sup>22</sup> it is neither a civil law nor a public or administrative law concept *per se* but a much broader, cross-cutting approach (Sects. 6.2.5 and 7.3).

Due diligence obligations are purposely designed to leave a substantial margin of discretion for businesses, authorities, and ultimately courts. First of all, due diligence in this sense typically<sup>23</sup> defines a behavioural standard of conduct (not of result). In accordance with the precautionary principle, duties of conduct in environmental law have the function of enabling risks in complex and uncertain situations to be adequately handled. They are supposed to provide normative commitments and at the same time enable agents to adapt and adopt preventive measures to manage risks and exercise options for action in political circumstances which may realize in an *a priori* unpredictable manner. Having said that, as a predominantly procedural standard of care, due diligence contains requirements to ensure that operations taking place in the legal context of environmental risks are carried out in a well-organised and hazard-minimising manner. Again, this is meant to provide the relevant actors with sufficient room for manoeuvre to deal with future unknown or non-specific risks and hazards.<sup>24</sup>

At the same time, it is important to emphasise that due diligence is not merely a tick-boxing exercise but can result in substantive obligations to avert an identified risk of harm or to mitigate imminent harm. As a substantive standard of care it includes the prohibition for a business to cause harm through its own activities and the duty to prevent harm,<sup>25</sup> but may also oblige them, for example, to implement certain technical measures or instructions to minimise negative environmental effects and refrain from the use of particularly hazardous substances. A

<sup>21</sup>Section 7.2; UN Human Rights Council, Promoting of all Human Rights, Civil, Political, Economic, Social and Cultural Rights, Including the Right to Development - Business and human rights: Towards operationalizing the “protect, respect and remedy” framework, Report of the Special Representative of the Secretary-General on the issue of human rights and transnational corporations and other business enterprises, UN doc. A/HRC/11/13 of 22 April 2009, para. 71, underlining added.

<sup>22</sup>Cf. District Court of The Hague *Milieudefensie v Shell* (2021) C/09/571932 / HA ZA 19-379 (English version) at 4.4.11; Sect. 4.2.2.

<sup>23</sup>A due diligence regulation can also prescribe an obligation of result, i.e., the endeavour to comply with emission targets, Chap. 8 and Gailhofer (2020). An understanding of relevant due diligence obligations as duties of result as opposed to duties of conduct may also be assumed if the harm to be prevented is (or possibly will be) caused by the business in question as opposed to third parties in the value chain, see sect. 7 of the German Supply Chain Act (LkSG).

<sup>24</sup>Cf. Matusche-Beckmann (2001), pp. 88 f.

<sup>25</sup>Cf. Chap. 3.

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proportionality test serves to determine the required level of due diligence in a flexible manner concerning the specific circumstances of the individual situation.

25 Due diligence forms a promising basis for the development and extension of a transnational standard of care. Conversely, liability law can be seen as a particularly suitable mechanism to further substantiate the open and procedural requirements of due diligence for specific transnational and sectoral contexts. There are several reasons, why legal doctrines of national liability law seem to be particularly appropriate tools to implement and further develop environmental due diligence, especially with respect to transboundary environmental damage.

26 First of all, scholars have frequently highlighted the specific potential of civil liability as an instrument of transnational norm-production. Norms and standards in international environmental agreements and soft law and, to a certain extent, the internal standards of transnational companies that reflect their own tried and tested practice as well as industry-wide self-regulation, can turn into legally relevant manifestations of a necessary and feasible standard to prevent damage. Second, fault-based liability, in line with a due diligence standard, requires a proportionality test and allows for the construction of very detailed and context-sensitive standards. Importantly, fault-based liability specifies the relevant duties through balancing interests in individual cases from an *ex post* perspective. Its standards are, at least to a certain extent, shaped by the contributions and deliberations of the parties to a dispute about the particular facts and the appropriateness of measures that would have prevented the damage sustained. It is, therefore, able to constantly adapt standards of reasonableness in view of current social needs and scientific findings.<sup>26</sup>

27 As a consequence of the normative openness and context-sensitivity of a tort-based construction of a standard of care, liability law provides fine-tuned approaches to the attribution of liability in situations where spheres of risks and scopes of action overlap between diverse actors. This allows it to not only address constellations of transboundary environmental damage where harm arises abroad directly as a result of the transboundary effects of a tortfeasor's conduct but also, in principle at least, provides legal solutions for cases in which a defendant's domestic actions only indirectly contribute to damage abroad. Even though courts have so far been reluctant to find liability in cases of harm directly caused by subsidiaries or suppliers in transnational value chains, the increasing recognition and legal implementation of due diligence obligations as envisaged by the UNGPs may lead to this reluctance being increasingly abandoned.

28 Finally, tort law principles may also provide some orientation regarding the allocation of environmental responsibility between public and private actors in transnational constellations, an issue that is still not settled in international law. A standard of care under liability law allows for an understanding of common but differentiated obligations towards the environment which, as we have seen, cannot currently be deduced from international environmental law. It is argued here that the overlap of State and private duties remains an issue to be examined in further

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<sup>26</sup>Cf. Thorpe (2008), p. 101.



research, however, some indications exist that transnational standards of care applicable to private actors on the one hand and States on the other also increasingly converge. Recent climate litigation in civil law cases is proof of the possibility to hold private entities liable based on the same legal standards that define State duties. For example, the standard of care in *Milieudefensie v. Shell* was derived, *inter alia* from the reduction targets of the Paris Agreement (see Chap. 8).

## 10.4 Challenges: Ways Forward for a Transnational Environmental Standard of Care

Notwithstanding the dynamics explicated above, major gaps in environmental liability law remain. This is noteworthy and illustrates the lack of political space for international rules to capture and balance measures able to tackle transboundary environmental challenges caused by globalisation. 29

Well-targeted regulatory approaches should be purposely construed to address legal loopholes that became apparent in environmental liability cases. As shown in Chap. 6, the assertion of transboundary damage claims can be averted by disadvantageous, or at least unclear, rules in private international law. Specifically, in cases against corporations concerning environmental damage directly caused by their suppliers or subsidiaries abroad, domestic courts will often apply foreign tort law, which can be disadvantageous from the perspective of the injured party. Many lawyers also believe that domestic regulations and standards should only be relevant to the liability of European companies if such regulations exonerate them. These views are at odds with the sought after goals of effective transboundary environmental liability, namely, to prevent companies from strategically exploiting ‘pollution havens’ abroad. Domestic regulations exonerating companies also contradict the fundamental principles of European conflict of laws, which is intended to raise the overall level of environmental protection by enabling the victims of environmental damage to choose the applicable law and thereby opt for a more comprehensive standard of care. Given both the sheer scale and global implications of environmental damage caused in transnational value chains, such obstacles to effective transboundary environmental liability should be removed. 30

In addition, the anthropocentric focus of liability law continues to exclude environmental damage that does not simultaneously affect clearly defined human rights, such as those related to property, health and life. From the perspective of legal policy, several possibilities are conceivable to broaden the scope of environmental liability to address this: First, administrative liability and other ‘top-down instruments’ could be strengthened to implement an environmental standard of care. In principle, administrative liability, if applied effectively,<sup>27</sup> can accommodate 31

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<sup>27</sup>The limited practical impact of the Environmental Liability Directive illustrates that the effective implementation of administrative liability is not a given, cf. Verheyen and Franke (2021), pp. 28–35.



restrictions to environmental liability regarding pure environmental damage and its dispersed or delayed effects.<sup>28</sup> In many transnational constellations, however, administrative liability may be rather weak and not the instrument of first choice.

**32** Scholarly debates on how the understanding of the intersection between human rights and the environment could be broadened in the context of tort law have not been pursued since the early 2000s. It remains to be seen whether and in what way the intense dynamics regarding the convergence of human rights and the environment will have an impact on tort law. Recent decisions of human rights and constitutional courts, which further specify the scope of subjective rights in the face of imminent risks, as well as legislative projects focusing on environmental and human rights due diligence may provide the needed impetus for new attempts to broaden the contexts in which tort law operates.

**33** Even though the view presented here is that doctrinal and epistemic problems can be solved in many fields, the proof of causality of a breach of duty for the occurrence of damage remains a cardinal problem for civil environmental liability. Legal doctrine and case law both indicate that challenges in attributing responsibility/liability for complex issues, such as climate change and geoengineering activities, can be overcome in many cases. Approaches that have been applied in case law to date, in particular the ‘preponderance of evidence’ standard, seem to be sufficiently flexible in this respect (Chap. 9) and national civil law could certainly accommodate these developments. Traditional principles which make it possible to facilitate, or even reverse the burden of proof, may sometimes support plaintiffs’ causes. Problems of attribution of damage will remain, however, a source of considerable procedural uncertainty and may, in many cases, inhibit effective environmental litigation.

**34** Targeted regulatory approaches can, in principle, solve these problems. Some of the proposals and implementations of a home State regulation to establish corporate due diligence already address major obstacles to effective transnational environmental liability. The proposals for an implementation of a value chain regulation, analysed in Chap. 7, include explicit references, *inter alia*, to international environmental law in this sense. In addition, detailed due diligence procedures ‘perform’ an *ex-post* standard of care in accordance with international concepts of human rights due diligence. Such statutory obligations clarify that adequate risk analysis and prevention throughout the value chain are legally relevant for a corporation’s risk of liability and where such obligations cannot be circumvented by simply relinquishing control and supervision of the activities of suppliers and subsidiaries. However, further juridification of international environmental law remains crucial beyond the extraterritorial approaches already discussed and is also of great importance for the further development of environmental liability. Environmental regulations, such as the prohibition of the unnecessary use of hazardous substances or very high-risk activities, remain an indispensable preventive instrument to control

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<sup>28</sup> Although the ELD specifically excludes diffuse pollution from its scope of application, Article 4(5) ELD.

transboundary environmental pollution. As an element of fault-based liability, and of other enforcement mechanisms, *ex ante*-regulation also provides supplementary primary norms and standards while delivering additional information about the adequate preventive measures to be taken into account by courts to determine the standard of care.

Multi-level legal dynamics require and are highly likely to lead to multi-level legal strategies. The interactions between different legal levels in the development of an environment-related standard of care will also necessitate legislative activity on all these levels. Unilateral action by States does not necessarily mean that the objective to establish a global level playing field has been rejected. Notwithstanding the prominence of national fora in current proceedings and debates surrounding transboundary environmental liability, the global nature of existing environmental problems also requires global substantive and protective standards. Environmental policy does not have to choose between an exclusively preventive strategy building on *ex ante* regulation on the one hand and *ex post*-liability mechanisms on the other. The advantages of liability law to contribute to the development of adequate and specific standards of care in cases involving transboundary damage, however, are evident. Environmental policy, which must endeavour to solve such global problems should harness this potential and translate it into real-world results.

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# Part IV

## Annex: Selected Environment Treaties with Liability Elements

### Introduction

This Annex focuses on the approaches to liability taken by six relevant treaty regimes, namely:

- The Convention on International Liability for Damage Caused by Space Objects (Chap. 11)
- The Liability Annex to the Protocol on Environmental Protection to the Antarctic Treaty (Chap. 12)
- The Liability Regime Under Part XI UNCLOS (Chap. 13)
- The Nagoya – Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety (Chap. 14)
- The Protocol on Liability and Compensation to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (Chap. 15)
- The Paris Agreement (Chap. 16).

With the exception of the Paris Agreement, the liability disclaimer of which is highly disputed, the treaties discussed in Annex Chaps. 11–16 distinguish themselves from other international instruments by their noteworthy approach to regulating liability. To ensure a certain degree of comparability, the liability analyses of these five treaties follow a common and coherent structure. After briefly describing the regulatory context of the regimes, each treaty analysis addresses the main legal aspects of liability, i.e. (1) the material scope of the regime, (2) the damage covered, (3) rules on causation exemptions and limitations of liability, and (4) stipulations regarding financial securities, enforcement as well as jurisdiction. Finally (5) the rationale behind the liability approach and (6) its practical relevance are discussed. The treaty-specific liability analyses of these international instruments serve several purposes within the context of this book. First, they help to provide an understanding of the extent these treaties reflect the objectives and strategies behind allocating liability for damage to the environment outlined in Chap. 2 above. Second, all

treaties reviewed in the Annex reflect the attitude of States towards their own international liability, which necessarily impacts the emergence, or non-emergence, of customary liability rules, the latter of which is discussed in Chap. 4 above. Finally, the liability regimes discussed in the Annex are complemented by civil liability conventions, which are addressed in more detail in Chap. 5.

# Chapter 11

## Convention on International Liability for Damage Caused by Space Objects



Kirsten Schmalenbach

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## 11.1 Introduction and Regulatory Context

For obvious reasons, space activities are generally classed as ultra-hazardous endeavours, i.e. they are inherently dangerous, not only for the various vehicles leaving the Earth atmosphere, but also the cargo such vehicles carry, be it human or otherwise. Additionally, space activities generate environmental risks in outer space that can, at times, impact the Earth as what goes up, must inevitably come down. The hazards of spaceflight come from multiple sources, including, but not limited to, the technology used (e.g. nuclear power sources) and the hostile nature of outer space

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which is difficult to reach, difficult to survive in and difficult to return from.<sup>1</sup> This inherent danger has been tragically highlighted not only by the shuttle disasters involving Challenger (1986) and Columbia (2003) but also by the vast field of radioactive debris left in Canada after the uncontrolled re-entry of the Soviet satellite Cosmos 954 in 1977. The latter accident exemplifies that ultra-hazardous activities require liability rules because when something goes wrong, the consequences can be significant for any injured parties.<sup>2</sup> However, it cannot be said that Canada's contamination by Cosmos' debris triggered the international agreement on a contractual liability regime for space activities, rather that was something born from the early awareness of the United Nations Committee on the Peaceful Use of Outer Space (COPUOS), established by the UN General Assembly in 1958.<sup>3</sup> Indeed, the international discussion on establishing a proper space liability regime was a direct consequence of the space race between the USA and USSR which started in 1955 when the US announced its intention to launch artificial satellites. The USSR, however, was the first nation to successfully launch an orbital payload using the unmanned Sputnik 1 satellite on 4 October 1957. Unfortunately, disagreements between the two major space-faring nations and cold-war enemies hampered reaching any agreement on a comprehensive space liability regime until the General Assembly, in 1963, adopted Resolution 1962 (XVIII), proclaiming the legal principles governing the activities of States in the exploration and use of outer space, a declaration that included a principle on liability (para. 8).<sup>4</sup> The UN GA's Declaration of Principles is the predecessor of today's Outer Space Treaty, which was agreed upon by the General Assembly in 1966<sup>5</sup> and entered into force in October 1967, almost exactly 10 years after Sputnik's first orbital flight.<sup>6</sup> However, in light of the difficult relationship between the USSR and the USA, it was clear from the outset that the treaty's rather rudimentary responsibility and liability provisions (Article VI and VII) needed to be both further specified and supplemented, a process to be addressed in the "Convention on International Liability for Damage Caused by Space Objects". Work on this Liability Convention built on proposals made by the USA<sup>7</sup> as early as 1962 and by Belgium and Hungary in 1964.<sup>8</sup> Within the institutional framework of COPUOS, a compromise on the space liability regime was finally found in 1971 and subsequently adopted by the General Assembly as Resolution 2777 (XXVI).<sup>9</sup> The Liability Convention entered into force in September 1972 as *lex specialis* to Article VII of the Outer Space Treaty for those States, which

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<sup>1</sup>Soucek (2011), p. 324.

<sup>2</sup>Jenks (1966), p. 122.

<sup>3</sup>GA Resolution 1348 (XIII) of 13 December 1958.

<sup>4</sup>GA Resolution 1962 (XVIII) of 13 December 1963.

<sup>5</sup>GA Resolution 2222 (XXI) of 19 December 1966.

<sup>6</sup>972 UNTS 119.

<sup>7</sup>A/AC.105/C.2/L.4 (1962), reproduced in A/AC.105/6 Section II (4) at 6.

<sup>8</sup>UN Docs A/AC.105/C.2/L.7 and L.10 (1964).

<sup>9</sup>GA Resolution 2777 (XXVI) of 29 November 1971.

are a States party to the Convention.<sup>10</sup> To date, 96 States have ratified the Liability Convention and four international organisations<sup>11</sup> have accepted all the rights and obligations under it. By way of comparison, 109 States are party to the Outer Space Treaty. There is, unsurprisingly, a close link between the two treaties: the understanding of the elements in Article VII Outer Space Treaty is informed by corresponding provisions of the Liability Convention and *vice versa*, given that both treaties have their origin in the same negotiation process and drafting history. Having said that, the Liability Convention was considered by its drafters as a supplementary treaty, designed to expand upon the provisions of the Outer Space Treaty.<sup>12</sup>

The Outer Space Treaty's main aim is not to protect the environment on Earth or in space as a common good of humanity, nor is the space liability regime designed to deal with providing compensation for environmental damage as such. However, by allowing the payment of monetary damages for harm caused by space objects, the Liability Convention includes environmental damage in its scope as this is seen as an integral part of public or private property.

## 11.2 Liability Model

### 11.2.1 *Material Scope of the Space Liability Regime*

The Liability Convention applies to damage caused by space objects launched by a State, irrespective of whether the space object causes damage on the surface of the Earth, to an aircraft in flight (Article II) or elsewhere (Article III). Applicability of the Liability Convention is not limited to space objects that were successfully launched as damage caused by a failed launch still falls within the scope of the treaty (Article I (b)).

The question of what constitutes the launching State is of no importance for determining the material scope of the Liability Convention because the term is used in a manner so that there is always a launching State, which was always going to be basic truth from a mid-twentieth century technological standpoint. The same is valid for the liability-provision found in Article VII of the Outer Space Treaty, which differs between the launching State and the procuring State.<sup>13</sup> Therefore, both treaties' scope of application is primarily ascertained by the understanding of the term space object, which must cause the damage to be compensated under the

<sup>10</sup>961 UNTS 187.

<sup>11</sup>UN Doc A/AC.015/C.2/2019/CRP.3: European Space Agency, European Telecommunications Satellite Organisation, Intersputnik International Organization of Space Communication; European Organization for the Exploitation of Meteorological Satellites.

<sup>12</sup>Kerrest and Smith (2013), Article II para. 76.

<sup>13</sup>Kerrest and Smith (2009), Article VII para. 35–37.



Liability Convention (Article II and III). The Convention does little to clarify the term space object, apart from stipulating in Article I(d) that the term includes component parts of a space object as well as its launch vehicle and parts thereof. From this, it follows that an object, such as an entire satellite or parts thereof, becomes a space object from the moment the launch countdown timer reaches zero.<sup>14</sup> Therefore, damage caused by a satellite being transported to the launch facility does not fall within the scope of the Liability Convention, neither does damage caused by equipment on the launch pad.

- 5 The term space object indicates that the object causing the damage must have both material<sup>15</sup> and physical properties,<sup>16</sup> which precludes any inclusion of damage emanating from electromagnetic waves, communication (optical) lasers or other non-tangible signals and emissions.<sup>17</sup> Also worthy of note at this point is the fact that the size of the space object is immaterial and thus includes the micro-debris already in outer space created by the cascading collisions of objects in orbit (the so-called Kessler effect). This broad catch-all understanding of what constitutes a space object is what was settled on, even though there had been proposals for a more specific definition during the negotiations, such as the joint proposal by Argentina, Belgium and France that sought to define the term ‘space object’ as “any object made and intended for space activities”.<sup>18</sup> However, this proposal was rejected and an alternative definition acceptable to all has remained elusive.<sup>19</sup>

### 11.2.2 *Limitations to the Scope of Application*

- 6 As stipulated in Article VII of the Liability Convention, the regime does not apply to damage caused to nationals of the launching State (a) or foreign nationals participating in the operation of the space object (b). The nationality-rule reflects a generally accepted principle of diplomatic protection according to which claims of nationals of the responsible State are not subject to protection by another State. The second limitation, the exclusion of foreign participants, was introduced at the behest of the USSR and was a reflection of its long-standing practice pertaining to such participants.<sup>20</sup> If foreign nationals knowingly and willingly participate in ultra-hazardous space activities at the invitation of the launching State, the question

<sup>14</sup>Countdown 0 means an intentional or accidental ignition of the rocket engines, see Bueckling (1982), p. 24.

<sup>15</sup>Types of material properties are *inter alia* physical, chemical, mechanical, thermal, electrical and magnetic, acoustical and optical.

<sup>16</sup>Christol (1980), p. 354.

<sup>17</sup>Kerrest and Smith (2009), Article VII para. 51.

<sup>18</sup>UN Doc PUOS/C.2/70/WG.I/CRP.16 and A/AC.105/85.

<sup>19</sup>For a thoroughly interpretation of the term see Wins (2000), pp. 87–97.

<sup>20</sup>UN Doc A/AC.105/C.2/SR. 49.

inevitably arises as to whether these participants have waived possible claims for damages vis-à-vis the launching State; a question that has to be answered by the competent national courts of the launching State. Article VII(b) of the Liability Convention clarifies that under this convention, any harm suffered by foreign participants is not a matter of international liability law.

### 11.2.3 *Actors Addressed by the Liability Regime*

There is only one category of actor that is addressed by the liability regime of both the Liability Convention (Article II and III) and the Outer Space Treaty (Article VII), namely the launching State. That means that only States parties, or consenting international organisations,<sup>21</sup> are proper respondents to liability claims under the Liability Convention and that private operators are excluded. The rapid commercialisation of the space industry by private companies in recent years means more and more space objects are being launched by the private sector using their own or shared launch facilities and the treaties' limitations in this regard are the source of some concern for States whose territory is used by such companies. Although having said that, from the perspective of the Liability Convention, the liable State is free to recover any damages payable under the Convention from a company that ultimately caused the damage by using its own domestic laws.

Eligible claimants are the claimant State (Article VIII) and any consenting international or intergovernmental organisation (Article XXII). It is worth noting that it is not required for the claimant State to be a party to the Liability Convention (Article IV Liability Convention in conjunction with Article 34 VCLT); however, Article IV does not extend to non-consenting international organisations. If individuals, companies or NGOs are injured parties, the State of nationality, the State on whose territory the damage occurred or the State of residence of the injured party has to present their claims (Article VIII) to the launching State. In this regard, the Liability Convention closely follows in the footsteps of the customary rules of diplomatic protection, although a remarkable deviation is that the claimant State does not have to establish a genuine link between the State and the victim as the ICJ famously ruled in the *Nottebohm* case,<sup>22</sup> nor is the exhaustion of local remedies required (Article XI(1)). This is further evidence of the Convention's distinctive victim-oriented approach, an aspect that was repeatedly emphasised throughout the drafting process.<sup>23</sup>

The only qualification to be the proper respondent in any liability case is being a launching State as only launching States and consenting launching organisations

<sup>21</sup> Meaning: intergovernmental organisations.

<sup>22</sup> ICJ *Nottebohm Case* (Liechtenstein v Guatemala) Second Phase [1955] ICJ Rep 4.

<sup>23</sup> UN Doc A/AC.105/C.2/SR.162 at p. 72 (Belgium), at p. 78 (Japan), at p. 98 (Sweden and Canada).

(Article XXII), be that a single actor or group thereof, are liable under the Outer Space Treaty and the Liability Convention. If more than one launching State is liable, the States shall be jointly and severally liable for any damage caused (Article V). Article I of the Liability Convention defines what exactly a launching State is, however, this remains controversial in detail. For this contribution, it suffices to say that a launching State has to meet at least one of the following four alternatives: it has (1) launched a space object, or (2) procured the launching of the space object, or (3) a space object is launched from the State's territory or (4) launched from one of its facilities. This four-fold concept of the launching State is intended to ensure that at least one State has to respond to the liability claims, i.e. the State on whose territory the launch took place. A growing number of voices both in practice and academia question this concept, especially because of the growing involvement of private companies' activities in the space sector and the possibility to launch objects from the high sea.<sup>24</sup>

### 11.2.4 *Standard of Liability*

- 10** Existing international space law establishes a dual liability system: One or more launching States are absolutely liable under Article II Liability Convention for any damage caused by a space object on the surface of the Earth or to any aircraft in flight ('strict liability', Sect. 11.2.5, ¶ 15). In the event of damage being caused somewhere other than on the surface of the Earth—that is in space itself or an air space involving an object other than an aircraft—Article III of the Liability Convention imposes fault-based liability on the launching State(s). Consequently, the type of liability that is applicable in the given case depends primarily on the location where the damage occurred.
- 11** From the outset of the liability regime negotiations, it was unanimously accepted that absolute liability should be the adopted standard of liability because "it would be difficult to prove fault or negligence", as the UK representative maintained.<sup>25</sup> Evidently, this argument was also seen as valid for damage caused to space objects actually in outer space, which prompted the US to propose that absolute liability applies to these cases as well.<sup>26</sup> However, shortly before the text of the Liability Convention was adopted, the Italian representative proposed a fault-based liability regime instead of absolute liability and changed the mind of the drafters, who accordingly changed the text to what is now Art III.<sup>27</sup> Therefore, if two space objects collide in outer space, at least one launching State must be at fault.

<sup>24</sup>Schrögl (1999); see also Zhao (2004).

<sup>25</sup>Yearbook of the United Nations 1962, p. 45.

<sup>26</sup>Yearbook of the United Nations 1964, p. 78.

<sup>27</sup>UN Doc A/AC.105/C.2/L.40, art 4 (2).

In contrast to the concept of absolute liability, which covers all manner of accidents and disasters, Article III's fault-based liability is tainted with legal uncertainties as it does not define fault, although from the wording of Article VI (exoneration from absolute liability) it can be concluded that fault can be assigned on the grounds of intent and/or gross negligence at least. That being said, the different regulatory purposes of Article VI and Article III do not allow Article III to be restricted to the two forms of fault referred to in Article VI. Rather, Article III's fault-based concept is broader and also covers cases of slight negligence. Applied to the peculiarities of space activities, this means that the launching State is liable under Article III if the operational control of the space object is deemed to have negligently disregarded the relevant code of conduct in outer space adopted by competent space agencies and international bodies.<sup>28</sup>

The question then arises, whose faulty behaviour triggers the launching State's liability? In answering this, Art III of the Liability Convention addresses this issue by stipulating that a State "shall be liable only if the damage is due to its fault or the fault of persons for whom it is responsible". Given that the actions and omissions attributable to a State under general international law are considered acts of that State, the faulty behaviour of State agents acting in their official capacity must be considered "its fault", i.e. the State's fault as opposed to "the fault of persons for whom it is responsible". Since private companies have now begun their own space activities, a crucial question remains as to whether the wording of Article III ("for whom it is responsible") refers to the general rules of attribution of private acts to the State, which requires the State's effective control over the faulty private act, or whether the term indicates a responsibility arising from the particularities of being the launching State. Even though Article III obviously aims to curb the liability for launching States, the decidedly victim-oriented focus of the Liability Convention favours an interpretation of Article III that is congruous with that focus. Thus, the reference to responsibility should not be viewed as a reference to attribution for the purpose of State responsibility (Article 8 ASR; Chap. 3) but to the responsibility arising from being the launching State. Consequently, the State from whose territory a private actor launched a space object is liable for damage caused to other space objects simply because that State is responsible for the private actors that made it the launching State (Article I).<sup>29</sup> Whether or not this aim-oriented interpretation ultimately passes the practice test remains to be seen; nevertheless, Article III of the Liability Convention has been rightly criticised for the fact that it is almost impossible for victims (i.e. astronauts, passengers and their dependants<sup>30</sup>) as well as States acting on their behalf to prove fault. Even in cases where a disused satellite is intentionally destroyed and thus creates a hazardous debris field endangering both manned and unmanned space objects, it remains difficult to prove when damage

<sup>28</sup>UN COPUOS, "Report of the Legal Subcommittee on its fifty-fourth session" (13 to 24 April 2015), Appendix 2(1).

<sup>29</sup>Hurwitz (1992), p. 35.

<sup>30</sup>Hurwitz (1992), p. 35.

occurs and from which space object the offending debris originated. The entire liability regime established by the Liability Convention and the Outer Space Treaty, be it absolute or fault-based, is founded on the assumption that the launching State is known, leaving victims of damage from unidentified space objects with no course of action under international space law.

### ***11.2.5 Exemptions from Liability***

**14** Even though the Liability Convention is noted for its victim-oriented approach, it provides for the launching state to be exonerated from absolute liability to the extent that damage has resulted either wholly or partially from gross negligence or intent to cause the damage on the part of the claimant State or the person the claimant State represents (Article VI(1)). Exoneration is not granted in cases of space activities infringing relevant rules of international law (Article VI(2)).

**15** The exemption from liability stipulated in Article VI(1) of the Liability Convention is limited to the absolute liability regime (Article II), which makes “absolute” a misnomer when one follows the common law terminology according to which absolute liability does not allow for any defence in contrast to strict liability. Article VI applies only to Article II, because it is inherent to the fault liability regime of Article III that contributory intent and negligence delimits the fault liability of the launching State. Even though Article VI introduces a fault element to the ‘absolute’ liability regime of space law, the difference between Article II and Article III remains: Where the claimant State has to prove fault on the part of the respondent State under Article III, the respondent State has to prove fault on the part of the claimant State for exoneration. From the victim’s perspective, this allocation of the burden of proof is vital.

**16** Apart from the exoneration provision, the space liability regime is rather inclusively: it deliberately does not grant any relief from liability in cases of force majeure (e.g. a meteoroid hits a space object, the debris of which causes further damage), nor does it provide for a non-liability rule in cases of nuclear power source related damage caused by space objects. Both of these options were discussed but eventually abandoned as consensus could not be found.<sup>31</sup>

### ***11.2.6 Damage***

**17** Naturally, the term damage is also of central importance for the Liability Convention, given that without damage there is no liability. Article I(a) begins by clarifying the term and differing between personal damage and property damage. Personal

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<sup>31</sup> See Harndt (1993), p. 543.

damage consists of loss of life, personal injury or other impairment of health, a wording that is often used in international conventions dealing with this subject matter. The central question concerning personal damage revolves around the understanding of the term ‘health’, and more specifically whether psychological health is covered by the term. Whereas it is clear that the impairment of physical health e.g. by exposure to radioactive space object debris is covered by the Convention, it is open to debate whether the impairment of mental well-being caused by stress is also covered. Two lines of reason support such an inclusion: If only physical health is compensable damage under the Convention, the references to health have no distinct meaning beyond ‘injury’.<sup>32</sup> In addition, the Liability Convention has to be interpreted in the light of contemporary principles of public international law, including human rights law, the latter of which is generally accepted as embracing the right to mental and emotional well-being.<sup>33</sup>

With regard to property damage, property rights issues have to be solved based on the claimant State’s domestic legal order. The only aspect Article 1 Liability Convention addresses is which owner can claim compensation: States, natural and legal persons (including companies and non-profit organisations) as well as international governmental organisations.

For both personal and property damage it is evident that direct damage is compensable, meaning that the space object or parts of it directly caused such damage. Less self-evident is the compensability of indirect damage, e.g. impairment of earning capacity, loss of profits, loss of services and so forth. In contrast to direct damage, the compensability of indirect damage is not recognised in every national jurisdiction, as Hurwitz rightly points out.<sup>34</sup> Moreover, one international agreement that served as an important templet for the Liability Convention, the 1952 Rome Convention on Damage Caused by Foreign Aircraft to Third Parties on the Surface, explicitly excludes indirect damage (Article 1(1)). Strengthening concerns in this area is the fact that Hungary’s proposal to stipulate loss of profits and moral damage as indemnifiable damage under the Liability Convention was rejected.<sup>35</sup> As such, one has to rely on the report of Aldo Cocca, the Argentine representative to COPUOS and Professor of Space Law, that in the end it was accepted by consensus that indirect damage was included in the Liability Convention because due to its imminence “it did not appear necessary to include an express mention thereof in the text of the Convention.”<sup>36</sup>

With regard to the compensation which the launching State is liable to pay for the damage described above, Article XII of the Liability Convention clarifies that the amount of compensation payable shall be determined not only in accordance with

<sup>32</sup>Alexander (1978), p. 155.

<sup>33</sup>UN HRC, Report of the United Nations High Commissioner for Human Rights, Mental Health and Human Rights, 31 January 2017, UN Doc A/HRC/34/32.

<sup>34</sup>Hurwitz (1992), p. 15.

<sup>35</sup>For the Hungary proposal see UN Yearbook 1964, p. 78.

<sup>36</sup>Cocca (1984), p. 158.

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international law but also pursuant to the principles of justice and equity, granting a great margin of appreciation to the negotiating parties. In this regard, international law provides rich jurisprudence as an adequate guideline as to how best to calculate damages. Any monetary payments settled upon (Article XIII) serve to provide such reparation in respect to the damage incurred to best restore the relevant conditions which would have existed if the damage had not occurred. The Liability Convention deliberately does not provide for any maximum limit to damages (Article XVIII), even though one might question the practicality of this decision.<sup>37</sup>

### ***11.2.7 Enforcement and Jurisdiction***

- 21** The Liability Convention dedicates a number of articles to dispute settlement (Article X and Articles XIV to XX): Every claim for compensation starts with diplomatic negotiations between the claimant State and the respondent State (Article X) or international organisation as the case may be (Article XXII). The Liability Convention sets a surprisingly short period of limitations of one year for lodging the claim following the date of the occurrence of the damage, the identification of the liable State (Article X(1)), or one year after the State can be reasonably expected to have learned of the facts (Article X(2)).
- 22** If diplomatic negotiations fail to produce a satisfactory outcome for the claimant State, a claims commission is to be established at the request of either the claimant or respondent state (Article XIV). Such a commission, which will have either a three-member or single-member panel (Article XV, Article XVI) has to decide upon procedural and jurisdictional matters as well as on the merits of the case, applying international law and the principles of justice and equity (Article XII). If the parties to the dispute agree beforehand, the commission's award or decision is final and binding on the parties; otherwise, it is purely recommendatory in character (Article XIX). The Liability Convention does not provide for any rules on enforcement of the legally binding award but relies on public pressure, which can be significant given the media attention such cases often attract. The results of any such commission's findings, including the award, have to be public and a certified copy has to be delivered to the UN Secretary-General (Article XIX).
- 23** The Liability Convention does not prevent a claimant state or those who have suffered damage in person to pursue their claims before government agencies, domestic courts, administrative tribunals or other bodies of dispute settlement of the launching state. However, while these remedies are not excluded by the Liability Convention, nor are they regulated by it. That being said, Article XI stipulates that a claimant must pursue a claim by irreversibly selecting one of two paths: either going before domestic courts of the launching state or choosing another international judicial body (e.g. the ICJ), as the same claim cannot be presented under the Liability

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<sup>37</sup>Hurwitz (1992), p. 55.

Convention in both, even if the claim ultimately fails before the judicial body of first-choice.

### 11.3 Rationale Behind the Space Liability Concept

The most distinguishing feature of the liability regime established by the Outer Space Treaty and the Liability Convention is that both treaties establish a genuine international liability for launching States, but not for private space companies. In addition, the Liability Convention deliberately abstains from establishing a civil liability regime for the operator of space activities. The reason why international space law took the path of international State liability is a historical one: In the 1960s and 70s of the twentieth century, States were the only actors operating in space and those States so engaged were also regarded as financially powerful enough to be able to satisfy any claims resulting from their ultra-hazardous space activities that resulted in damage being done. It is safe to say that today this rationale is patently no longer valid given the diversity now present within the group of actors undertaking space activities. 24

With regard to the decision to adopt a dual liability system under the Liability Convention, the reasons again reflect the realities of the early years of space activities. With relatively few space objects orbiting the Earth, the chances of an orbital collision occurring were mathematically improbable and notions of privatised launches, commercial satellites and even space tourism were seen as science-fiction, hence the focus was clearly centred on the damage suffered by people and States on Earth. In 2019, UNOOSA determined that almost 5000 space objects are orbiting the earth and US Strategic Command estimates these objects share earth orbit with some 130 million pieces of debris capable of causing catastrophic damage to anything they hit. As such, it is safe to say that today the focus is more on the risks present in Earth's orbit than to its surface. 25

In COPOUS, several reasons were provided why the launching State should be absolutely liable for any damage caused on the Earth's surface and to aircraft in flight (Article II). The severity of the possible damage caused by space objects imposes a high risk for uninvolved States and victims and these should not carry the impossible burden to prove faulty or negligent action, which would require them to have access to details which are usually kept secret by launching States. In addition, the launching State often reaps significant rewards in one form or another from its space activities and it should be such States, rather than the unwitting victim, that must be prepared to bear the consequences attached to such activities when something goes amiss.<sup>38</sup> Regarding the last-minute decision to introduce fault liability for damage occurring in space as a consequence of a collision between two or more space objects, the rationale for the change of mind is difficult to verify. As Hurwitz 26

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<sup>38</sup>Wins (2000), pp. 68 f.



noted: “Fault liability shows the maturity of technology. Absolute liability shows the maturity of society. Fault liability shows that technology has reached a stage where operators may be held liable for activities which violate an accepted code of behaviour. Absolute liability shows that society recognizes (. . .) the fact that (technology) cannot be regulated due to the many unknown dimensions involved with its development and exploitation.”<sup>39</sup>

## 11.4 Particularities

- 27 The most important particularity of the liability regime is that it is the first and last conventional regime that has established a system of international State liability, i.e. the international duty of a launching State to pay monetary compensation for any damage caused by its space objects. Even though the space liability regime shares some traditional features of general international law, most importantly the mediatisation of the natural and legal person on the international level, some of its features were progressive for the time when the Liability Convention was drafted. This is especially true for the comprehensive liability approach regarding the launching State that entirely absorbs the consequences of any harm resulting from private space activities. Then again, private space launches were inconceivable in the early 1970s, a fact that drove the State-centred language of the Liability Convention. With only a handful of States being able to launch space objects at the time, the Liability Convention’s ignorance of operator liability is a historical particularity. Furthermore, State liability was a political compromise between western States and socialist States as liability under private law could not have been enforced against the resistance of the socialist States. The operation of private space corporations was hardly conceivable in the economic system of the socialist States.<sup>40</sup> Nevertheless, the ILC in its commentary to the Draft Principles on the Allocation of Loss in the Case of Transboundary Harm arising out of Hazardous Activities (2006) considered ultrahazardous outer space activities the only example for which State liability—in contrast to operator liability—is generally accepted.<sup>41</sup> That said, it remains to be seen whether, in the event of an actual case of damage caused by a private space object, the launching State’s liability will be considered outdated or whether it remains the prevailing liability concept subject to reimbursement claims against the private operator.

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<sup>39</sup>Hurwitz (1992), p. 36.

<sup>40</sup>Gehring and Jachtenfuchs (1988), p. 110.

<sup>41</sup>ILC, Draft principles on the allocation of loss in the case of transboundary harm arising out of hazardous activities, with commentaries, YBILC 2006 Vol II part 2, UN Doc A/61/10, Principle 8 para. 8.

## 11.5 Practical Relevance

So far, not a single liability claim has been processed under the Liability Convention even though several incidents involving space object and their debris have caused considerable damage. The most famous case is that of the *Cosmos 954*, a nuclear-powered satellite launched by the USSR on 17 September 1977. The mission of *Cosmos 954* was to have lasted for approximately 70 days before being moved to and abandoned in higher orbit where the 55-kilogram uranium power-source would decay. Unfortunately, the satellite malfunctioned and made an uncontrolled re-entry into Earth's atmosphere on 24 January 1978, showering radioactive debris across northern Canada in an area of the size of Austria.<sup>42</sup> The Canadian government settled its claims against the USSR bilaterally outside of the Liability Convention's framework. The joint US-Canadian clean-up operation cost Canada approximately C\$14 million and the U.S. some US\$ 2–2.5 million. Canada billed the USSR for C\$6 million of which the USSR paid C\$3 million as a full and final settlement.<sup>43</sup>

There have been several near misses with space debris—Lottie Williams was in a park in Tulsa, Oklahoma in 1997 when she was fortunate not to have been injured after being struck a glancing blow by what NASA deduced was a fragment from the second-stage of a Delta rocket. The semi-controlled return to Earth of the 77,000 kg *Skylab* in 1979 tried to bring the debris left over after the station disintegrated in the upper atmosphere down in an area of the Indian Ocean 1300 km south-east of Cape Town. In the end, the station remained significantly intact until only 16 km from the Earth's surface and the debris rained down in an unpopulated area of Australian desert 480 km east of Perth, Western Australia.

Even though the *Cosmos* case has remained the most prominent space object incident to cause damage to this day, there are other cases such as the European Space Agency's *Sentinel-1A* satellite which was hit in 2016 by a piece of space debris estimated to be only 1 mm in diameter. Even though this was only relatively minor damage to a solar panel, it is and remains remarkable that the Liability Convention does not play any role in practice.

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<sup>42</sup>Hurwitz (1992), p. 114.

<sup>43</sup>Cohen (1984), p. 80.

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# Chapter 12

## Liability Annex to the Protocol on Environmental Protection to the Antarctic Treaty



Alexander Proelss and Robert C. Steenkamp

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## 12.1 Introduction and Regulatory Context

1 Twenty-nine States (the ‘Consultative Parties’), each with a substantial interest in Antarctica, collectively manage Antarctica through a system of consensus-based decisions.<sup>1</sup> Traditionally, the Antarctic Treaty<sup>2</sup> together with recommendations and measures adopted by the Antarctic Treaty Consultative Meetings (ATCM), the Convention on the Conservation of Antarctic Marine Living Resources (CAMLR Convention)<sup>3</sup> and the Convention for the Conservation of Antarctic Seals (CCAS)<sup>4</sup> form the basis of the Antarctic Treaty System. However, the Consultative Parties began to expand their environmental responsibilities in Antarctica in 1970 and agreed that they “should assume responsibility for the protection of the environment and the wise use of the Treaty area”.<sup>5</sup> A major step in this regard was the addition to the Antarctic Treaty System of the Protocol on Environmental Protection to the Antarctic Treaty (PEPAT or the Protocol). Together with safeguarding free and peaceful scientific research, the Protocol incorporates the protection of the Antarctic environment into the Antarctic Treaty System. The Protocol has six annexes, with Annex VI (Liabilities Arising from Environmental Emergencies) being a product of the obligations contained in Articles 15 and 16 of the PEPAT. Specifically, Article 16 of the PEPAT states that:

Consistent with the objectives of this Protocol for the comprehensive protection of the Antarctic environment and dependent and associated ecosystems, the Parties undertake to elaborate rules and procedures relating to liability for damage arising from activities taking place in the Antarctic Treaty area and covered by this Protocol.

2 Article 16 of the PEPAT highlights that the Consultative Parties considered special liability rules they deemed necessary to achieve the objectives of protecting the Antarctic environment.<sup>6</sup> Additionally, Article 15 of the PEPAT calls on Parties to

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<sup>1</sup>Only seven States (Argentina, Australia, Chile, France, New Zealand, Norway and the United Kingdom) claim portions of the continent as a part of their territory, in 1959, the initial claimant States and five other States adopted the Antarctic Treaty. Currently, there are twenty-nine Consultative Parties that take part in the decision-making processes regarding Antarctica and twenty-five Non-Consultative Parties that are invited to attend consultative meetings but do not participate in decision-making. A list of the Consultative and Non-Consultative Parties can be found at <https://www.ats.aq/devAS/Parties?lang=e>, accessed 1 Apr 2022.

<sup>2</sup>Antarctic Treaty, 402 UNTS 71 (entry into force 23 June 1961).

<sup>3</sup>1980 Convention on the Conservation of Antarctic Marine Living Resources, ILM 19 (1980), pp. 841–859 (entry into force 7 April 1982).

<sup>4</sup>1972 Convention for the Conservation of Antarctic Seals, 11 ILM pp. 251–262 (entry into force 11 March 1978).

<sup>5</sup>Recommendation VI-4 (Tokyo, 1970) on human interference with the environment available at: <https://www.ats.aq/devAS/Meetings/Measure/79>, last accessed on 1 Dec 2021; see also Saul and Stephens (2015), pp. 759–763 for a discussion on further recommendations and guidelines adopted by the Consultative Parties for the protection of the Antarctic environment.

<sup>6</sup>See Bastmeijer (2017), p. 417; see also Lefeber (2000), p. 184.

provide prompt and effective response action to emergencies that may arise during the course of various human activities being undertaken in the Antarctic Treaty area. Despite being considered by some as one of the most innovative environmental liability regimes,<sup>7</sup> Annex VI (Liability Annex or Annex) is not yet in force. However, the Liability Annex and the associated environmental liability regime that it creates needs to be seen as “an essential element in the enforcement of international commitments, and in the case of Antarctica commitments concerning the protection of the Antarctic environment”.<sup>8</sup>

With this in mind, the present Annex is divided into four Subchapters. First, Sect. 12.2 examines the essential features of the Liability Annex. Included is an examination of the Liability Annex’s scope of application as well as the extent of its liability model, including an examination of the exemptions, limitations and insurance requirements contained therein. Subsequent to this, the reasons and considerations that necessitated this particular liability model are examined in Sect. 12.3. Section 12.4 analyses the special features of the liability model, including the extent to which non-State operators may be held liable for emergencies emanating from their activities in Antarctica. Included in Sect. 12.4 is a discussion of the relationship that the rules on State responsibility may have with the Annex. Lastly, Sect. 12.5 examines the practical significance of the Liability Annex and includes an example by way of a hypothetical scenario. This examination was undertaken with an awareness that the Liability Annex has not yet come into force and highlights, where appropriate, possible reasons for this.

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## 12.2 Liability Model

### 12.2.1 Material Scope of the Liability Annex

During the negotiations leading up to the adoption of the Liability Annex, there was considerable debate as to the scope of the planned regime. Some delegations were of the view that the Annex should apply to all activities governed by the PEPAT. Other delegations opposed this broad approach on the grounds that the response action obligation contained in Article 15 of the PEPAT is limited to those activities for which Article VII(5) of the Antarctic Treaty requires notification.<sup>9</sup> Ultimately, the reference to Article VII(5) of the Antarctic Treaty was maintained and the Liability Annex, therefore, has a more limited scope. Specifically, Article 1 of the Liability Annex stipulates that it applies:

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<sup>7</sup>Vöneky and Beck (2017), p. 545.

<sup>8</sup>Wolfrum (2008), p. 819.

<sup>9</sup>Bederman and Keskar (2005), p. 1387.

to environmental emergencies in the Antarctic Treaty area which relate to scientific research programmes, tourism and all other governmental and non-governmental activities in the Antarctic Treaty area for which advance notice is required under Article VII(5) of the Antarctic Treaty, including associated logistic support activities.<sup>10</sup>

The scope of potential liability, therefore, applies to environmental emergencies in the Antarctic Treaty area and to all governmental as well as non-governmental activities for which advance notice is required under the Antarctic Treaty. This includes activities related to tourism, scientific research programmes as well as logistical support activities such as the use of supply ships and aircraft.<sup>11</sup> The reference to Article VII(5), and therefore the requirement that advance notice must be given for certain activities, specifically excludes any activities for which notice is not required, such as fishing and whaling.<sup>12</sup> This said, there are several limitations inherent in the scope of application stipulated in Article 1.

### ***12.2.2 Limitations to the Scope of Application of the Liability Annex***

- 5 Several limitations to the Liability Annex's scope of application require a brief explanation at the outset.<sup>13</sup> First, unlike most liability instruments that cover damage to persons and property, the Annex only applies to environmental emergencies.<sup>14</sup> Article 2(b) of the Liability Annex defines an environmental emergency as "any accidental event that has occurred, having taken place after the entry into force of this Annex, and that results in, or imminently threatens to result in, any significant and harmful impact on the Antarctic environment". This definition implies that the Liability Annex only covers those events that have a "significant and harmful impact" on the environment.<sup>15</sup> Therefore, any activity that only has a minor or transitory impact on the environment will not be covered by the Annex. The rationale behind this is that every human activity will have some impact on the fragile Antarctic environment and, even if not significant and harmful, would result

<sup>10</sup>Article VI of the Antarctic Treaty defines the Antarctic Treaty area as "south of 60° South Latitude, including all ice shelves".

<sup>11</sup>Article VII(5) of the Antarctic Treaty states that Parties to the Antarctic Treaty must give advance notice for (1) "all expeditions to and within Antarctica, on the part of its ships or nationals, and all expeditions to Antarctica organized in or proceeding from its territory"; (2) "all stations in Antarctica occupied by its nationals"; and (3) "any military personnel or equipment intended to be introduced by it into Antarctica"; see also de La Fayette (2007), p. 134.

<sup>12</sup>Bloom (2006), note 8; see also Bederman and Keskar (2005), p. 1387.

<sup>13</sup>For a detailed discussion on such limitations see Bastmeijer (2017); see also Wolfrum (2008), pp. 820–822.

<sup>14</sup>See generally Skåre (2000).

<sup>15</sup>Abdullah et al. (2015), p. 229; see also Wolfrum (2008), p. 821.

in liability, creating a *de facto* tax/compensation regime rather than a liability regime.<sup>16</sup>

Second, the word “accidental” seems to suggest that any damage that is intentionally inflicted is not covered by the Liability Annex. This is contrary to international law generally where damage caused intentionally is often considered to be a more severe offence and can even increase liability.<sup>17</sup> However, an examination of the object and purpose of the PEPAT clearly restricts this limitation. The object and purpose of Article 15 of the PEPAT (as an Article establishing the Liability Annex) reveals that “accidental” should be interpreted as any damage that was not anticipated when the activity in question was planned.<sup>18</sup> In this regard then, the Liability Annex serves as “a mechanism to enforce Article 8 and Annex I”<sup>19</sup> of the PEPAT, i.e. the practice of conducting an Environmental Impact Assessment (EIA) prior to commencing an activity. In this respect, the competent national authority assesses, based on appropriate domestic procedures, whether or not the proposed activity requires that an initial environmental evaluation (IEE) and full EIA under the PEPAT be conducted. If an IEE is undertaken, the operator, be it governmental or non-governmental, can anticipate that the proposed activity will at least have a minor or transitory impact. The situation has to be assessed differently, however, if an activity that was initially anticipated to have less than minor or transitory impact, based on the applicable domestic procedures, results in minor or transitory impact or an impact even greater than minor or transitory. In light of Article 1 (2) of Annex I PEPAT, no IEE or EIA is conducted in such a situation. Consequently, the impact concerned was not anticipated and, accordingly, will be covered by the Liability Annex. The same is true if a proposed activity which, in the context of an IEE, is anticipated to have only a minor or transitory impact but later generates impacts greater than minor or transitory.

Third, the exclusion of fishing and, therefore, the activities of fishing vessels, was settled upon on the basis that another regime, namely the Conservation of Antarctic Marine Living Resources (CAMLRL) Convention, which is applicable to fishing activities in Antarctica.<sup>20</sup> This, however, is regrettable since the CAMLR Convention does not include regulations on liability. While fishing vessels are thus covered by their own regime under the CAMLR Convention, such vessels are not correspondingly subjected to a separate liability regime. Given the number of fishing vessels in Antarctic waters and their potential to cause pollution or other

<sup>16</sup> Wolfrum (2008).

<sup>17</sup> Vöney (2008), p. 181.

<sup>18</sup> Wolfrum (2008), p. 821.

<sup>19</sup> Wolfrum (2008).

<sup>20</sup> Addison-Agyei (2007), p. 315; see also de La Fayette (2007), p. 133; Vöney (2008), p. 182 highlights that “fishing vessels are the third potential major source of environmental pollution by accidental events” which serves as an “example of where the output legitimacy of the Annex is weakened”.



environmental emergencies, this limitation to the Liability Annex's scope of application is sub-optimal.<sup>21</sup>

- 8 Lastly, the area of application of the Liability Annex is limited to the Antarctic Treaty area and fails to acknowledge Antarctica's "dependent and associated ecosystems", references to which is made in several provisions of the PEPAT. The ecosystem approach dominates the regime of the PEPAT and the failure of the Liability Annex to reference damage to "dependent and associated ecosystems" is contrary to the repeated references to such ecosystems elsewhere in the PEPAT, including in Articles 15 and 16 which obligate Parties to establish a liability regime in the first place.<sup>22</sup>

### 12.2.3 *Actors Addressed by the Liability Annex*

- 9 The Liability Annex applies to operators, who are defined as "any natural or juridical person, whether governmental or non-governmental, which organises activities to be carried out in the Antarctic Treaty area".<sup>23</sup> An operator does not include a natural or juridical person who is performing but not organising or otherwise responsible for activities in Antarctica. For example, the captain of a vessel (in his role as a captain) or a juridical person acting on behalf of a State operator (as a contractor or subcontractor) are not classified as operators.<sup>24</sup> The definition of what constitutes an operator clearly allows for them to be either governmental or non-governmental, however, it must be borne in mind that the Liability Annex follows a traditional international law approach. It addresses States directly and places certain obligations and duties on them in fulfilling the goals of both the Liability Annex and the Protocol. In other words, although operators may be liable according to the provisions of the Annex irrespective of whether or not they are governmental or non-governmental, "the implementation and enforcement of the Liability Annex rests with States".<sup>25</sup>

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<sup>21</sup> Secretariat of the Antarctic Treaty, Final Report of the Twenty-Eighth Antarctic Treaty Consultative Meeting, 2005, para. 101, [https://documents.ats.aq/ATCM28/fr/ATCM28\\_fr001\\_e.pdf](https://documents.ats.aq/ATCM28/fr/ATCM28_fr001_e.pdf), accessed 1 Apr 2022.

<sup>22</sup> Other provisions in the PEPAT that reference "dependent and associated ecosystems" include Articles 2, 3, 6, 8, 10 and 14; see also Hemmings (2018), p. 323.

<sup>23</sup> Article 2(c) of the Liability Annex.

<sup>24</sup> Article 2(c) read in conjunction with Article 2(d) of the Liability Annex; see also Bederman and Keskar (2005), p. 1391.

<sup>25</sup> Wolfrum (2008), p. 822.

### 12.2.4 *Regime Established by the Liability Annex*

#### **General Aspects of Liability Under the Annex**

Several recommendations adopted by the Antarctic Treaty Consultative Parties have acknowledged “that prime responsibility for Antarctic matters, including protection of the Antarctic environment, lies with the States active in the area which are parties to the Antarctic Treaty”.<sup>26</sup> On this basis, the Liability Annex obligates States parties to require their operators, namely those entities organising activities in the Antarctic Treaty area, to undertake reasonable preventative measures to reduce the risk of environmental emergencies (Article 3) and to establish contingency plans to respond to events that may potentially damage the Antarctic environment (Article 4). If these requirements are unable to prevent an environmental emergency, the Liability Annex obligates States parties to require “each of its operators to take prompt and effective response action to environmental emergencies from the activities of that operator” (Article 5(1)). Failure to take prompt and effective response action results in the liability of the operator to pay the costs of the required response action (Article 6). As a consequence of this, if an operator acts immediately to contain the damage, there is no liability.<sup>27</sup> Therefore, it must be highlighted that the liability regime enunciated in Article 6 is not for “some widely defined environmental damage”, but only for the costs associated with the required response action.<sup>28</sup> Given that an operator is obliged to have contingency plans in place before commencing activities (Article 4), it should, in theory, be easier and less expensive for the operator that caused the emergency to act rather than allow another operator to do so.<sup>29</sup> Together with the obligation that operators take response action, the liability to reimburse the costs of any response action taken by others provides an incentive for an operator to act. Consequently, the Liability Annex follows a logical course of measures. First, it prescribes safeguards to prevent environmental emergencies then it provides for specific action to be taken should such an environmental emergency materialise and, finally, it imposes financial liability on operators that fail to take such action.<sup>30</sup>

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#### **State Liability and Response Action**

That said, States will not be liable for the failure of an operator, other than its State operators, to take the necessary response action to the extent that the State party has taken appropriate measures within its competence, including the adoption of laws,

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<sup>26</sup> Recommendation ATCM VIII-13, 1975; see also Recommendation ATCM IX-5, 1977 and Recommendation ATCM XV-1, 1989.

<sup>27</sup> de La Fayette (2007), p. 145.

<sup>28</sup> Gaskell (2018), p. 257.

<sup>29</sup> The Annex also allows for collective response action, whereby States parties undertaking such action are required to consult and coordinate their action (Articles 5(3)(c) and 5(5)).

<sup>30</sup> Johnson (2006), p. 39.

regulations and enforcement measures (Article 10). Nevertheless, States parties are encouraged to take response action should the responsible operator not do so (Article 5(2)) but there is no absolute obligation to do so. In this context, a response action is defined in the Annex as “reasonable measures taken after an environmental emergency has occurred to avoid, minimise or contain the impact of that environmental emergency, which to that end *may include clean-up* in appropriate circumstances”.<sup>31</sup> The Annex also defines “reasonable” in the context of preventative and response action as “measures or actions which are *appropriate, practicable, proportionate* and based on the availability of objective criteria and information”.<sup>32</sup> Therefore, when evaluating whether there is a duty to take response action, the “technological and economic feasibility” of the action may be decisive factors.<sup>33</sup> It is noteworthy that these definitions indicate that rehabilitation or restoration of the environment to the state that it was in prior to the environmental emergency is not legally required under the Liability Annex. Additionally, the Liability Annex does not cover cumulative impacts that take place over a long period.<sup>34</sup> For example, the impacts of noise pollution over a prolonged period causing damage to marine mammals, or the cumulative impacts that the introduction of invasive species (through, for example, ship ballast water) may have on the Antarctic environment, are not covered by the Liability Annex.<sup>35</sup>

### Standard of Liability

- 12 The Liability Annex sets a strict liability standard, i.e. liability without proof of fault<sup>36</sup> and, as such stands in stark contrast to liability based on fault or due diligence.<sup>37</sup> Under a due diligence liability regime, it would have to be proven that the operator has not acted in conformity with some due diligence obligation. In a situation where an operator has not violated a due diligence obligation, liability would not arise and the incentive given to operators to take prompt and effective response action to avoid liability would, therefore, diminish.<sup>38</sup>

### Liability of State and Non-State Operators

- 13 The liability enunciated in the Liability Annex applies to both State and non-State operators. It is important to differentiate between scenarios in which response action is taken by others, imposing the costs of the response action taken by others on the

<sup>31</sup> Article 2(f) of the Liability Annex (emphasis added).

<sup>32</sup> Article 2(e) (emphasis added).

<sup>33</sup> Vöneky (2008), p. 183.

<sup>34</sup> de La Fayette (2007), p. 135.

<sup>35</sup> That said, Hughes and Convey (2014), p. 6 argue that there is a case to be made “that the presence of even a single individual of a confirmed non-native species should be considered an ‘environmental emergency in waiting’, and trigger prompt management action, thereby pre-empting the potential application of Annex VI”.

<sup>36</sup> Article 6(3) of the Liability Annex.

<sup>37</sup> See Francioni (1994), p. 226 for a discussion on different standards of liability (i.e. strict, fault-based, and due diligence); see also Goldie (1985).

<sup>38</sup> Addison-Agyei (2007), p. 317.

operator liable for the environmental emergency, and scenarios in which response action is required but none is taken. In the first scenario, it must be reiterated that the liability of operators is not for damage to the environment but is solely “to compensate the costs of response measures taken by other persons besides the [responsible] operator” (liability under Article 6(1)).<sup>39</sup> Incurring liability in the second scenario is a distinct possibility given the often difficult Antarctic weather conditions.<sup>40</sup> In this scenario, the Liability Annex differentiates between the costs of response action that should have been taken by State operators and non-State operators (liability under Article 6(2)).

The liability of State and non-State operators can be summed up in this regard as follows:

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State operators must pay the whole sum of the cost of a response action that should have been taken whereas non-State operators must only pay “an amount of money that reflects as much as possible the costs of the response action that should have been taken”. The money must be paid, where State operators are concerned, directly into the fund [Article 6(2)(a)]. In case the emergency was generated by a non-State operator it can also be paid to the State which then “shall make best efforts to make a contribution to the fund referred to in Article 12 which at least equals the money received from the operator” [Article 6(2)(b)].<sup>41</sup>

The liability regime stipulated in Article 6 has come under increased scrutiny. This is due to three primary reasons: First, the “best efforts” of a State to contribute to the fund could be interpreted to mean that a State party may “withhold the money received instead of channelling it to the Fund”.<sup>42</sup> Second, non-State operators may be in a somewhat privileged position vis-à-vis State operators since they are only required to pay an estimated amount that reflects, as much as possible, the envisioned response action versus State operators which are liable to pay the costs of real-world action. Lastly, the costs of response action taken are determined by a decision of the Antarctic Treaty Consultative Parties. This is problematic because such decisions are made through consensus, leaving the possibility that the State responsible for the emergency may withhold consent and the cost of response action may, therefore, wholly or in part not be agreed upon.<sup>43</sup>

An additional concern arises with regards to the liability of State and non-State operators as the activities of both have become increasingly interconnected. One example of this is that certain State-operated facilities, initially designed to support scientific research, are increasingly being used for tourism purposes. This is the case with the Uruguayan National Programme, which “transports and accommodates between 20 and 50 paying visitors at their Artigas Station in King George Island

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<sup>39</sup>de La Fayette (2007), p. 134.

<sup>40</sup>Vöney (2008), p. 185.

<sup>41</sup>Wolfrum (2008), p. 825.

<sup>42</sup>Wolfrum (2008), p. 826.

<sup>43</sup>Rule 14 of the Rules of Procedure of the Antarctic Treaty Consultative Meeting and the Committee for Environmental Protection; see also Addison-Agyei (2007), p. 317; see also Secretariat of the Antarctic Treaty (2005), para. 108.

to recover some of the station's operating costs".<sup>44</sup> Additionally, there are even reports of big hotel chains seeking permission from a State party to establish hotels in Antarctica.<sup>45</sup> Article 6(4) provides for joint and several liability when an environmental emergency arises as a result of the activities of two or more operators. However, the blurring of the lines between the activities undertaken by State and non-State operators, including which portion of an environmental emergency can be attributed to which operator, may pose future challenges in attributing liability under the Annex.

### **Exemptions from Liability**

- 16** The Liability Annex provides for five instances where States parties and/or their operators are exempt from liability (Article 8). Specifically, if an act or omission was necessary to protect human life or safety; if the event which caused the damage constituted, in the unique context of Antarctica's environment, a natural disaster of an exceptional character which could not have been reasonably foreseen; if the environmental emergency resulted from an act of terrorism; if the environmental emergency resulted from an act of belligerency against the activities of an operator; or if an environmental emergency resulted from reasonable response action taken by an operator pursuant to the rules of the Annex.<sup>46</sup> These exemptions are similar to those under other existing liability regimes and, possibly also relevant in so far as exemptions go, is that the usual principles of sovereign immunity also apply with respect to vessels in government service. The actions of such vessels may still give rise to State liability, however, the vessels themselves remain immune from search and seizure.<sup>47</sup>

### **Limits of Liability**

- 17** Article 9 of the Liability Annex provides limits to any liability incurred.<sup>48</sup> For example, response cost liability is limited by differentiating between situations in which a ship is involved<sup>49</sup> and those situations where no ship is involved, such as when activities take place on the ice shelf.<sup>50</sup> Somewhat concerning is that the maximum amounts stipulated under the Annex are less than those available under other liability regimes. The challenge that this presents is that a State party who is

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<sup>44</sup>Bastmeijer et al. (2008), p. 88; see also Submission by the Government of Uruguay, Visitors Programme to the "Artigas" Antarctic Scientific Base (BCCA) (Doc. XXVIII ATCM/IP 56, 2005).

<sup>45</sup>Holiday Inn allegedly made such a request to Argentina (see White 1994, p. 258).

<sup>46</sup>For further examination on the exemptions see Vöneyk (2008), p. 187; see also Wolfrum (2008), p. 824.

<sup>47</sup>Article 6(5); see also Bloom (2006), p. 3.

<sup>48</sup>Article 9.

<sup>49</sup>See Article 9(1).

<sup>50</sup>See Article 9(2).

also a party to one of these other liability regimes with higher limits may face certain complications regarding the adoption of domestic legislation—whereby the Liability Annex sets certain limits but a State party is bound by higher limits under another international law instrument.<sup>51</sup> Additionally, the limits for situations involving a ship are linked to the size of the ship, which is a rather anachronistic approach since it has been recognised that even relatively small ships can cause substantial damage.<sup>52</sup> During the negotiations, many States parties felt that the limits contained in Article 9 were generally too low.<sup>53</sup> That said, Article 9(4) does allow for a review of the limits every three years, or sooner at the request of any party.

As is commonly accepted under several other liability regimes, the limits of liability cannot be relied on where the “environmental emergency resulted from an act or omission of the operator, committed with the intent to cause such emergency, or recklessly and with knowledge that such emergency would probably result”.<sup>54</sup> The limitations of liability articulated in Article 9 are necessary and were intensively discussed in the lead up to the Annex’s adoption since limits are fundamentally linked to the ability of operators to obtain insurance because unlimited liability cannot effectively be insured against.<sup>55</sup>

### Insurance for Liability

The incorporation of the limits referred to above must be seen against the obligations contained in Article 11 of the Liability Annex that requires States parties to ensure that their operators “maintain adequate insurance or other financial security”. Insurance is necessary to reimburse operators that have undertaken response action on behalf of an operator that caused damage to the environment or where the latter has to rely on technical assistance to undertake adequate response action.<sup>56</sup> Significant in the context of insurance under the Liability Annex is a presentation given by the International Group of Protection and Indemnity Clubs (P&I Clubs) at the 40th meeting of the Antarctic Treaty Consultative Parties. P&I Clubs provide insurance cover for approximately 90% of the world’s ocean-going tonnage.<sup>57</sup> Specifically, the P&I Clubs noted that its insurance would, in principle, cover the liabilities of “commercial operators” (being ship owners) as prescribed in Article 6 of

<sup>51</sup> Such regimes where higher compensation is required include the International Convention on Civil Liability for Oil Pollution Damage of 1992 and the International Oil Pollution Compensation Funds Convention of 1992; see also Secretariat of the Antarctic Treaty (2017), paras. 139–150; and de La Fayette (2007), p. 150.

<sup>52</sup> See de La Fayette (2007), p. 149 for a discussion on the internationally recognized (considerable) impact that smaller ships may have on the marine environment.

<sup>53</sup> Secretariat of the Antarctic Treaty (2005), para. 116.

<sup>54</sup> See Article 9(3).

<sup>55</sup> Wolfrum (2008), p. 825; see also Vöneky (2008), p. 189.

<sup>56</sup> Vöneky (2008).

<sup>57</sup> See the website of International Group of Protection & Indemnity Clubs, About, <https://www.igpandi.org/about>, accessed 1 Apr 2022.

the Annex.<sup>58</sup> However, the P&I Clubs also highlighted that the Annex's definition of "operator" is broader than "shipowner" and could include "actors other than the ship owner and may include parties that did not have [insurance] cover with the P&I Clubs".<sup>59</sup> Such other actors, then, would need to find other market cover in order to fulfil their obligations under Article 11 of the Annex. In this regard, the Russian Federation noted that it has already implemented the Liability Annex and that several Russian National Expedition Antarctic Ships are already insured.<sup>60</sup> However, Russia also made clear:

that there remained the issue of the insurance of existing equipment and facilities in the Antarctic. From its own practice, it noted that it was difficult to find insurance companies prepared to insure in Antarctica because they do not have the necessary abilities or capabilities, and knew that they would have to rely on National Antarctic Programmes for their expertise.<sup>61</sup>

- 20** Apart from this, there are two additional questions that insurers have raised that need further attention: First, whether insurers will be entitled to invoke protection available to the insured, such as the exemptions listed under Article 8, and second, whether insurers may subrogate and claim reimbursement from the fund established under Article 12, an issue that will be discussed in the next section.<sup>62</sup>

### **The Fund**

- 21** Article 12 of the Annex establishes a Fund which is to be administered and maintained by the Antarctic Treaty Secretariat. The purpose of the fund is to provide "*inter alia*, for the reimbursement of the reasonable and justified costs incurred by a Party or Parties in taking response action pursuant to Article 5(2)".<sup>63</sup> In other words, reimbursement from the fund is foreseen in situations in which the operator that caused the damage cannot be identified, or where the operator that caused the damage does not take the prompt and effective response action as required under the Annex.<sup>64</sup> Therefore, the fund reimburses the costs incurred by States parties that engage in response action, such as in instances where a State party cannot fully recover its costs from the responsible operator. However, reimbursement from the fund is limited to the extent that such costs are "reasonable and justified".<sup>65</sup>

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<sup>58</sup> Secretariat of the Antarctic Treaty (2017), para. 143.

<sup>59</sup> Secretariat of the Antarctic Treaty (2017), para. 143.

<sup>60</sup> Secretariat of the Antarctic Treaty (2017), para. 151; see also Gaskell (2018), pp. 258–259.

<sup>61</sup> Gaskell (2018), pp. 258–259.

<sup>62</sup> UK P&I Club (2016), p. 8.

<sup>63</sup> Article 12(1) of the Liability Annex.

<sup>64</sup> de La Fayette (2007), p. 152.

<sup>65</sup> Given the relatively few commercial activities currently taking place in Antarctica, there is little financial support for the Fund. Therefore, the limitation that only "reasonable and justified costs" will be paid seems appropriate at this stage.

Additionally, there is no automatic entitlement to reimbursement as this is subject to ATCM approval.<sup>66</sup> Unfortunately, the ‘non-guarantee’ of reimbursement arising from this approval requirement may act as a deterrent for States when deciding whether or not to take response action on behalf of the responsible operator or to act at all.<sup>67</sup> An additional deterrent is the fact that non-State operators may have no right at all to even apply for reimbursement since it is States parties who need to make a proposal for reimbursement to the ATCM.<sup>68</sup> This point has been criticised since the Annex places broad and significant obligations on operators but then seems to foresee compensation under Article 12 only for States.<sup>69</sup>

Currently, there are no detailed operational procedures for the fund, although it is envisaged that it will be financed by payments made by operators who fail to take the necessary response action, as required under Article 6(2), as well as by voluntary contributions from States or non-State actors that are allowed under Article 12(4).<sup>70</sup>

### Enforcement and Jurisdiction

An examination of enforcement and jurisdiction under the Liability Annex requires taking two distinctions into account,<sup>71</sup> namely (1) the difference between action for liability under Article 6(1) that involves reimbursement of costs for response action taken by other States parties, and action for liability under Article 6(2) that deals with liability arising when an environmental emergency occurs but no response action is taken. The second distinction that must be taken into account is the difference between taking action against a State operator as opposed to a non-State operator. Enforcement of compensation obligations under the Annex rests with the States parties and requires appropriate implementation systems to be set up in advance.<sup>72</sup> Therefore, States parties have to enact the necessary legislation within their domestic legal orders to allow for compensation actions related to Antarctica to be processed in their domestic courts.<sup>73</sup> The lack of a central international dispute settlement system to hold non-State operators liable may create fragmented jurisprudence whereby domestic courts of different States come to different findings.

As alluded to earlier, the Liability Annex distinguishes between State and non-State operators but only States parties are entitled to sue. This may be due to the fact that during the negotiations leading up to the adoption of the Annex, States wanted to prevent undesirable actions that may be brought by other operators or even

<sup>66</sup> Article 12(2) of the Liability Annex read with Article 12(3) which notes criteria which must be taken into account when States parties seek reimbursement.

<sup>67</sup> Addison-Agyei (2007), p. 318.

<sup>68</sup> Gaskell (2018), p. 258.

<sup>69</sup> Bederman and Keskar (2005), p. 1403.

<sup>70</sup> Gaskell (2018), p. 258; see also de La Fayette (2007), p. 152.

<sup>71</sup> Johnson (2006), p. 47.

<sup>72</sup> Wolfrum (2008), p. 826.

<sup>73</sup> de La Fayette (2007), p. 150.

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environmental activists.<sup>74</sup> In addition, States have traditionally been reluctant to have disputes in which they or their operators are embroiled decided in the national courts of other States.

- 26 With this in mind, together with the different liability actions stipulated under Article 6(1) and 6(2), the Liability Annex allows for three possibilities to claim compensation.<sup>75</sup> First, if a State party has taken response action on behalf of a non-State operator which caused damage, that State party can bring an action against the non-State operator in the courts in only one State party where the operator is either (1) incorporated; (2) has its principal place of business; (3) is habitually resident; or if there is no such State party, (4) in the courts of the State party where the activities that led to the environmental emergency were organised.<sup>76</sup> Second, if the environmental emergency is caused by a State operator and another State's State operator takes response action, the dispute is subject to the inter-State dispute settlement procedures of Articles 18, 19 and 20 of the PEPAT, i.e. negotiation, enquiry, mediation, conciliation and lastly arbitration (Article 7(4) Liability Annex).<sup>77</sup> Third, if a State operator should have taken response action but did not and no response action is taken by any other party, liability is resolved by the ATCM or, should that fail, the resolution should be sought using the dispute mechanism provided by Articles 18–20 of the PEPAT.<sup>78</sup>

### 12.3 Reasons for the Chosen Liability Model

- 27 The Antarctic Treaty consists of three main pillars, namely that Antarctica shall be used for peaceful purposes (Article I); that international cooperation in scientific research in Antarctica shall be promoted (Article II); and that the Antarctic environment shall be preserved.<sup>79</sup> However, neither the Antarctic Treaty nor any other of the original international instruments of the Antarctic Treaty System currently in force

<sup>74</sup>de La Fayette (2007), p. 150.

<sup>75</sup>Note that it is not clear whether a non-State operator is also obligated to respond to emergencies caused by other operators. The insertion of the word “each” in Article 5(1), in contrast to Articles 3(1) and 4(1), could arguably indicate that where an operator causes an environmental emergency, all operators of a State party (State and non-State) are under an obligation to respond. There is, however, no literature that supports this assumption. It should also be noted that non-State operators are excluded under Article 7 from making a claim for the costs of their response action, meaning that if they respond their costs may never be reimbursed.

<sup>76</sup>Article 7(1) of the Liability Annex; see also Wolfrum (2008), p. 826; see also Bloom (2006), p. 3.

<sup>77</sup>Vöney (2008), p. 185; see also de La Fayette (2007), p. 151.

<sup>78</sup>Article 7(5) of the Liability Annex.

<sup>79</sup>In this regard, nuclear explosions and the disposal of radioactive waste is prohibited (Article V), and States are obligated to formulate measures regarding the preservation and conservation of living resources in Antarctica (Article IX(1)(f)).

(such as the CAMLR Convention and CCAS), include a liability clause.<sup>80</sup> Although the 1988 Convention on the Regulation of Antarctic Mineral Resource Activities (CRAMRA)<sup>81</sup> does contain liability provisions, it never came into force.<sup>82</sup> After the failure of CRAMRA, the PEPAT was negotiated to provide “comprehensive protection of the Antarctic environment and dependent and associated ecosystems” (Article 2 of PEPAT). Without addressing liability this aim would be unattainable and, for this reason, Article 16 of the PEPAT was included that requires States parties to elaborate rules and procedures relating to liability for damage to the Antarctic environment.

Additionally, the ‘freezing’ of territorial claims under the Antarctic Treaty leaves Antarctica in a somewhat strange position. Antarctica is neither a “common space outside national jurisdiction nor clearly under the sovereignty of certain States”.<sup>83</sup> This results in several questions arising: Which States would be entitled to claim for damage to the Antarctic environment? Which States would be injured should an environmental emergency occur in Antarctica? How should the value of the damage to the environment be evaluated? Who should pay whom and how much should be paid if there is environmental damage that cannot be cleaned up?

Lastly, although several international conventions exist that deal with questions associated with environmental liability, the scope of such conventions is limited and often apply “exclusively to pollution damage caused in the territory, including the territorial sea and exclusive economic zone of a State party”.<sup>84</sup> Given the unique status of Antarctica, there are no coastal States or territorial seas and such conventions are not necessarily applicable.

With all of the foregoing in mind, it is clear that a Liability Annex was necessary to provide a regime that can first, fix liability for environmental damage and, second, determine the required response action.<sup>85</sup>

## 12.4 Special Features of the Liability Annex

In so far as the Liability Annex’s special features go, two points require particular attention: First, the applicability of the Annex to non-State entities/operators and second, the relationship that State responsibility may have with the Liability Annex.

<sup>80</sup>Vöneky (2008), p. 176.

<sup>81</sup>1988 Convention on the Regulation of Antarctic Mineral Resource Activities, ILM 27 (1988), p. 859 (not in force).

<sup>82</sup>Australia and France refused to sign CRAMRA, see Australian Antarctic Division (2019); see also Bederman and Keskar (2005), p. 1385.

<sup>83</sup>Vöneky (2008), p. 179.

<sup>84</sup>Vöneky (2008), p. 180; for example, see the International Convention on Civil Liability for Oil Pollution Damage 1992.

<sup>85</sup>Bederman and Keskar (2005), p. 1387.

### 12.4.1 *Non-State Actors and the Liability Annex*

32 As demonstrated above, the Liability Annex applies to operators that conduct activities in Antarctica. Such activities are conducted either by States parties through State operators or by non-State operators. Therefore, to effectively regulate all operators, the Annex establishes obligations as well as corresponding liability for both State and non-State operators. However, implementation and enforcement of the Liability Annex remain with States. Non-State operators shall thus be held liable for any failure to take the necessary response action through the appropriately incorporated national legislation. This requires States to ensure that they have taken all appropriate measures, “including the adoption of laws and regulations, administrative actions and enforcement measures”, to hold non-State operators liable for any failure to take response action to an environmental emergency they cause.<sup>86</sup> Additionally, States parties must also ensure that non-State operators maintain adequate insurance or other financial security as well as undertake preventative measures and contingency plans.

### 12.4.2 *State Responsibility and the Liability Annex*

33 In line with the International Law Commission’s (ILC) reasoning that having a compensation mechanism for activities that are not prohibited does not diminish the need for the prevention or mitigation of damage, the Liability Annex follows a tiered approach to protecting the Antarctic environment. It does so by prescribing safeguards to prevent environmental emergencies, then providing for specific action to be taken should an environmental emergency arise and, finally, imposing liability.<sup>87</sup> In this regard, prevention and contingency planning are as integral to the Annex as liability for failure to take the necessary response action. Therefore, liability cannot be separated from prevention and, specifically in the case of the Liability Annex, liability cannot be completely disassociated from State responsibility.<sup>88</sup> In this regard, Article 10 is entitled “State Liability” and requires brief mention because although it refers to liability, its focus is on addressing instances where a State fails to “comply with its legal obligations to take appropriate measures to prevent harm by non-State actors within its jurisdiction”.<sup>89</sup> Such a failure is generally the basis for a claim under the laws of State responsibility.

<sup>86</sup> Article 10 of the Liability Annex.

<sup>87</sup> International Law Commission, Second Report on International Liability for Injurious Consequences Arising out of Acts not Prohibited by International Law, Yearbook of the International Law Commission 1981 II-1, 103–123, at para. 91; see also Montjoie (2010), p. 505.

<sup>88</sup> For a detailed discussion on the differences between international liability and State responsibility see Fitzmaurice (2008).

<sup>89</sup> Kiss and Shelton (2007), p. 1138.

Traditionally, State responsibility for internationally wrongful acts refers to “the entirety of the ‘secondary’ rules determining the legal consequences of a violation of the obligations established by the ‘primary’ rules”.<sup>90</sup> In describing international liability on the other hand, the ILC stated that:

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Contrary to State responsibility, international liability rules were primary rules, for they established an obligation and came into play not when the obligation had been violated, but when the condition that triggered that same obligation had arisen.<sup>91</sup>

In this way, any liability that may arise out of activities that are not prohibited by international law within the Antarctic Treaty area, such as tourism or scientific research activities, would constitute special primary rules within the context of Antarctica. However, “a State’s failure to respect the rules surrounding these activities brings into play the mechanism of secondary rules of international State responsibility for wrongful acts”.<sup>92</sup> The regimes of international liability and State responsibility within the context of Antarctica do not, therefore, conflict but are somewhat complementary. *Wolfrum* even goes so far as to say that liability within the Liability Annex “can be interpreted as an expansion of the customary law-based regime on international responsibility”, supplementing “the existing regime concerning international liability”.<sup>93</sup>

It appears that if Annex VI come into force, it would not be a self-contained regime (“autonomous systems decoupled from general international law”).<sup>94</sup> Consequently, the general rules surrounding State responsibility will continue to apply in the Antarctic Treaty area and should do so in a manner complementary to the special primary and secondary rules established by the Liability Annex.

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## 12.5 Practical Relevance of the Liability Annex

At the 41st ATCM, the Secretariat noted that

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the issue of liability and the progress towards ratifying Annex VI were not included on the agenda [for 2018]. The Meeting agreed to extend an invitation to the International Group of Protection and Indemnity Clubs (IGP&I Clubs), the International Maritime Organisation (IMO) and the International Oil Pollution Compensation Funds (IOPC Funds) to participate in the liability discussions at ATCM XLII.<sup>95</sup>

<sup>90</sup>Montjoie (2010), p. 505.

<sup>91</sup>International Law Commission, Yearbook of the International Law Commission 1987 II-2, 43, at para. 146.

<sup>92</sup>Montjoie (2010), p. 505.

<sup>93</sup>Wolfrum (2008), p. 827.

<sup>94</sup>Simma and Pulkowski (2006), p. 485; Bastmeijer (2017), p. 416.

<sup>95</sup>Secretariat of the Antarctic Treaty (2018), para. 46.

- 37 Before coming into effect, all 28 Consultative Parties present during the adoption of the Liability Annex will need to approve it. Of the 17 Consultative Parties that have approved the Liability Annex thus far, five have reported that they are passing domestic legislation designed to implement the Liability Annex.<sup>96</sup> A number of the other Consultative Parties have indicated that they will pass the relevant domestic legislation once Annex VI enters into force.<sup>97</sup> As part of its strategic work plan, the ATCM recently re-stated that a decision originally made in 2020 should be taken “on the establishment of a timeframe for the resumption of negotiations on liability and that discussions on this matter would continue at ATCM XLIV”.<sup>98</sup>
- 38 The above said, only a little more than half of the required 28 Consultative Parties have approved the Annex in the 14 years since it was adopted, which has led to considerable consternation among certain authors who claim that the inability to bring the “long-sought Antarctic Liability regime into force after such a long gestation period is surely the greatest failure of the whole Madrid Protocol project”.<sup>99</sup> Other authors have noted that despite the Annex’s relatively narrow scope, it took “five times the effort involved in negotiating the entire Protocol and its five other Annexes”.<sup>100</sup>
- 39 Contemporary international environmental law has made clear that any environmental protection regime that hopes to be effective must include a comprehensive liability scheme. Two points related to the reluctance of States to ratify the Liability Annex are worth mentioning in this regard. First, unlike the shipping industry or the deep seabed regime, Antarctica’s geographic isolation and harsh environment have traditionally limited the economic incentives and opportunities that draw operators’ attention. However, the profitability and environmental impacts associated with the recent increase in Antarctic tourism industry have the potential to change this traditional perception.<sup>101</sup> Second, the reimbursement procedure for States who take necessary response action to protect the Antarctic environment after an incident

<sup>96</sup> Australia, Ecuador, Finland, Germany, Italy, Netherlands, New Zealand, Norway, Peru, Poland, Russian Federation, South Africa, Spain, Sweden, Ukraine, United Kingdom and Uruguay have approved Annex VI. Of these Consultative Parties, Finland, the Netherlands, Norway, the Russian Federation and Sweden have adopted implementing legislation; see Secretariat of the Antarctic Treaty (2021).

<sup>97</sup> Secretariat of the Antarctic Treaty (2021), para. 120. For example, Germany completed its ratification process in 2017 and stated that its domestic law implementing the Annex will come into force once the Annex is ratified by all Consultative Parties. See Secretariat of the Antarctic Treaty (2017), para. 124; see also BMU (2017).

<sup>98</sup> Secretariat of the Antarctic Treaty (2021), para. 123.

<sup>99</sup> Hemmings (2018), p. 330.

<sup>100</sup> Jackson and Kriwoken (2011), p. 315.

<sup>101</sup> The 2018–19 Antarctic tourism season attracted 56,168 persons with preliminary estimates that the 2019–20 season will attract some 78,520 persons. The boom in the tourism industry has the potential to increase the economic incentive in Antarctica. However, such incentive ultimately calls for robust guidelines (including a functioning liability regime) in order to combat the higher risks that may be attributed to an increase in private activities in and around Antarctica, see IAATO (2019).

occurs is both time-consuming and may have uncertain outcomes. As such, there remains a relatively high risk that any State party taking response action to an incident caused by another party may ultimately have to carry the costs of the response action itself.<sup>102</sup> Conceivably then, the economic risks associated with taking response action coupled with the comparatively low economic incentives traditionally associated with Antarctica have made States reluctant to ratify the Liability Annex. However, it has to be emphasised that an increase in private activity in Antarctica, particularly the diversification of Antarctic activities related to tourism, makes it unlikely that issues concerning liability will continue to be largely hypothetical.<sup>103</sup>

To date, there have been no court cases and no legal disputes concerning international liability and State responsibility that relate to the Antarctic Treaty System generally and the Liability Annex in particular.<sup>104</sup> However, it is probably only a matter of time before tourism, climate change and other activities related to the Anthropocene start having a significant impact on the fragile Antarctic environment. The Annex establishes special rules for State operators, however not every undertaking in Antarctica is operated by a State. For example, the German Alfred Wegener Institute is financed by the German State, at both the federal and State level, but is nonetheless classified as an independent research institute.<sup>105</sup> The lack of clarification or definition of what constitutes a “State operator” adds additional strain to the various issues surrounding response action and liability, insurance and the establishment of the fund discussed earlier.

Therein lies the greatest challenges facing the Liability Annex. With 11 approvals still required to enter into force, it will be for the States parties to ensure that the liability provisions contained within the Annex do not go from being limited in scope to empty verbiage.<sup>106</sup> If anything, the Liability Annex does highlight the need for States parties to cooperate in regulating their own nationals uniformly as an effective means of enforcing Antarctic norms.<sup>107</sup>

<sup>102</sup> See Addison-Agyei (2007), p. 316.

<sup>103</sup> Burton (2018), p. 687.

<sup>104</sup> Bastmeijer (2017), pp. 400 & 424.

<sup>105</sup> However, see Section 2 No. 13 of the German Implementation Act, which defines a State operator as “an operator established in Germany which is organised under public law or controlled by the State”.

<sup>106</sup> Vöneky (2008), p. 193. Two further States (Belgium and Chile) have announced that their ratification processes would soon be completed. See Secretariat of the Antarctic Treaty (2021), para. 120.

<sup>107</sup> Vigni (2000), p. 534.

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# Chapter 13

## Liability Under Part XI UNCLOS (Deep Seabed Mining)



Alexander Proelss and Robert C. Steenkamp

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## 13.1 Introduction and Regulatory Context

The part of the seabed and subsoil that is beyond national jurisdiction (hereafter, the Area) is regulated by Part XI of the United Nations Convention on the Law of the Sea (UNCLOS) as well as by the 1994 Implementation Agreement.<sup>1</sup> The regime of deep seabed mining (DSM) in the Area foresees three phases: prospecting, exploration and exploitation. The exploration and exploitation phases involve several actors, including States, the International Seabed Authority (ISA or Authority) and private entities. Established under UNCLOS, the ISA is tasked with controlling and organising “activities in the Area, particularly with a view to administering the

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<sup>1</sup>United Nations Convention on the Law of the Sea, 10 December 1982, 1833 UNTS 3 (entered into force 16 November 1994); Agreement Relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982, 28 July 1994, 1836 UNTS 3.

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resources of the Area”.<sup>2</sup> To date, the ISA has developed regulations related to exploration for minerals in the Area which set out the standard terms of exploration contracts as well as the requirements to apply for exploration rights.<sup>3</sup> DSM in the Area is currently transitioning from the exploration phase into the exploitation phase, and the ISA is developing rules for the assessment and environmental management of future operations.<sup>4</sup>

2 It is accepted that while the exploration of minerals in the Area does pose environmental risks, the most serious environmental risks will occur during the exploitation phase.<sup>5</sup> For this reason, the ISA has noted that environmental protection measures are amongst some of “the most important elements” of any proposed exploitation framework.<sup>6</sup> Therefore, the development and adoption of any exploitation framework that adequately addresses environmental protection will naturally have to include rules governing liability for damage arising out of activities in the Area.<sup>7</sup>

3 Before moving into any substantive analysis, it is important to provide an overview of the regulatory context for DSM activities in the Area. In this regard, Article 145 UNCLOS sets the regulatory scene by providing that the Authority will develop measures necessary for environmental protection including the adoption of rules and regulations to prevent, reduce and control pollution as well as harmful effects to the marine environment in general. Article 139 UNCLOS provides the requirements necessary to establish the liability of States (not private actors), with Article 139(2) stating that “damage caused by the failure of a State Party or international organization to carry out its responsibilities [...] shall entail liability”. However, a State will not be liable if it has fulfilled its responsibilities by taking “all necessary and appropriate measures” to secure compliance under Article 153(4) and Article 4(4) of Annex III UNCLOS. Additionally, Article 209 UNCLOS requires States to “adopt laws and regulations to prevent, reduce and control pollution of the

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<sup>2</sup>Article 157(1) LOSC.

<sup>3</sup>Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area (Document No. ISBA/19/C/17, adopted 13 July 2000 and amended on 25 July 2013) [Nodules Regulations]; Regulations on Prospecting and Exploration for Polymetallic Sulphides in the Area (Document No. ISBA/16/A/12/Rev.1, adopted 7 May 2010) [Sulphides Regulations]; Regulations on Prospecting and Exploration for Cobalt-Rich Crusts (Document No. ISBA/18/A/11, adopted 27 July 2012) [Crusts Regulations]. These regulations (the Nodules, Sulphides and Crusts Regulations) will collectively be referred to as the Exploration Regulations.

<sup>4</sup>ISA (2016).

<sup>5</sup>Jaeckel (2017), p. 153.

<sup>6</sup>ISA Council, Workplan for the Formulation of Regulations for the Exploitation of Polymetallic Nodules in the Area (25 April 2012), ISBA/18/C/4, para. 5, [https://isa.org/jm/files/files/documents/isba-18c-4\\_0.pdf](https://isa.org/jm/files/files/documents/isba-18c-4_0.pdf), accessed 1 Apr 2022.

<sup>7</sup>The comprehensive set of rules, regulations and procedures issued by the ISA to regulate prospecting, exploration and exploitation of marine minerals in the Area are referred to as the Mining Code. Thus far, the ISA has developed Draft Regulations on the Exploitation of Mineral Resources in the Area, ISBA/25/C/WP.1 (2019) [Draft Exploitation Regulations], [https://isa.org/jm/files/files/documents/isba\\_25\\_c\\_wp1-e\\_0.pdf](https://isa.org/jm/files/files/documents/isba_25_c_wp1-e_0.pdf), accessed 1 Apr 2022.

marine environment from activities in the Area”. Articles 235 and 304 UNCLOS respectively necessitate that States adopt national legislation for “compensation or other relief” and provide that all provisions of UNCLOS concerning responsibility and liability are without prejudice to the “existing rules and the development of further rules regarding responsibility and liability under international law”. Finally, the responsibility and liability of the Authority and contractors (being natural or juridical persons) are enunciated in Article 22 of Annex III UNCLOS. Certain aspects of this regulatory framework (discussed in detail in the following sections) were elaborated on in an advisory opinion of the Seabed Disputes Chamber (SDC) of the International Tribunal for the Law of the Sea (ITLOS).<sup>8</sup>

Given the involvement of different actors, performing different tasks but all being burdened with similar, or at times the same, obligations, the need for a comprehensive liability regime becomes evident. The relationship between several actors, all of which have a commercial interest in the deep seabed, provides a complex legal situation for both international governance and environmental protection.<sup>9</sup> Bearing in mind that the liability regime specifically applicable to the Area has thus far not been completed, this report is necessarily limited to examining the Mining Code as well as the advisory opinion of the SDC to highlight the trajectory that international liability for activities associated with the Area is currently undergoing. In doing so, this Annex is divided into five sections. Following this introduction (Sect. 13.1), Sect. 13.2 highlights the potential scope as well as the allocation and standard of liability that may be required for DSM in the Area. It includes an examination of the current debate surrounding insurance as well as possible exemptions to and limitations of liability. Section 13.3 evaluates the rationale behind the liability model sketched out, as far as the basic structure and principles are concerned, in UNCLOS. Section 13.4 briefly analyses the special features of DSM liability, including its applicability to private actors. Lastly, Sect. 13.5 examines the practical relevance of the current DSM liability model whilst acknowledging that although no liability model has yet been completed, its adoption is arguably imminent.

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## 13.2 Liability Model

### 13.2.1 *Material Scope of the Potential Liability Regime for Deep Seabed Mining in the Area*

Article 134 UNCLOS establishes that its Part XI (including the liability and responsibility provisions therein) apply to the Area as well as activities conducted in the

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<sup>8</sup>Seabed Disputes Chamber of the International Tribunal for the Law of the Sea (SDC ITLOS) *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Reports 2011, 10, para. 168.

<sup>9</sup>Plakokefalos (2017), p. 381.

Area. Following on from Article 134, when coupled with the zonal approach established by UNCLOS, it must be emphasised that the liability regime for DSM will only apply to those activities associated with DSM in the Area and not to other maritime zones (such as the exclusive economic zone (EEZ) or the high seas). For this reason, the rules detailing responsibility and liability need to clarify to which activities they specifically apply. Article 139 UNCLOS states that the rules regarding responsibility and liability, pertaining to DSM in the Area, apply to “activities in the Area”. Article 1(1)(3) UNCLOS defines activities in the Area as “all activities of exploration for, and exploitation of, the resources of the Area”. After an examination of other relevant UNCLOS provisions, the SDC explained in its 2011 advisory opinion that in the context of exploration and exploitation, activities in the Area includes “the recovery of minerals from the seabed and their lifting to the water surface”.<sup>10</sup> Furthermore, the Chamber made clear that the extraction of water from such minerals and the “preliminary separation of materials of no commercial interest, including their disposal at sea, are also deemed to be covered by the expression ‘activities in the Area’”.<sup>11</sup> In contrast, the SDC held that the process through which metals are extracted from the respective minerals at a plant situated on land is excluded from “activities in the Area”.<sup>12</sup> The transportation “to points on land from the part of the seas super-adjacent to the part of the Area in which the contractor operates”, is also not included as an activity taking place in the Area.<sup>13</sup> The reason for this is that regulating such transportation could create conflicts with existing provisions and rights under UNCLOS associated with, for example, navigation on the high seas or through an EEZ.<sup>14</sup>

6 Although the 2011 advisory opinion sheds some light on the scope of application of potential liability rules in the Area, the definition of “activities in the Area” does not fully resolve the issues related to the scope of application. This is because the definition does not address questions connected to the role of flag States (of vessels used for mining and related activities) and their liability for failures to appropriately oversee shipping matters in areas used for DSM.<sup>15</sup> Given the diverse array of actors involved in DSM, any newly proposed liability regime will need to be particularly accurate when demarcating the division of responsibilities. The definition of “activities in the Area” will guide the scope of application of liability rules related to DSM in the Area however, such guidance needs to take note of the development of other rules. This will need to include issues such as compensation, flag State responsibility

<sup>10</sup>SDC ITLOS *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Reports 2011, 10, para. 94.

<sup>11</sup>Ibid., para. 88; see also Legal Working Group on Liability (2018), p. 11.

<sup>12</sup>SDC ITLOS *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Reports 2011, 10, para. 95.

<sup>13</sup>Ibid.

<sup>14</sup>Ibid.

<sup>15</sup>Legal Working Group on Liability (2018).

and the like, all of which may have an impact on the future scope of application of the intended liability regime.

### ***13.2.2 Actors Addressed by the Deep Seabed Mining Regime***

UNCLOS is applicable to States, however, its Part XI sets up a unique regime whereby international obligations are created for all entities involved in activities in the Area. UNCLOS, the 1994 Implementation Agreement as well as those regulations and rules established by the Authority address a variety of actors, including sponsoring States, natural and juridical persons as well as international organisations. This means that each of these entities that engage in activities in the Area bears international obligations.<sup>16</sup>

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### ***13.2.3 Imputability of Liability***

#### **General Aspects of Liability**

From the outset, it must be noted that given the nature of the questions posed to the SDC (pertaining to sponsoring States), the 2011 advisory opinion only briefly touches upon the responsibility and liability of the Authority and private actors. Despite this, the deep seabed regime attributes liability to a variety of actors, with sponsoring States, contractors and the Authority being the most relevant for this report. Some actors, such as the Enterprise,<sup>17</sup> have not yet (and will perhaps never) become operational while other actors, such as flag States, owners/operators of vessels and subcontractors/employees of contractors, cannot be held liable under the current framework.<sup>18</sup> However, this does not mean that these other actors will not be liable should they engage with DSM activities in the Area in the future.

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Each actor addressed within the current framework has different responsibilities regarding adherence to obligations associated with the precautionary approach and employing best environmental practices. The responsibility of the sponsoring States is to cooperate with the ISA in implementing the DSM regime, to establish an adequate domestic legal regime and to ensure that sponsored contractors fulfil their contractual obligations. The ISA, taking into account the best scientific information, is responsible for monitoring all activities in the Area. Contractors are responsible

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<sup>16</sup>Plakokefalos (2017), p. 391.

<sup>17</sup>According to Article 170(1) UNCLOS, the Enterprise is the organ of the ISA “which shall carry out activities in the Area directly, pursuant to article 153, paragraph 2(a), as well as the transporting, processing and marketing of minerals recovered from the Area.”

<sup>18</sup>For a detailed discussion on the possible liability of these other actors see Davenport (2019).

for implementing the regulations of the Authority, and complying with their contractual obligations.<sup>19</sup>

### Standard of Liability

- 10 Generally speaking, “activities with higher degrees of risk [such as deep seabed mining] are often subjected to strict forms of liability in both international and domestic law”.<sup>20</sup> As will be seen below, however, the standard of liability associated with the deep seabed liability regime is more closely related to a negligence standard, that is, requiring that certain due diligence obligations are met. As the three primary groups of actors currently associated with DSM activities, the remainder of this subsection is divided into an examination of the obligations and standard of liability relevant for sponsoring States, the Authority and contractors. The subsection ends with a brief discussion of the liability standards and obligations applicable in instances where multiple actors cause damage.

### Sponsoring States

- 11 The primary obligation of sponsoring States is to “ensure” that activities in the Area that are conducted by entities under their jurisdiction or control, comply with the requirements laid down in Part XI of UNCLOS as well as those rules and regulations developed by the ISA.<sup>21</sup> Whilst the objective is to secure contractors’ compliance, the obligation for sponsoring States is to ensure the deployment of “adequate means, to exercise best possible efforts, to do the utmost, to obtain this result”.<sup>22</sup> This obligation to “ensure” is an obligation of conduct and not of result and is, therefore, considered a due diligence obligation.<sup>23</sup> In assessing the liability of sponsoring States, the SDC ruled out the application of any strict liability regime.<sup>24</sup> The SDC made clear that “liability for damage of the sponsoring State arises only from its failure to meet its obligation of due diligence” and there “must be a causal link between the sponsoring State’s failure and the damage”.<sup>25</sup> In terms of prospects here, there seems to be little State practice that supports a move away from due

<sup>19</sup>Lodge (2015), p. 152.

<sup>20</sup>Legal Working Group on Liability (2018).

<sup>21</sup>Article 139(1) and Article 4(4) of Annex III LOSC; see also SDC ITLOS *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Reports 2011, 10, paras. 117–123.

<sup>22</sup>SDC ITLOS *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Reports 2011, 10, para. 110.

<sup>23</sup>See *Pulp Mills on the River Uruguay* (Argentina v Uruguay), Judgment, ICJ Reports (2010), p. 14 at para. 187; see also SDC ITLOS *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Reports 2011, 10, para. 111.

<sup>24</sup>SDC ITLOS *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Reports 2011, 10, para. 189.

<sup>25</sup>*Ibid.*, paras. 189 & 184.

diligence as the default approach to the liability of States.<sup>26</sup> The finding of the SDC in its 2011 advisory opinion, together with the reluctance of States to explore a DSM liability regime applicable to the Area beyond one based on due diligence obligations, reveals that liability is only triggered if a sponsoring State fails to meet its due diligence obligations and if there is damage. That said, the question remains as to whether States can still be held liable outside the liability regime of the deep seabed.

Traditionally, “a State may be held liable under customary international law even if no material damage results from its failure to meet its international obligations”.<sup>27</sup> In this way: 12

the liability of a sponsoring State constitutes an exception to the customary law rule on liability. In the [Seabed Dispute] Chamber’s view, if the sponsoring State failed to fulfil its obligation but no damage has occurred, the consequences of such a wrongful act are determined by customary international law. This means that under customary international law, a sponsoring State may be liable if it breaches its obligation where no damage has been caused. It seems to follow that if a sponsoring State is not liable under the deep seabed regime of UNCLOS, it may be liable at the customary law level.<sup>28</sup>

Finally, there may be situations in which several States sponsor the same contractor. In such situations, the question arises as to how liability should be divided between the States concerned. In this regard, the SDC noted that “in the event of multiple sponsorship, liability is joint and several unless otherwise provided in the Regulations issued by the Authority”.<sup>29</sup> 13

### **International Seabed Authority**

The Authority is the primary administrator of DSM activities, and all “activities in the Area are organized, carried out and controlled by the Authority on behalf of mankind as a whole”.<sup>30</sup> Taking into account that any failure by the Authority to ensure sufficient supervision of activities in the Area may result in damage, Article 22 of Annex III UNCLOS highlights that the “Authority shall have responsibility or liability for any damage arising out of wrongful acts in the exercise of its powers and functions” and that the liability will be for the actual amount of damage. The SDC held that “the main liability for a wrongful act committed [ . . . ] in the exercise of the Authority’s powers and functions rests with [ . . . ] the Authority rather than with the 14

<sup>26</sup>Sreenivasa Rao, First Report on the Legal Regime for Allocation of Loss in the Case of Transboundary Harm Arising out of Hazardous Activities (UN Doc A/CN.4/531 (2003)), para. 4; see also Boyle (1990), p. 13; see also Craik (2018), p. 7.

<sup>27</sup>SDC ITLOS *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Reports 2011, 10, para. 178.

<sup>28</sup>Tanaka (2013), p. 220.

<sup>29</sup>SDC ITLOS *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Reports 2011, 10, para. 192.

<sup>30</sup>Article 153(1) LOSC.

sponsoring State”.<sup>31</sup> As in the case of the sponsoring States, the obligation of the ISA is one “to ensure” and is, therefore, a due diligence obligation, which is why the applicable standard is one of negligence rather than strict liability.<sup>32</sup>

### Contractors

15 Article 153(2) UNCLOS foresees that States parties, State enterprises as well as natural or juridical persons may conduct activities in the Area. Additionally, the drafting history of Article 139 UNCLOS indicates that international organisations may also undertake activities in the Area.<sup>33</sup> Collectively referred to as contractors, these entities had concluded 31 contracts with the Authority as of December 2021.<sup>34</sup>

16 Article 22 of Annex III UNCLOS deals with the liability of contractors. It states that contractors will be responsible and liable “for any damage arising out of wrongful acts in the conduct of its operations, account being taken of contributory acts or omissions by the Authority”. The liability of sponsored contractors was shaped by the SDC in relation to the liability of sponsoring States. In this regard, the SDC concluded that:

The liability of the sponsoring State arises from its own failure to comply with its responsibilities under the Convention and related instruments. The liability of the sponsored contractor arises from its failure to comply with its obligations under its contract and its undertakings thereunder.<sup>35</sup>

17 The language used in the Exploration Regulations, the Draft Regulations on Exploitation as well as the standard clauses of both exploration and exploitation contracts highlights that the obligations of a contractor are not all that different from

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<sup>31</sup>SDC ITLOS *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Reports 2011, 10, para. 200.

<sup>32</sup>Plakokefalos (2017), p. 387.

<sup>33</sup>See Nordquist et al. (1990), pp. 120–125.

<sup>34</sup>Four of these contractors are States (India, Poland, South Korea, and the Russian Federation); five are juridical or private companies (Nauru Ocean Resources Inc., Tonga Offshore Mining Ltd., Global Sea Mineral Resources NV, UK Seabed Resources Ltd., Ocean Mineral Singapore Pte. Ltd.); and twelve are State enterprises (JSC Yuzhmorgeologiya, China Ocean Mineral Resources Research and Development Association, Deep Ocean Resources Development Co. Ltd., Japan, Oil, Gas and Metals National Corporation, Institut français de Recherche pour l’exploitation de la Mer, Federal Institute for Geosciences and Natural Resources, Marawa Research and Exploration Ltd., Cook Islands Investment Corporation, Companhia de Pesquisa de Recursos Minerais, China Minmetals Corporation, Blue Minerals Jamaica Ltd. and Beijing Pioneer Hi-Tech Development Corporation). The status of one of the contractors (Interoceanmetal Joint Organization) is not clear—it could be seen either as an international organisation consisting of States, or as a State enterprise which is jointly established by several States (in this regard see Davenport 2019, p. 6).

<sup>35</sup>SDC ITLOS *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Reports 2011, 10, para. 204.



those of sponsoring States.<sup>36</sup> All the exploration regulations (concerning nodules, sulphides and crusts) provide that contractors “shall take necessary measures” to protect and preserve the environment pursuant to Article 145 UNCLOS.<sup>37</sup> Such phrases are clearly indicative of obligations of conduct rather than result.<sup>38</sup> For this reason, the current standard of liability applicable to contractors appears to be one of negligence—i.e. contractors are liable if they breach their due diligence obligations.<sup>39</sup>

### **Relationship Between Sponsoring States, the Authority and Contractor Liability**

One further issue that requires mention regarding the allocation of liability concerns those situations where multiple actors are responsible for damage. The liability of a sponsoring State stems from its failure to meet its primary obligations “to ensure”. Accordingly, if a sponsoring State has adequately satisfied its responsibilities (primarily of creating an adequate legal framework, and of supervision and control), such a State will not be liable for any damage that may arise from a contractor’s non-compliance. Consequently, the SDC characterised the responsibility and liability of sponsoring States and contractors not as joint and several but as “existing in parallel”.<sup>40</sup> For this reason, there is no room for a sponsoring State to be “vicariously liable for the acts or omissions of a contractor, but is independently liable for its own acts or omissions”.<sup>41</sup> In this regard, certain States and organisations have raised concerns surrounding liability and contractor insolvency. Particularly, it is argued that even if a sponsoring State has observed all its due diligence obligations to ensure contractor compliance, a contractor’s liability should not end by filing for insolvency,<sup>42</sup> leaving damage to the common heritage unremedied. However, the SDC made clear that “the liability regime established by article 139 of the Convention and in related instruments leaves no room for residual liability”.<sup>43</sup> On this basis, the insolvency of a company will not *prima facie* result in a State assuming the liability of an insolvent contractor since the liability of a sponsoring State is measured by that State’s failure to fulfil its due diligence obligation to ensure contractor compliance.

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<sup>36</sup>Plakokefalos (2017), p. 388.

<sup>37</sup>Reg. 31(5) of the Nodules Regulations; Reg. 33(5) of the Sulphides Regulations; Reg. 33(5) of the Crusts Regulations.

<sup>38</sup>Plakokefalos (2017), p. 388.

<sup>39</sup>Davenport (2019).

<sup>40</sup>SDC ITLOS *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Reports 2011, 10, para. 201.

<sup>41</sup>Plakokefalos (2017), p. 391.

<sup>42</sup>Anton (2012), pp. 250 & 254–256.

<sup>43</sup>SDC ITLOS *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Reports 2011, 10, para. 204.

- 19 Regarding the relationship between the liability of the ISA and contractors, the standard clauses for both exploration and exploitation contracts indicate that the liability of the contractor and the ISA will be calculated by taking into account the “contributory acts or omissions” of each.<sup>44</sup> Additionally, each party must also indemnify the other.<sup>45</sup> The Draft Exploitation Regulations provide for an almost identical framework except that they allow “contributory acts of third parties to be taken into account, in addition to contributory acts of the ISA or the contractor”.<sup>46</sup> Given that the ISA and the contractors are obliged to indemnify each other, the argument can be made that the liability of the ISA and contractors will be joint and several. However, the ISA and the contractors deal with different aspects related to activities in the Area and, following the reasoning of the SDC, it could also be argued that the liability of the Authority and a contractor exist in parallel.<sup>47</sup> This is an unclear area and a liability regime purporting to regulate DSM in the Area needs to take into account such ambiguities.
- 20 Lastly, the SDC indicated that “sponsoring States have an obligation to assist the Authority in its task of controlling activities in the Area”.<sup>48</sup> The SDC noted that such an obligation to “ensure” is “met through compliance with the ‘due diligence’ obligation set out in article 139”, and it would seem, therefore, that the liability of the Authority and sponsoring States also exist in parallel. However, as with the liability relationship between the ISA and contractors, more clarity on this point is still needed.

### **Due Diligence Obligations and Strict Liability**

- 21 It has been made clear that sponsoring States, the Authority and contractors are currently under due diligence obligations and that their liability standard is not strict.<sup>49</sup> However, brief mention should be made of the variable nature of the due diligence obligation and its possible impact on any potential deep seabed liability regime. The International Law Commission (ILC) stated that:

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<sup>44</sup>Section 16 of the Standard Clauses for Exploration Contracts (Annex IV) (the Nodules Regulations; the Sulphides Regulations; and the Crusts Regulations); Section 7 of the Standard Clauses for Draft Exploitation Contract, Annex X of ISBA/25/C/WP.1 (2019), Draft Regulations on Exploitation of Mineral Resources in the Area, <https://isa.org.jm/files/files/documents/25c-wp1-en-advance.pdf>, accessed 1 Apr 2022.

<sup>45</sup>Section 7.2 and 7.4 of the Standard Clauses for Draft Exploitation Contract, Annex X of ISBA/25/C/WP.1 (2019), Draft Regulations on Exploitation of Mineral Resources in the Area, <https://isa.org.jm/files/files/documents/25c-wp1-en-advance.pdf>, last accessed on 25 Mar 2022.

<sup>46</sup>Davenport (2019).

<sup>47</sup>Davenport (2019).

<sup>48</sup>SDC ITLOS *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Reports 2011, 10, paras. 122 & 124.

<sup>49</sup>In this regard, see SDC ITLOS *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Reports 2011, 10, paras. 125–137.

What would be considered a reasonable standard of care or due diligence may change with time; what might be considered an appropriate and reasonable procedure, standard or rule at one point in time may not be considered as such at some point in the future.<sup>50</sup>

Additionally, the SDC ruled that the “standard of due diligence may vary over time and depends on the level of risk and on the activities involved”.<sup>51</sup> Both Articles 235 and 304 UNCLOS provide that the relevant rules and principles relating to international responsibility and liability are not static but are open to elaboration and development.<sup>52</sup> These conclusions are relevant for a discussion on how liability standards under the DSM regime may alter over time and be based on the particular activity that is being undertaken. The variable nature of the due diligence obligation implies that even the obligation itself may change as technologies improve and may become stricter for riskier activities.<sup>53</sup> This is not to say that the concept of due diligence will one day equate to strict liability, but future developments may potentially contribute to bridging the gap between liability standards based on due diligence and those based on strict liability.

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### Exemptions from Liability

Under Article 139(2), as well as Article 4(4) of Annex III UNCLOS, sponsoring States are exempt from liability if they have discharged their due diligence obligation to ensure, for example, the adoption of laws and regulations and have implemented “all necessary and appropriate measures to secure effective compliance” by persons under their jurisdiction (including sponsored contractors).<sup>54</sup> With regard to the relationship between contractors and the Authority, Article 22 of Annex III UNCLOS exempts a portion of their respective liabilities to the extent that the other entity (the Authority or a contractor) was contributorily negligent. That said, the deep seabed regime has not yet considered the topic of exemptions in detail and typical exemptions for damage resulting from intentional acts, war and hostilities, terrorism etc. cannot be ruled out.

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<sup>50</sup>International Law Commission (2001), p. 154 at para. 11.

<sup>51</sup>SDC ITLOS *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Reports 2011, 10, paras. 117–120 & 242.

<sup>52</sup>Both Articles 235 and 304 LOSC make clear that the rules on liability and responsibility are without prejudice to the application of “further rules regarding responsibility and liability under international law”; see also SDC ITLOS *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Reports 2011, 10, para. 211.

<sup>53</sup>Ibid; see also Tanaka (2013), p. 210.

<sup>54</sup>Article 139(2) LOSC; see also SDC ITLOS *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Reports 2011, 10, paras. 185–187.

## Definition of Damage and Limits of Liability

24 In its 2011 Advisory Opinion, the SDC noted that:

Neither the Convention nor the relevant Regulations (regulation 30 of the Nodules Regulations and regulation 32 of the Sulphides Regulations) specifies what constitutes compensable damage, or which subjects may be entitled to claim compensation. It may be envisaged that the damage in question would include damage to the Area and its resources constituting the common heritage of mankind, and damage to the marine environment.<sup>55</sup>

25 The extent to which damage will be compensable will depend on several factors, including the definition of damage adopted, the threshold of harm/damage required and, ultimately, the scope of the liability regime established. While a thorough analysis of this is beyond the ambit of the current report, several questions require further examination before a conclusive definition of compensable damage can be submitted. The SDC's finding seems to indicate that "damage to the Area and its resources" is different from "damage to the marine environment". The Draft Exploitation Regulations defines the "marine environment" as including "the physical, chemical, geological and biological and genetic components, conditions and factors [...], the waters of the seas and oceans and the airspace above those waters, as well as the seabed and ocean floor and subsoil thereof".<sup>56</sup> If a definition of compensable damage took account of the airspace and water column above the Area, it remains to be seen how such a definition would have a bearing on the rules and instruments applicable in other maritime zones.<sup>57</sup>

26 The definition of "marine environment", although capturing the complexity of the marine ecosystem, also presents challenges for the restoration or reinstatement of the marine environment. The risks and impacts associated with DSM activities may make such restoration or reinstatement unfeasible or impossible.<sup>58</sup> Additionally, Article 162(2)(x) UNCLOS stipulates that exploitation contracts will be disapproved where there exists "the risk of serious harm to the marine environment". Article 162 suggests that the threshold of harm required needs to be serious. However, in light of the contemporary developments surrounding international environmental law since the adoption of UNCLOS, "the use of the term serious harm seems to impose an unreasonably high threshold before liability for harm is triggered".<sup>59</sup>

<sup>55</sup>SDC ITLOS *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Reports 2011, 10, para. 179.

<sup>56</sup>See Schedule ("Use of Terms and Scope") to Draft Regulations on Exploitation of Mineral Resources in the Area, ISBA/25/C/WP.1 (2019), p. 117; available at <https://isa.org/jm/files/files/documents/25c-wp1-en-advance.pdf>, accessed 1 Apr 2022.

<sup>57</sup>Mackenzie (2019).

<sup>58</sup>Ibid. One of the purposes of the suggested Environmental Liability Trust Fund is to fund "research into Best Available Techniques for the restoration and rehabilitation of the Area" (Draft Reg. 55(d) of the Draft Exploitation Regulations) which purpose may be left unfulfilled if restoration is unfeasible or impossible.

<sup>59</sup>Mackenzie (2019).

The amount and structure of limits are directly affected by the “predicted quantum of potential damages” and the lack of an agreed-upon threshold and definition for compensable damage will affect the establishment of limits in any potential liability regime.<sup>60</sup> The SDC noted that “the form of reparation will depend on both the *actual damage* and the technical feasibility of restoring the situation to the *status quo ante*”.<sup>61</sup> Moreover, Article 22 of Annex III UNCLOS mentions that the liability for contractors and the Authority will be for the “actual amount of damage”. The use of the term “actual damage” may imply that damage claims are not limited, which would pose problems for potential insurance obligations as unlimited liability is likely to be received as unreasonable and unfair by both operators and insurers.<sup>62</sup>

The legal character and special features of the Area will require a tailored approach to defining and limiting compensable damage. Any approach will need to take note of whether damage must exceed a particular threshold (serious or significant), whether pure environmental harm will be compensable and how particular compensable damage will be valued.<sup>63</sup>

### Insurance and Possible Funds

The diversity of actors in operational and oversight roles together with the specific risks associated with mining in the Area implies the need for compulsory insurance schemes. With regard to sponsoring States, there is currently no mention or requirement that they maintain adequate insurance. This makes sense since sponsoring States themselves are not involved in activities in the Area and their liability is linked to failures to fulfil their due diligence obligations and, even then, that failure must be linked to the damage that is triggered by the activities of sponsored contractors. Regarding contractors, section 16 of the standard clauses for exploration contract requires that contractors “maintain appropriate insurance policies with internationally recognized carriers”.<sup>64</sup> Regulation 36 of the Draft Exploitation Regulations indicates that the obligation to maintain adequate insurance is a fundamental term of the exploitation contract, failure of which entitles the Authority to suspend or terminate the exploitation contract.<sup>65</sup>

In contrast, neither UNCLOS nor the exploration regulations indicate how the Authority will pay compensation should it be found liable. Under the current Draft Exploitation Regulations, the contractor is obliged to include the ISA as an additional assured, and “shall ensure that all insurances required under this regulation

<sup>60</sup>Xue (2019).

<sup>61</sup>SDC ITLOS *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Reports 2011, 10, para. 197 (emphasis added).

<sup>62</sup>MacMaster (2019), p. 351.

<sup>63</sup>Legal Working Group on Liability (2018); see also Mackenzie (2019).

<sup>64</sup>Standard Clauses for Draft Exploitation Contract, Annex X of ISBA/25/C/WP.1 (2019), Draft Regulations on Exploitation of Mineral Resources in the Area, <https://isa.org.jm/files/files/documents/25c-wp1-en-advance.pdf>, accessed 1 Apr 2022.

<sup>65</sup>Draft Reg. 36(3) read with Draft Reg. 103(5) of the Draft Exploitation Regulations.

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shall be endorsed to provide that the underwriters waive any rights of recourse, including subrogation rights against the Authority in relation to Exploitation”.<sup>66</sup> This seems to imply that even if the Authority were to be found legally liable, the liability of the contractor, together with the waiver of recourse under the Draft Exploitation Regulations, means that the Authority will not be held financially liable.<sup>67</sup> Such a conclusion could seriously undermine a primary purpose of an effective liability regime—i.e. sufficient deterrence so that damage is avoided.

**31** Also relevant for a discussion on insurance is that Draft Regulation 26 of the Draft Exploitation Regulations requires contractors to “lodge an Environmental Performance Guarantee in favour of the Authority and no later than the commencement date of production in the Mining Area”. In this context, “Environmental Performance Guarantee” means a financial guarantee,<sup>68</sup> and while a number of issues remain to be specified in guidelines to be issued by the Authority, the Draft Exploitation Regulations indicate that the primary purpose of the guarantee is to cover the costs associated with the closure of a mining site.<sup>69</sup> Importantly, Draft Regulation 26(8) highlights that “an Environmental Performance Guarantee by a Contractor does not limit the responsibility and liability of the Contractor under its exploitation contract”.

**32** The SDC acknowledged that there may be situations in which a contractor is unable to cover the amount of damage in full. In other words, where “the sponsoring State has taken all necessary and appropriate measures, [and] the sponsored contractor has caused damage and is unable to meet its liability in full”, there could be a liability gap.<sup>70</sup> In this regard, the SDC highlighted that the liability regime under UNCLOS does not allow for residual liability and that any outstanding amount cannot be claimed from the sponsoring State.<sup>71</sup> In light of this, the SDC drew attention to Article 235(3) UNCLOS and surmised that such a liability gap may be bridged by “the establishment of a trust fund to compensate for the damage not covered”.<sup>72</sup>

**33** It must be highlighted that no such fund yet exists, however, Section 5 of Part IV of the Draft Exploitation Regulations does envisage the establishment of an Environmental Compensation Fund.<sup>73</sup> The main purpose of such a fund will be the implementation of measures necessary “to prevent, limit or remediate any damage

<sup>66</sup>Draft Reg. 36(2) of the Draft Exploitation Regulations.

<sup>67</sup>Davenport (2019).

<sup>68</sup>Schedule 1 of the Draft Exploitation Regulations.

<sup>69</sup>Draft Reg. 95 of the Draft Exploitation Regulations dealing with guidelines to be issued and Draft Reg. 26(2) dealing with the purpose of the guarantee.

<sup>70</sup>SDC ITLOS *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Reports 2011, 10, para. 203.

<sup>71</sup>Ibid.

<sup>72</sup>Ibid., para. 205.

<sup>73</sup>Draft Regs. 54–56 of the Draft Exploitation Regulations.

to the Area arising from activities in the Area, the costs of which cannot be recovered from a Contractor or sponsoring State”.<sup>74</sup> The establishment of a compensation fund will have to take account of several factors including financing (compulsory or voluntary) as well as who the respective contributors and beneficiaries would be. Contractors are the immediate beneficiaries associated with DSM in the Area but are not the only beneficiaries as Article 160(2)(f)(i) UNCLOS requires that the Authority equitably shares “financial and other economic benefits derived from activities in the Area”. In this regard, the vast array of beneficiaries that this provision may include needs to be understood in the establishment of any potential funding scheme. Moreover, the common heritage of mankind principle not only entails common benefits but also common obligations in protecting the environment and contractors cannot be expected to be the only contributors to the fund.<sup>75</sup> This is not to say that every actor will be expected to make an equal contribution, however, account will have to be taken of an equitable beneficiary and contributory regime (especially considering the needs and involvement of both developed and developing States).

### Entitlement to Claim Compensation and Jurisdiction

A pertinent question regarding any proposed DSM liability regime is which actors from among the diverse array involved in DSM activities will be entitled to bring a compensation claim? In answering this question, account has to be taken of the categories of compensable damage since these categories will determine potential claimants. Recently, five possible categories of compensable damage have been identified, namely (1) claims for damage to the resources that are the common heritage of mankind; (2) claims for damage to the marine environment in areas beyond national jurisdiction; (3) claims for persons and property in the Area; (4) claims for damage to coastal State interests; and (5) claims for damage suffered by non-State Parties to UNCLOS operating in areas beyond national jurisdiction.<sup>76</sup> Potential fora in which claims for damages may be adjudicated include the SDC (under Article 187), an *ad hoc* chamber of the SDC, a special chamber of ITLOS, commercial arbitration under Article 188 and national courts. The structure of the specific liability regime which, in the case of DSM is not yet finalised, will determine the appropriate forum through which a claim for damages can be made. Given the current regulatory and liability framework, both the SDC and national courts are potential claims for a that are particularly relevant.

The categories of compensable damage have a direct impact on the contentious jurisdiction of the SDC. The SDC noted that actors “entitled to claim compensation may include the Authority, entities engaged in deep seabed mining, other users of the

<sup>74</sup>Draft Reg. 55(a) of the Draft Exploitation Regulations.

<sup>75</sup>Xue (2019).

<sup>76</sup>Legal Working Group on Liability (2018).

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sea, and coastal States”.<sup>77</sup> This is in line with the contentious jurisdiction provisions contained in Article 187 UNCLOS which provides that the SDC has jurisdiction over, *inter alia*, disputes between States parties, disputes between State parties and the Authority as well as disputes between parties to a contract—which will always involve the Authority on one side and contractors, in the form of States parties, State enterprises and natural or juridical persons, on the other.<sup>78</sup> However, it must be noted that there are limitations to the jurisdiction of the SDC including the fact that Article 187 UNCLOS does not allow for States parties to bring claims against contractors who are either State enterprises or natural or juridical persons.<sup>79</sup> Should a limitation to jurisdiction be present as, for example, where a State party wishes to institute action against a State enterprise/private company that has caused damage to the marine environment, recourse could follow within domestic fora. The jurisdiction that national courts may have over a particular dispute is a direct consequence of Article 235(2) UNCLOS that obligates sponsoring States to ensure that their domestic legal systems allow for prompt and adequate compensation, “including access to the court system of potentially affected claimants”.<sup>80</sup>

**36** Despite the obligation that sponsoring States provide such legislation, problems within domestic legal systems are already evident. The current domestic laws of sponsoring States refer to the SDC as a forum for dispute resolution which, if the SDC did have jurisdiction, is unlikely to provide “prompt and adequate compensation” as required under Article 235(2) UNCLOS.<sup>81</sup> Additionally, the existing domestic laws are silent on measures to ensure enforcement of any judgement that may be made against a liable contractor.<sup>82</sup> Gaps in current domestic legislation may entail non-compliance with Article 235, which entails a failure of a State’s due diligence obligations and has the potential to expose States to liability.

**37** One last point worth noting is the SDC’s statement that each States party to UNCLOS may “be entitled to claim compensation in light of the *erga omnes* character of the obligations relating to preservation of the environment of the high seas and in the Area”.<sup>83</sup> Arguably, this means that all States, even a State that is not injured, may be entitled to invoke the responsibility of another State that has

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<sup>77</sup>SDC ITLOS *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Reports 2011, 10, para. 179.

<sup>78</sup>This is an oversimplification of the SDC’s jurisdiction. For a more detailed analysis see Burke (2017), p. 1254.

<sup>79</sup>Legal Working Group on Liability (2018).

<sup>80</sup>Legal Working Group on Liability (2018), p. 24.

<sup>81</sup>Such unlikelihood is apparent given the complexities and timeframes often associated with international litigation.

<sup>82</sup>Lily (2018), p. 11.

<sup>83</sup>SDC ITLOS *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Reports 2011, 10, para. 180.



breached its obligations owed to the Area.<sup>84</sup> There are several problems associated with what form of reparation could be claimed for such a breach (assurance of non-repetition, restitution, satisfaction etc.) since certain forms of reparation, such as satisfaction, need to be made to the true victims, which might exclude States that are not in fact injured.<sup>85</sup> Additionally, the SDC did not differentiate between *erga omnes* obligations owed to the international community as a whole and *erga omnes partes* confined to the States parties of UNCLOS.<sup>86</sup> The impact of this statement requires further examination, and uncertainties regarding which States, including non-State Parties to UNCLOS, may bring a claim based on *erga omnes* obligations owed to the marine environment will need to be clarified.<sup>87</sup>

### 13.3 Reasons for the Chosen Liability Model

The Chairman of the informal meetings of the third session in 1975 initially stated that “liability is certainly important, but need not necessarily cause too much controversy”.<sup>88</sup> Unfortunately, issues surrounding liability and DSM activities have resulted in certain States parties becoming increasingly

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impatient with the length of the exploration phase [pushing for exploitation to start taking place] while others are sounding a note of caution by pointing to the still existing technological challenges for large-scale commercial deep seabed mining as well as to the unpredictable development of the world market metal prices.<sup>89</sup>

Originally, the regime of the Area under UNCLOS was negotiated on the assumption that DSM would become an economic reality before the end of the twentieth century.<sup>90</sup> However, contemporary marine ecosystem research has revealed that the biodiversity of the seabed is dependent on the mineral deposits of the Area, and the potential harm that DSM may cause to both seabed biodiversity and adjacent ecosystems is largely unknown.<sup>91</sup> In this regard, the ILC Articles on the Prevention of Transboundary Harm from Hazardous Activities acknowledge that at a particular point in time, harm “might not be considered ‘significant’ because at that specific time scientific knowledge or human appreciation for a particular resource

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<sup>84</sup>Tanaka (2013), p. 225.

<sup>85</sup>Tanaka (2013), p. 227.

<sup>86</sup>Legal Working Group on Liability (2018).

<sup>87</sup>Legal Working Group on Liability (2018).

<sup>88</sup>Nordquist (1990), p. 123.

<sup>89</sup>Türk (2017), p. 278.

<sup>90</sup>Türk (2017), p. 280; see also Panel on the Law of Ocean Uses (1988), p. 363.

<sup>91</sup>Feichtner (2020).

had not reached a point at which much value was ascribed to that particular resource. But sometime later that view might change and the same harm might then be considered ‘significant’.”<sup>92</sup>

- 40 These developments, together with exploration imminently set to become exploitation, culminated in the SDC highlighting the importance of developing a more thorough liability regime when it stated:

Considering that the potential for damage, particularly to the marine environment, may increase during the exploitation phase, it is expected that member States of the ISA will further deal with the issue of liability in future regulations on exploitation.<sup>93</sup>

- 41 In June 2019, the Secretary-General of the Authority reiterated that DSM “has the potential to accelerate progress towards achieving the 2030 Agenda for Sustainable Development by increasing scientific knowledge of the deep ocean whilst at the same time providing opportunities for economic growth” (advancing sustainable development of the blue economy).<sup>94</sup> The statement by the Secretary-General highlights the progress in the knowledge and appreciation that States have made in balancing economic opportunity with environmental protection. The *travaux préparatoires* of UNCLOS’ liability provisions reveal that States spent some time in the negotiation of their content.<sup>95</sup> However, technology is no longer the limiting factor that it was in the 1980s when the UNCLOS’ negotiations took place and as technology and international environmental principles, such as the precautionary approach and sustainable development, have developed so too has the necessity for a robust liability regime.

### 13.4 Special Features of the Liability Regime

- 42 Three features of the liability regime established under UNCLOS for DSM require special mention:

First, States are only liable under Article 139 UNCLOS if they breach their due diligence obligations arising out of the Convention and if such a breach results in damage to the Area.<sup>96</sup> The requirement of damage departs from the Articles on State

<sup>92</sup>International Law Commission (2001) Commentary to Article 2, p. 153 at para. 7.

<sup>93</sup>SDC ITLOS *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Reports 2011, 10, para. 168.

<sup>94</sup>ISA (2019).

<sup>95</sup>Nordquist et al. (1990), pp. 118–128 (Article 139), pp. 753–755 (Art. 22 of Annex III), pp. 399–415 (Article 235).

<sup>96</sup>SDC ITLOS *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Reports 2011, 10, para. 178.

Responsibility<sup>97</sup> whereby the ILC did not include damage as an inherent element for the attribution of responsibility.<sup>98</sup> This departure means that the regime established for liability and responsibility under UNCLOS departs from the general international environmental law obligation to prevent harm.<sup>99</sup>

Second, it is standard practice under international law not to include a provision on the applicable law when international organisations contract with private entities, as would be the case between the Authority and private contractors.<sup>100</sup> Contrary to this practice, UNCLOS presents a novel approach in ascertaining which law applies to contracts concluded between the Authority and private entities. In contrast, the contract between the ISA and the contractor is expressly governed by public international law.<sup>101</sup> The choice of international law as the law governing this contract is evidence that the obligations that are binding on private actors, by virtue of a contract, derive directly from public international law and “the omission of any reference to municipal law in the contract for exploitation logically hints at [the contract’s] insulation from municipal law”.<sup>102</sup> Read together, Article 139 and Article 22 of Annex III UNCLOS clearly attribute “responsibility at all three levels: states, private entities, and international organisations. This is not commonplace in international law, especially not in a single instrument”.<sup>103</sup>

Lastly, Article 304 UNCLOS makes it possible for the States parties to react to contemporary challenges and developments surrounding responsibility and liability under international law. In this regard, if any potential liability regime is limited or unable to respond to a certain situation, a State’s broader responsibility will remain. In other words, “a state will continue to be responsible for any attributable breach of its broader obligations occasioned by [. . .] harm to the marine environment. This is so because Article 139(2) is expressly ‘without prejudice to the rules of international law’ and each and every internationally wrongful act entails the responsibility of a state.”<sup>104</sup>

Therefore, UNCLOS’ rules regarding international responsibility and liability are not static but are open to elaboration and development.<sup>105</sup> In this way, gaps and limitations surrounding the current liability and responsibility regime may be further

<sup>97</sup>International Law Commission, Responsibility of States for Internationally Wrongful Acts, UNGA Res. 56/83 of 12 December 2001 [ARISWA].

<sup>98</sup>International Law Commission, Draft Articles on Responsibility of States for Internationally Wrongful Acts, with Commentaries – Commentary to Article 2, Yearbook of the International Law Commission 2001 II-2, p. 36 at para. 9.

<sup>99</sup>Plakokefalos (2017), p. 391.

<sup>100</sup>Karavias (2013), pp. 137–138.

<sup>101</sup>Plakokefalos (2017), p. 383.

<sup>102</sup>Karavias (2013), p. 138.

<sup>103</sup>Plakokefalos (2017), p. 392.

<sup>104</sup>Anton (2012), p. 250.

<sup>105</sup>SDC ITLOS *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Advisory Opinion), 1 February 2011, ITLOS Reports 2011, 10, para. 211.

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developed either “in the context of the deep seabed mining regime or in conventional or customary international law”.<sup>106</sup>

### 13.5 Practical Relevance

46 The commercial interests associated with DSM together with the environmental uncertainties that DSM entails present a unique opportunity for examining the intricacies and challenges facing international liability regimes generally and the liability regime associated with DSM in particular. Given the increased (some would say renewed) interest in DSM, the need for a robust liability regime cannot be overstated. As of December 2021, 33 of the 168 State Parties to UNCLOS provided information or texts on relevant national legislation by which they indicated compliance with their obligations to adopt local laws and regulations to ensure that contractors are under their effective control comply with their contractual obligations. These 33 States are Belgium, Brazil, China, Cook Islands, Cuba, the Czech Republic, the Dominican Republic, Fiji, France, Georgia, Germany, Guyana, India, Japan, Kiribati, Micronesia (the Federated States of), Mexico, Montenegro, Nauru, Netherlands, New Zealand, Nigeria, Niue, Oman, the Republic of Korea, the Russian Federation, Singapore, Sudan, Tonga, Tuvalu, the United Kingdom of Great Britain and Northern Ireland, the United States of America and Zambia.<sup>107</sup>

47 Negotiations relating to the final part of the Mining Code have developed rapidly over the last five years and the issues associated with the exploitation phase, as opposed to the exploration phase, have raised several issues. States and contractors have expressed concern “over how the responsibilities of the respective regulators, namely, the Authority, sponsoring States, flag States and relevant international organizations” will interact.<sup>108</sup> While expectations that the Mining Code would be finalised by 2020<sup>109</sup> have not been met, the exploitation of the deep seabed is no longer a distant dream but is very much an immediate reality. In June 2021, Nauru requested the Council of the ISA to complete the elaboration of the rules, regulations and procedures necessary to facilitate the approval of plans of work for exploitation

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<sup>106</sup>Ibid.

<sup>107</sup>See also ISA Secretary General, Laws, regulations and administrative measures adopted by sponsoring States and other members of the International Seabed Authority with respect to the activities in the Area, and related matters, including a comparative study of existing national legislation (22 May 2020) ISBA/26/C/19, para. 5, [https://isa.org.jm/files/files/documents/ISBA\\_26\\_C\\_19-2007015E.pdf](https://isa.org.jm/files/files/documents/ISBA_26_C_19-2007015E.pdf), accessed 1 Apr 2022.

<sup>108</sup>ISA Secretariat, Comments on the Draft Regulations on the Exploitation of Mineral Resources in the Area (4 December 2018) ISBA/25/C/2, para. 19, [https://isa.org.jm/files/files/documents/25c-2-e\\_3.pdf](https://isa.org.jm/files/files/documents/25c-2-e_3.pdf), accessed 1 Apr 2022.

<sup>109</sup>Lodge (2019).

within two years of the operative date of its request (i.e. by 9 July 2023).<sup>110</sup> This request, however, has been met with considerable resistance with numerous organizations<sup>111</sup> and States calling for a moratorium on DSM until certain conditions are met.<sup>112</sup> With many of the concerns raised relating to scientific uncertainty and the potential damage that DSM may cause to the marine environment, the importance of a robust and agreeable liability regime for DSM has become even more apparent. In the hopes of adopting a Mining Code, the Authority faces complex political, economic, technological, scientific, environmental, social, industrial and legal concerns. Ultimately though, the completion and adoption of the Mining Code can only be viewed as successful and effective if the issues associated with liability and responsibility for DSM activities taking place in the Area have been comprehensively addressed.

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<sup>110</sup>Letter dated 30 June 2021 from the President of the Council of the ISA addressed to the members of the Council (1 July 2021) ISBA/26/C/38; this request was made pursuant to section 1, para. 15 of the Annex to the 1994 Agreement relating to the Implementation of Part XI UNCLOS.

<sup>111</sup>See, for example, “Protection of deep-ocean ecosystems and biodiversity through a moratorium on seabed mining” (22 September 2021) IUCN Resolution 69, <https://www.iucncongress2020.org/motion/069>; and Policy Position: Deep Seabed Mining (2020) WWF Oceans Practice, [https://wwfint.awsassets.panda.org/downloads/wwf\\_policy\\_position\\_deep\\_seabed\\_mining\\_2020\\_final.pdf](https://wwfint.awsassets.panda.org/downloads/wwf_policy_position_deep_seabed_mining_2020_final.pdf).

<sup>112</sup>In June 2022, Chile urged States parties to UNCLOS to extend the deadline for adopting the necessary rules, regulations and procedures “for a period of 15 years, in order to obtain more evidence and scientific certainty to ensure the protection of the marine environment” (32nd Meeting of States Parties to UNCLOS, SPLOS/32/14, 17 June 2022. <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N22/388/59/PDF/N2238859.pdf?OpenElement>).

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# Chapter 14

## The Nagoya-Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety



Peter Gailhofer

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## 14.1 Introduction: Regulatory Context

The Cartagena Protocol on Biosafety<sup>1</sup> (hereafter: Cartagena Protocol) was adopted on 29 January 2000 as a supplementary agreement to the Convention on Biological Diversity and entered into force on 11 September 2003. The Cartagena Protocol pursues the goal of reconciling the economic interests of the biotechnology industry

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<sup>1</sup> Secretariat of the Convention on Biological Diversity (2011) Nagoya-Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety. United Nations Environment Programme. [https://bch.cbd.int/protocol/NKL\\_text.shtml](https://bch.cbd.int/protocol/NKL_text.shtml). Accessed 7 April 2022.

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with environmental concerns<sup>2</sup> and, by doing so, is supposed to provide a framework to meet the respective needs of trade and environmental protection with respect to the rapidly growing global biotechnology industry.<sup>3</sup> On the one hand, the Protocol is designed to enable the access to and transfer of technologies regarding the development and use of living modified organisms (LMOs) which are seen to potentially provide considerable socio-economic benefits. Such a typically commercial use may be contained in controlled settings, or involve the release of the organisms into the environment for application in agricultural or industrial production-processes or products.<sup>4</sup> This entails serious risks of environmental damage. The Cartagena Protocol, therefore, seeks to ensure the development of appropriate procedures to enhance the safety of biotechnology, to reduce potential threats to biological diversity, taking also into account the risks to human health.<sup>5</sup> It does so with a particular focus on transboundary movements.<sup>6</sup> The reasons cited for the need for a specific liability regime regarding LMOs and the potential damage they may cause relate to many of the specific problems associated with such organisms: For example, once LMOs are released, the transgenes cannot be easily recalled or removed from the environment. There may be possible long-term effects, whereby damage may only appear over time or even increase incrementally over time. Furthermore, some of the difficulties common to liability in an environmental damage context become acute when dealing with LMOs, such as in proving damage and causation, valuing areas damaged by LMOs, which may be not as well developed under existing liability regimes, as well as defining the affected persons who can bring a claim, e.g., on behalf of the environment or affected communities.<sup>7</sup>

2 The Protocol however does not substantially address the question of liability in cases involving damage resulting from such risks and adverse effects. The issue of the regulation of the allocation of costs as consequences of such adverse effects had been a fiercely contested struggle<sup>8</sup> over the liability issue during the negotiations on an international agreement and even became a major obstacle in the negotiation process: Many developing countries argued that transboundary movements should only be permitted if the allocation of the costs of any adverse effects was regulated. As a result, proposals were introduced that would address such adverse effects through the introduction of civil liability provisions. Other negotiating States, in particular developed countries, held that the issue was too complex and controversial to be resolved in the time available for the negotiations.<sup>9</sup> To resolve the disagreement, the parties agreed to integrate a procedural solution by means of an enabling

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<sup>2</sup>Nijar (2013), p. 271.

<sup>3</sup>Cf. Secretariat of the Convention on Biological Diversity (2000), Introduction.

<sup>4</sup>Lefeber (2012), p. 3.

<sup>5</sup>Cf. Secretariat of the Convention on Biological Diversity (2000), Introduction.

<sup>6</sup>Cf. Secretariat of the Convention on Biological Diversity (2011), p. 1.

<sup>7</sup>Ching and Ling (2011), p. 1.

<sup>8</sup>Newell and Glover (2003), p. 19.

<sup>9</sup>Lefeber (2012), p. 1.

clause. The outcome was Article 27 of the Protocol which required the parties to establish a process to negotiate international rules and procedures to deal with any such damage.<sup>10</sup>

After an extensive negotiation process, the Nagoya–Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety<sup>11</sup> (hereafter: Supplementary Protocol) was adopted on 15 October 2010 and entered into force on 5 March 2018. The Supplementary Protocol explicitly recognises, in its preamble, Principle 13 of the Rio Declaration on Environment and Development, which calls on the States Parties to develop further international law regarding liability and compensation for adverse effects of environmental damage. It has to be emphasised, however, that the supplementary protocol primarily adopts an administrative approach: The Protocol primarily contains rules for the State Parties to make sure that taken in the event of damage resulting from living modified organisms, or where there is sufficient likelihood that damage will result if timely response measures are not taken.<sup>12</sup> Conversely, the provisions concerning civil liability are quite rudimentary: Article 12 of the Supplementary protocol obliges the Parties to provide, in their domestic law, rules and procedures that address damage, either by continuing to apply their existing rules regarding civil liability or by developing specific liability regimes. Given the initial prominence of the issue, this outcome was surprising to many observers.<sup>13</sup>

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## 14.2 Liability Model

### 14.2.1 *The “Dual Approach” of the Supplementary Protocol*

As outlined above, the Supplementary Protocol includes basic propositions regarding civil liability, but prioritises an ‘administrative approach’, which is also denominated as ‘administrative liability’.<sup>14</sup> This approach is, in principle,<sup>15</sup> adopted in a similar way by the European Directive 2004/35 on environmental liability (Environmental Liability Directive) which equally entails a framework based on the polluter pays principle and, according to which, an identified polluter is required to take remedial action to address damage. The process is dealt with by a designated administrative public authority.<sup>16</sup> The single norm on civil liability requires an adaptation of the Parties’ domestic law to provide for legal means to claim damages

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<sup>10</sup>Nijar (2013), p. 271.

<sup>11</sup>[https://bch.cbd.int/protocol/NKL\\_text.shtml](https://bch.cbd.int/protocol/NKL_text.shtml), last accessed on 06.09.2022.

<sup>12</sup>Cf. Secretariat of the Convention on Biological Diversity (2011).

<sup>13</sup>Nijar (2013), p. 271.

<sup>14</sup>Gupta and Orsini (2017), p. 448.

<sup>15</sup>For a comparison of the regimes see Brans and Dongelmans (2014).

<sup>16</sup>Nijar (2013), p. 275.

as defined in the Supplementary Protocol. The basic liability model thereby differs from the majority of international environmental liability treaties, such as the International Oil Pollution Conventions and several of the treaties analysed in the Annex, which opted for a civil liability approach.<sup>17</sup>

- 5 In addition, the Supplementary Protocol relies heavily on domestic decisions in accordance with national circumstances, indeed, Gupta and Orsini count 18 references to domestic law in its text. Many elements of the Supplementary Protocol, including issues of financial security and limits of liability, are also left to the discretion of national authorities.<sup>18</sup> These elements of the Supplementary Protocol may result in considerable differences between States where it concerns the application of the regime.<sup>19</sup>
- 6 The following section describes and evaluates the framework of the regime. Given the predominantly administrative approach of the Supplementary Protocol, it will, first of all, analyse the respective allocation of responsibilities regarding response measures. The subsequent discussion of the civil liability regime necessarily is limited to the basic provisions of the Supplementary Protocol, however, it includes an example of an option to integrate diverse mechanisms to prevent, mitigate or compensate for environmental damage. In addition, the advantages and disadvantages of ‘top-down’ approaches to risk regulation may be discussed by way of contrast to the benefits of a ‘horizontal’ liability regime.<sup>20</sup>

### ***14.2.2 Scope of the Supplementary Protocol: Regulated Organisms, Activities and Harms***

- 7 Several aspects regarding the scope of the Supplementary protocol can be noted, however, the focus here is primarily on its limitations with respect to the object (LMOs) and the specific activities to be covered. With respect to initial struggles during the negotiation process over the scope of the liability regime, what was considered a narrow interpretation has presumably prevailed in several respects, such as the definition of damage and limitations of liability. These aspects will be discussed as a constitutive part of the administrative liability regime in the next subchapter.

#### **Regulated Living Modified Organisms**

- 8 It is Article 3.1 that details the Protocol’s scope in covering damage that results from LMOs, which includes whether these were intended for direct use for food, feed or for processing, for contained use or for intentional introduction into the

<sup>17</sup>Brans and Dongelmans (2014), p. 180.

<sup>18</sup>Gupta and Orsini (2017), p. 448.

<sup>19</sup>Brans and Dongelmans (2014), p. 185.

<sup>20</sup>Chapter 2 ¶ 40 *et seq* (Sect. 2.3.2).

environment. Excluded from this scope are pharmaceutical LMOs for humans, a sub-category which is also excluded from the scope of the Cartagena Protocol, Article 5 Cartagena Protocol, but is addressed by other relevant international agreements or organizations, such as the World Health Organisation. This includes genetically engineered vaccines, such as micro-organisms that have been modified to transmit the hepatitis B vaccine.<sup>21</sup>

The explicit mention of “products thereof”, i.e. processed materials of LMO origin, was removed from the operative text of the Supplementary Protocol due to various points of contention.<sup>22</sup> However, arguments provided in the course of the negotiations support an understanding that Parties may apply the Supplementary Protocol to damage caused by such processed materials, provided that a causal link is established between the damage and the LMO in question.<sup>23</sup> This understanding is significant as it clarifies that the Supplementary Protocol may apply to damage caused not only by LMOs but also by their products, which may be non-living material.<sup>24</sup>

### Activities Addressed

A limitation on the scope of the Supplementary Protocol results from its restriction to only damage caused by LMOs which find their origin in a transboundary movement. The Protocol accordingly does not apply to domestic damage caused by LMOs when the damage does not originate from transboundary movement.<sup>25</sup> According to Articles 3.2. and 3.3., the supplementary Protocol applies to damage resulting from authorised and intentional (in which case the use must be authorised), as well as unauthorised and unintentional uses, including damage resulting from illegal transfers of LMOs.<sup>26</sup>

The Supplementary Protocol covers damage that occurred in areas within the limits of the national jurisdiction of Parties. Parties are free to establish criteria for addressing damage. Notably, the domestic law implementing the Supplementary

<sup>21</sup>Nijar (2013), p. 272.

<sup>22</sup>For all cf. Ching and Ling (2011), pp. 5–6.

<sup>23</sup>See Report of the Group of the Friends of the Co-Chairs on Liability and Redress in the Context of the Cartagena Protocol on Biosafety on the Work of its Fourth Meeting, UNEP doc. UNEP/CBD/BS/GF-L&R/4/3, 11 October 2010, online available at: <https://www.cbd.int/doc/meetings/bs/bsgfr-04/official/bsgfr-04-03-en.pdf>, p. 3, last accessed 7 Apr 2022.

<sup>24</sup>For all cf. Ching and Ling (2011), pp. 5–6.

<sup>25</sup>Brans and Dongelmans (2014), p. 183.

<sup>26</sup>This concerns, as Gupta and Orsini explain, an important demand of developing countries, Gupta and Orsini (2017), p. 448. Brans and Dongelmans, however, argue that the definition in the Supplementary Protocol implies that an illegal or unintentional transboundary movement is seemingly to be distinguished from an unauthorised use of LMOs following an intentional transboundary movement. Accordingly it only covers damage resulting from any authorized use of such LMOs; however, it “probably makes up part of the gap between authorized and unauthorized uses of LMOs following an intentional transboundary movement of LMOs”; cf. Brans and Dongelmans (2014), p. 180.

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Protocol shall include damage caused by LMOs from non-Parties as well, as per Article 3.7. This is considered a key provision designed to broaden the reach of the agreement to those countries that are currently LMO producers and exporters but not yet a Party to the Cartagena Protocol.<sup>27</sup>

### Damage

- 12 The damage covered relates to the adverse effect on the conservation and sustainable use of biological diversity which, according to the Convention on Biological Diversity (CBD), is to be understood as “the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems”, Art. 2 CBD.
- 13 Article 2.2.b.i states that the damage must be measurable or otherwise observable, taking into account, wherever available, scientifically-established baselines recognised by a competent authority that takes into account any other human-induced and natural variations. In addition, the damage has to be “significant” under Article 2.2.b.ii, Article 2.3., where a “significant” adverse effect is determined on the basis of factors such as any long-term or permanent change, to be understood as change that will not be redressed through natural recovery within a reasonable period of time; the extent of the qualitative or quantitative changes that adversely affect the components of biological diversity; the reduction of the ability of components of biological diversity to provide goods and services; the extent of any adverse effects on human health in the context of the Protocol.
- 14 Accordingly, only adverse effects to biodiversity are “significant” and therefore considered to be damage in the sense of the Supplementary Protocol. This definition of damage is, on the one hand, rather narrow, but on the other hand, it has to be noted that the Supplementary protocol does acknowledge “pure” environmental damage as a reason for liability and thereby adopts a “relatively new concept”.<sup>28</sup> The Supplementary Protocol states that risks to human health have to be “taken into account”. This ‘rather awkward expression’ is understood to imply a rather vague formulation of the damage concerned. As some have noted, this leads to the question, if “[...] damage to human health [is] covered directly or [if it] must [be] a consequence of damage to biodiversity? Both interpretations are plausible. In the absence of unambiguous guidance, it is left to parties to adopt either interpretation in their domestic law implementing the Protocol.”<sup>29</sup>
- 15 Irrespective of risks to human health, ‘traditional damage’ caused by LMOs, such as personal injury, property damage and economic loss, is not covered by the

<sup>27</sup> Gupta and Orsini (2017), p. 448.

<sup>28</sup> Inter-American Institute for Cooperation on Agriculture (IICA) (2007), p. 10.

<sup>29</sup> Singh Nijar (2013), p. 274, however, argues that a straight reading of Art. 27 of the Protocol, coupled with a historic interpretation of the negotiations, suggest that this phrase could cover all damage, directly or indirectly flowing from LMOs or products of LMOs, provided the causal link between the damage and the LMO is established.

definition of damage in the Supplementary Protocol. Such damage is, however, addressed in the norm regarding civil liability in Article 12.2.<sup>30</sup> Accordingly, the parties shall apply or adapt their domestic law on civil liability to provide adequate rules and procedures for material or personal damage associated with the damage defined in Article 2, paragraph 2.b. Accordingly, the administrative liability regime does not detail such damage, leaving it to be covered by domestic civil liability regimes.<sup>31</sup>

### **Causation**

With respect to the question of the required causal link between an LMO and the damage at hand, the Supplementary protocol again defers to the discretion of the States: According to Article 4, a causal link shall be established between the damage and in accordance with domestic law.

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### **Exemptions from Liability**

The Supplementary Protocol does not provide specific defences for an operator. However, aside from the typical exemptions of an ‘act of God’ and ‘act of war’, the Supplementary Protocol gives its Parties the option to regulate, via domestic law, other exemptions or mitigations they consider appropriate. This enables the Parties to the Supplementary Protocol to introduce key defences.<sup>32</sup> The Supplementary Protocol thus does not provide orientation with respect to important questions regarding liability, such as the legal consequences of a given permission for the activity in question or the (technical) standards which may inform national courts about what constitutes adequate levels of due care.

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### **Limitations of Liability**

The Supplementary Protocol does not provide for a liability limit. Regarding financial limits, it instead again defers to domestic laws as “Parties may provide, in their domestic law, for financial limits for the recovery of costs and expenses related to response measures”.<sup>33</sup>

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In addition, Article 2.2.d. stipulates that operators can only be required to take response measures that are considered reasonable. This formulation, and the fact that the elements listed in Article 2.2.d to determine the kinds of response measures to be taken several times refer to the appropriateness of the measures to be implemented, leads Brans and Dongelmans—although Article 2.2.d of the Supplementary Protocol does not explicitly refer to the costs of such measures—to suggest that an operator cannot be forced to take disproportionately costly response measures. The Supplementary Protocol does not contain any further provisions which would help to determine the appropriateness of the costs of response measures.<sup>34</sup>

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<sup>30</sup>¶ 29 et seq

<sup>31</sup>Gupta and Orsini (2017), p. 448.

<sup>32</sup>Cf. Brans and Dongelmans (2014), p. 187.

<sup>33</sup>Gupta and Orsini (2017), p. 448.

<sup>34</sup>Cf. Brans and Dongelmans (2014), p. 189.

### **Insurance: Financial Security**

**20** Regarding financial security, the Supplementary protocol again defers to domestic laws. Article 10.1. provides that parties retain the right to provide for financial security in their domestic law. The question of how such a provision ensures that operators can cover damage is rightly considered a crucial issue given the uncertainties of estimating the potential costs of reparation<sup>35</sup> and the potentially large costs associated with LMO-based damage.<sup>36</sup> Efforts to address this issue must, according to Article 10.2, be exercised in a manner consistent with the Parties' rights and obligations under international law. In addition, the Supplementary Protocol leaves decisions on financial securities open to further negotiations. According to Article 10.3, a comprehensive study has to be undertaken after the entry into force of the Supplementary Protocol which shall address, *inter alia*: The modalities of financial security mechanisms, an assessment of the environmental, economic and social impacts of such mechanisms, in particular on developing countries; and an identification of the appropriate entities to provide financial security. In line with his provision, the Secretariat was asked to carry out such a study at the meeting of the Conference of the Parties of the Cartagena Protocol on 30 November 2018.<sup>37</sup>

### **Enforcement and Jurisdiction**

**21** The Supplementary Protocol does not provide for the transboundary recognition and enforcement of decisions related to response measures.<sup>38</sup> As an administrative system, it provides access to justice for private entities who are not satisfied with how the authority has exercised its competence in a specific case.<sup>39</sup> The decisions of the competent authority are subject to procedural safeguards, including administrative or judicial review (Art. 5.6).

## **14.3 The “Administrative Regime” on Liability and Redress**

### ***14.3.1 Actors Addressed by the Regime***

**22** The Supplementary Protocol imposes liability on the operator, who is defined in Article 2.c as “any person in direct or indirect control of the living modified organism which could, as appropriate and as determined by domestic law, include,

<sup>35</sup> Gupta and Orsini (2017), p. 449.

<sup>36</sup> Cf. Orsini (2012), p. 966.

<sup>37</sup> Decision adopted by the Parties to the Nagoya-Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety, UNEP Doc. CBD/CP/MOP/DEC/9/15, 2018; cf. <https://www.cbd.int/doc/decisions/cp-mop-09/cp-mop-09-dec-15-en.pdf>, last accessed 7 April 2022.

<sup>38</sup> Cf. Lefeber (2012), p. 17.

<sup>39</sup> Inter-American Institute for Cooperation on Agriculture (IICA) (2007), p. 10.

inter alia, the permit holder, person who placed the living modified organism on the market, developer, producer, notifier, exporter, importer, carrier or supplier”.

Given the wide range of actors addressed as “operators”, depending on how the Supplementary Protocol is being implemented in domestic law, diverse potential and possibly solvent addressees are available in the event of damage. There may, therefore, be more than one addressee of an administrative order available not only to immediately inform the competent authority of damage that occurred or is occurring and to evaluate such damage but also to take the appropriate response measures.<sup>40</sup>

As indicated above, the Supplementary Protocol provides for administrative liability and, as such, it allocates responsibility for the implementation and enforcement of its provisions to the regulatory authorities of the States. While response measures are an integral part of this administrative regime,<sup>41</sup> liability under the Supplementary Protocol does not rely on State liability. Instead, the Protocol stipulates that domestic legislation shall allocate the burden of liability to the relevant private actors.<sup>42</sup>

### 14.3.2 *Response Measures*

Under Article 5.1, Parties shall require the operator or operators, in the event of damage, to immediately inform the competent authority, evaluate the damage and take appropriate response measures. The competent authorities have the responsibility to identify the operator who has caused the damage, undertake their own evaluations of the damage and determine which response measures should be taken by the operator.

According to Article 2.2.d. “response measures” mean reasonable actions to:

1. Prevent, minimize, contain, mitigate, or otherwise avoid damage, as appropriate;
2. Restore biological diversity through actions to be undertaken in the following order of preference:
  - (a) Restoration of biological diversity to the condition that existed before the damage occurred, or its nearest equivalent; and where the competent authority determines this is not possible;
  - (b) Restoration by, inter alia, replacing the loss of biological diversity with other components of biological diversity for the same, or for another type of use either at the same or, as appropriate, at an alternative location.

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<sup>40</sup>Cf. Brans and Dongelmans (2014), p. 187.

<sup>41</sup>Cf. Perron-Welch and Rukundo (2013), p. 198.

<sup>42</sup>Gupta and Orsini (2017), p. 448.

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- 26** Response measures, accordingly, in the first instance are determined as measures to restore the affected environmental conditions to that which existed before the damage occurred. The approach of the Supplementary Protocol thereby differs from other international regimes and, specifically, civil liability regimes which limit compensation for impairment of the environment to the costs of measures of restatement actually undertaken or not undertaken.<sup>43</sup> Where relevant information indicates that there is a sufficient likelihood that damage may result if timely response measures are not taken, the operator shall be required to take appropriate response measures so as to avoid such damage, as per Article 5.3. In this regard, Article 5.4 states that the competent authority may implement appropriate response measures, especially when the operator has failed to do so. It also has the right to recover from the operator the costs and expenses of, and incidental to, the evaluation of the damage and the implementation of any such appropriate response measures, as detailed in Article 5.5.
- 27** The authority must adhere to a predefined set of rules, provided by Article 5.6, when requiring the operator to take response measures. These include providing notification to the operator of the decision requiring the operator to take response measures, reasons for the decision and notification of the remedies available under domestic law for challenging these decisions. This includes recourse to courts or other authorities to challenge any decision made.<sup>44</sup>

### ***14.3.3 Standard of (Administrative) Liability***

- 28** Given the primarily administrative nature of the Supplementary Protocol, it obliges the States Parties and their regulatory authorities to require operators to take adequate response actions irrespective of any infringement of standards regarding due diligence or due care. The standard of liability of the Supplementary Protocol, in line with its character as an administrative instrument, is accordingly strict. The civil liability clause, as will be outlined below, indicates at alternative options in local civil law.

## **14.4 The Civil Liability Clause**

- 29** Article 12 of the Supplementary Protocol contains basic provisions on civil liability. Article 12.1 stipulates that Parties shall provide rules and procedures that address damage in their domestic law. To implement this obligation, Parties shall provide for response measures in accordance with this Supplementary Protocol and may, as

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<sup>43</sup>Sands and Peel (2018), p. 760.

<sup>44</sup>Nijar (2013), p. 274.

appropriate, apply their existing domestic laws, including where applicable, general rules and procedures on civil liability and/or develop specific rules and procedures concerning civil liability. According to Article 12.2, adequate civil liability rules and procedures shall more concretely regulate material and personal damage associated with adverse effects on the conservation and sustainable use of biodiversity that result from the use of LMOs. When developing civil liability laws to adequately regulate damage to biodiversity as well as material and personal damage, Article 12.3 requires that the parties shall, as appropriate, address issues related to damage that include, but are not limited to: the standard of liability, including strict or fault-based liability; channelling of liability, where appropriate; the right to bring claims.

Scholars have deduced some basic substantial provisions from the formulation of the norm: E.g. the integration of ‘associated’ material and personal damage in the civil liability clause also seems to point to a basic understanding of a causal link as it plausibly implies that the damage must be a consequence of damage to biodiversity. “An example would be when an LMO contaminates the environment and damages biodiversity. At the same time, it may cause material and physical loss to a farmer whose field is affected by the contamination. This damage would clearly be covered.”<sup>45</sup> It also has to be noted that the Supplementary Protocol stipulates that, where respective rules do not yet exist, substantial and procedural adaptations of national civil liability laws should be made to make it possible to take into account pure environmental damage (subject to the limitations of the definition of damage according to Article 2 of the Supplementary Protocol).

The Supplementary Protocol implicitly obliges parties to review their domestic laws to assess whether or not they have in place adequate rules and procedures on civil liability.<sup>46</sup> It does so, however, by relying heavily on formulations that entail significant leeway regarding the implementation of the norms. It therefore almost entirely leaves the implementation of civil liability up to existing domestic laws or the development of relevant new laws at the discretion of the parties. Given that it does not stipulate the relevant substantive content for any of the suggested elements of liability, which could provide for significant international harmonisation, it is considered by some to be spectacularly deficient.<sup>47</sup> Others acknowledge the fact that the Supplementary Protocol at least provides an obligation to develop domestic civil liability legislation, where it may not yet exist.<sup>48</sup> The basic propositions of the Supplementary Protocol are hoped to potentially trigger further work on an international civil liability regime.<sup>49</sup> The first review of the Supplementary Protocol, which is scheduled to take place five years after its entry into force (2023), shall include an assessment of the effectiveness of the provision on civil liability, Article 13 Supplementary Protocol.

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<sup>45</sup>Nijar (2013), p. 274.

<sup>46</sup>Nijar (2013), p. 289.

<sup>47</sup>Nijar (2013), p. 278.

<sup>48</sup>Gupta and Orsini (2017), p. 450.

<sup>49</sup>Ching and Ling (2011), p. 1.

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## 14.5 Special Features of the Liability Regime

- 32** A dual approach to a liability regime in the regulatory context of the Supplementary Protocol can have several advantages. According to Newell, the provisions of the public, administrative regime and the civil liability regime may have, “[r]ather than pulling in different directions [...] interacted in a mutually supportive way with each approach building on the limitations of the other”. Regulation focusing on civil liability may, accordingly, help to construct “new normative frameworks”, to generate “fresh expectations” and brings into the regulatory process a wider circle of stakeholders.<sup>50</sup> This could give more voice to categories of interests not always well represented by States and their governments, such as indigenous and local communities, environmental organisations and smallholder farmers.<sup>51</sup> Public regulation, in contrast, can provide the authority, legitimacy and enforceability of environmental rules and standards.<sup>52</sup>
- 33** The Supplementary Protocol could thus have contributed to a well-adapted integration of a top-down instrument, e.g. by clarifying the implications of public permits for civil regulation for civil liability. However, given the high degree of discretion of the parties regarding the configuration of civil liability, this opportunity has not been taken. The implementation of a balanced and functional civil liability regime, which may “bolster the effectiveness of public regulation while simultaneously providing an avenue for the expression of particular civic interests or concerns”<sup>53</sup> still hinges on the goodwill and readiness of the parties.

## 14.6 Rationale Behind the Chosen Liability Model

- 34** Historically, the specific regulatory model of the Supplementary protocol is widely considered to be a consequence of the need to find the middle ground to circumvent the points of contention between the negotiating States, specifically regarding the integration of a regulation on civil liability.<sup>54</sup> The fact that negotiators opted for the administrative approach and provided the parties with almost complete discretion regarding whether or not to apply civil liability procedures, time limits, financial

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<sup>50</sup>Newell and Glover (2003), p. 32.

<sup>51</sup>Gupta and Orsini (2017), p. 450.

<sup>52</sup>Cf. Newell and Glover (2003), p. 32.

<sup>53</sup>Newell and Glover (2003), p. 32.

<sup>54</sup>Cf. Lefeber (2012), p. 17. Several developing states, such as Ethiopia, Colombia, Liberia, Burkina Faso, India, Namibia, and South Africa argued for a binding international civil liability instrument. Japan, Brazil, and Paraguay, conversely, argued for a non-binding instrument; the EU, New Zealand, and Switzerland opted for a ‘middle of the road’ approach by proposing the binding instrument on administrative approach with a non-binding civil liability instrument; cf. Balashanmugam (2015), p. 4259.

limits and financial security, can seemingly only be explained by their need to overcome a deadlock in the negotiations.<sup>55</sup> A somewhat similar reason for not adopting internationally binding provisions on civil liability, which some commentators suggest was to improve the prospects of gaining ratifications and enabling the agreement to enter into force.<sup>56</sup>

Notwithstanding these historic and political reasons for the chosen liability model, scholars also point to several functional reasons driving a primarily administrative liability approach. The merits of such an approach, as Singh Nijar points out, may be summarised as follows: First, an administrative approach is based on strict liability. Secondly, there is no need to go through a court adjudicatory process to ascertain liability before requiring response measures, which is seen as a significant advantage, especially where immediate remedial measures are required to address already materialised or to prevent imminent damage. Thirdly, the administrative approach is seen to be particularly suitable where the damage is diffused and there is no easy way to ascertain the wrongdoer. In addition, a significant lag time between the movement or use of LMO and any potential harm they may cause make it difficult for an injured party to determine the harm's source as during this period other intervening forces may affect biodiversity and human health.<sup>57</sup> Fourthly, the approach is, in principle, also suited to 'pure' environmental damage, i.e. where there is no clear ownership of an object damaged, such as may frequently be the case when biodiversity is affected. As such, it may avoid procedural obstacles in some jurisdictions, which give standing to sue only to those who can establish their direct interest in the subject matter over and above that of the general public. Fifthly, the approach channels liability to the operator, i.e. the person involved in the activity causing the damage, and thereby implements the 'polluter pays principle'. Finally, commentators consider the flexibility of this approach to accommodate the different priorities, legal systems and practices of the operators involved as an advantage and highlight the reliance on science-based proof of damage and its acceptance by industry as being transparent and fair.<sup>58</sup>

Conversely, the success of this approach to efficiently put in place preventative measures and then deal with reparations in the event of damage largely depends on the abilities and readiness of the 'competent authorities' of the parties, in particular on their having the necessary resources and expertise to determine adequate response measures in a timely manner. Specifically, developing countries may face challenges related to their lack of relevant capacities. Finally, it has also been suggested that an administrative approach may be inappropriate for smaller-scale damage.<sup>59</sup>

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<sup>55</sup>Nijar (2013), p. 279.

<sup>56</sup>Gupta and Orsini (2017), p. 450.

<sup>57</sup>Kohm (2009), p. 178.

<sup>58</sup>For all cf. Nijar (2013), p. 274.

<sup>59</sup>Nijar (2013), p. 275.

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## 14.7 Practical Relevance and Evaluation: A Model for the Liability Regulation of Risk Technologies?

37 Given the short time that has passed since the entry into force of the Supplementary Protocol, it is too early to properly evaluate its effects and effectiveness. Nevertheless, based on this brief analysis, several conclusions can be drawn regarding the prospects of success of the Supplementary Protocol.

38 As the administrative public law approach of the treaty is still unusual for international environmental treaties,<sup>60</sup> and given the concerns raised concerning the potential of effective implementation, it remains to be seen if it will be successful. The functional scope of the Supplementary Protocol, however, is limited as it only addresses damage to biodiversity resulting from transboundary movements of LMOs. This does not mean that an administrative liability approach cannot be suited for application to such or other activities and/or types of damage. It could, according to Lefeber, also be introduced for: (a) damage to biodiversity caused by other activities, such as the transboundary movement of invasive alien species under the Convention on Biological Diversity; (b) damage to the environment under other multilateral environmental agreements; or (c) other types of damage, such as public health costs resulting from unexpected negative effects caused by the introduction of medicines.<sup>61</sup> As such, the rather modest approach of the Supplementary Protocol could, if its administrative regime, contrary to concerns regarding practicability and feasibility of an effective implementation, turns out to be successful, serve as a starting point for more demanding strategies. Practically, the ongoing struggles and potential deadlocks during the negotiations on the regime may, however, ultimately temper such hopes. In addition to the limited scope and definitions, the flexibility provided to the parties regarding the implementation of crucial aspects of the regime such as exemptions from or limitations to liability and financial security<sup>62</sup> may also limit the potential of the Supplementary Protocol to be an effective, internationally harmonised (administrative) liability regime.

39 The deficits arising from the lack of substance of the liability clause have been described above and, given these shortcomings, scholars predominantly perceive that an opportunity to develop a harmonised liability approach with respect to potential harm from the specific characteristics of an emerging modern technology has been missed.<sup>63</sup> The (empirical) question of whether the rather rudimentary obligations regarding the development and implementation of national civil liability norms concerning the (environmental) damage addressed may lead to substantial changes in the positive framework or application of national laws, remains to be answered. Article 13 requires the Conference of Parties to review the effectiveness of

<sup>60</sup>Brans and Dongelmans (2014), p. 190.

<sup>61</sup>Lefeber (2012), p. 17.

<sup>62</sup>Cf. ¶ 12 et seq.

<sup>63</sup>Nijjar (2013), p. 288.

the liability clause of the Supplementary Protocol 5 years after the entry into force of the Supplementary Protocol and every 5 years thereafter. Based on this review, adaptations of the civil liability regime could follow.

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# Chapter 15

## Protocol on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes and Their Disposal



Peter Gailhofer

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## 15.1 Introduction and Regulatory Context

### 15.1.1 *The Basel Convention*

The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (hereafter: Basel Convention) was adopted in 1989. It was a reaction to heightened international awareness of the exponential growth of

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hazardous waste being produced and the risks it presented to human health, property and the environment while being transported around the globe. The Basel Convention primarily aims to minimise the generation and transboundary movements of hazardous wastes<sup>1</sup> and to keep risks at a tolerable level.<sup>2</sup> It was also a response to the practice of exporting increasing amounts of hazardous waste from the Global North to the Global South. Hence, the Convention is supposed to address concerns regarding environmental justice which arise when industrialised countries profit by exploiting the precarious economic positions nation in the Global South. Economically challenged countries may accordingly be under pressure to prioritise economic development over environmental concerns when they are offered foreign payments in exchange for accepting toxic waste shipments.<sup>3</sup> By dealing with the disproportionately large share of the burden regarding hazardous waste developing nations face, the Basel Convention has been touted as one of the international agreements at the forefront of integrating environmental justice principles<sup>4</sup> into global trade.<sup>5</sup>

2 The primary regulatory mechanism and ‘keystone’ to achieve its objectives is the Convention’s system of prior informed consent (PIC).<sup>6</sup> Under this system, exporting Parties have to notify or shall require the generator or exporter to do so, in writing, via the competent authority of the State of export to the competent authority of the States concerned of any proposed transboundary movement of hazardous wastes or other wastes, Article 6. Until these countries provide their written consent and confirm the existence of a contract between the exporter and the disposer specifying environmentally sound management, the Convention prohibits the waste from being exported. If it turns out after export that the importing country cannot manage the hazardous wastes in an environmentally sound manner, the Convention requires the exporting nation to re-import the wastes, Article 8. The Basel Convention also prescribes that hazardous wastes or other wastes shall not be exported to a non-Party or imported from a non-Party. By prohibiting Parties to trade wastes with non-Parties, the Convention is supposed to encourage membership.<sup>7</sup> The Convention also entails various relevant definitions and provisions, e.g. regarding international cooperation to improve and achieve environmentally sound management of hazardous wastes and other wastes. Furthermore, it has established a

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<sup>1</sup>Lawrence (1998).

<sup>2</sup>Silva Soares and Viera Vargas (2002), p. 69.

<sup>3</sup>Choksi (2001), p. 515.

<sup>4</sup>Choksi defines the “environmental justice movement” as a movement which “addresses the adverse environmental effects that activities such as hazardous waste disposal can wreak on minority communities, which often lack the political and economic clout to express their right to a healthy environment. Environmental justice concerns arise in the case of hazardous waste disposal, because industrialized countries often have economic incentives to dump their wastes in developing nations, which are frequently populated by disadvantaged communities who cannot afford to manage long-term environmental damages”, Choksi (2001) at fn. 26.

<sup>5</sup>Widawsky (2008), pp. 580–581.

<sup>6</sup>Cox (2010), p. 263.

<sup>7</sup>Choksi (2001), p. 518.

Secretariat which, for example, shall coordinate cooperation to provide information regarding the implementation of the Convention's provisions and assist Parties upon request with the identification of illegal waste trafficking, Article 16.

The Convention contains an important exemption from its scope of application in Article 11: Accordingly, parties may enter into bilateral, multilateral and regional agreements or arrangements regarding transboundary movements of hazardous wastes or other wastes with Parties and non-Parties. Such agreements or arrangements are required to not derogate from the environmentally sound management of hazardous wastes and other wastes as required by the Convention in particular with respect to taking into account the interests of developing countries. Critics have argued that this clause enables industrialised countries to circumvent and weaken the Convention by cutting deals and preying on the economic needs of developing nations.<sup>8</sup> Another criticism concerns the absence of effective enforcement mechanisms, as the Secretariat does not have any relevant competencies regarding the enforcement of the provisions of the Convention.<sup>9</sup> As such, compliance, monitoring and enforcement primarily is left in the hands of the State Parties.

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### 15.1.2 *The Ban Amendment*

To increase protection for developing nations and solidify the regulation of hazardous wastes, the parties proposed an amendment to the Basel Convention in 1994 that would ban all exports of hazardous wastes from OECD Member States, the European Community (EC) and Lichtenstein to non- OECD (or developing) nations by December 31, 1997 ("Basel Ban"), see Annex VII to the Basel Convention.<sup>10</sup> The prohibition of these specific transboundary movements was considered, by some, as a way to address the challenges faced by developing countries and countries with economies in transition in controlling imports of hazardous and other wastes they were unable to manage in an environmentally sound manner but continued to receive.<sup>11</sup>

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The Amendment, however, has still not been ratified by the three-quarters majority of Member States present at its adoption which is required for it to enter

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<sup>8</sup>Choksi (2001), p. 519.

<sup>9</sup>The enforcement provision through the International Court of Justice, according to Article 20 of the Convention, is considered inadequate for failure to provide a mechanism whereby individuals and environmental organisations can have *locus standi* to enforce proceedings, cf. Okaru (2011), pp. 161–162. At the 6th meeting of the COP in 2002, an effective compliance committee was founded, which came into force on 19 October 2003. However, the Committee's powers are restricted to making non-binding proposals to non-compliant parties and making suggestions to the COP regarding extra measures it deems the non-compliant Party needs to take, see Goyal (2018), p. 252.

<sup>10</sup>Widawsky (2008), p. 580.

<sup>11</sup>Cf. UNEP Doc. No. UNEP/CHW.9/39, 27 June 2008, Annex to decision IX/26, 52.

into force.<sup>12</sup> Many of the States that have failed to join or ratify the Basel Ban are OECD nations, but there is also a large number of non-OECD, developing nations that have failed to ratify the amendment. The reason for this, according to Widawsky, lies in a lack of understanding “that the unique pressures of developing nations require the harmonization of a precautionary attitude with tools for economic growth”. In essence many developing nations are averse to a system in which they are universally deemed ineligible to import certain wastes, especially wastes from which valuable scrap metals can often be recovered.<sup>13</sup>

### 15.1.3 *Protocol on Liability and Compensation*

- 6 Article 12 of the Convention required the Parties to co-operate to adopt, as soon as practicable, a Protocol that sets out appropriate rules and procedures in the field of liability and compensation for damage resulting from the transboundary movement and disposal of hazardous wastes and other wastes. In what was considered another effort to strengthen the Convention, the Protocol on Liability and Compensation (hereafter Protocol) was finalised on 10 December 1999 at the Fifth Conference of Parties (COP-5) to the Basel Convention, after 6 years of negotiations. The Protocol functions as a supplement to the Basel Convention treaty and must be ratified separately before it enters into force,<sup>14</sup> however, and as is the case with the Ban Amendment, the Protocol has so far failed to obtain the required number of ratifications.<sup>15</sup>
- 7 Article 1 of the Protocol states that its objective is to provide a comprehensive regime for liability as well as adequate and prompt compensation for damage resulting from the transboundary movement of hazardous wastes and other wastes, including incidents occurring because of illegal traffic in those wastes. It was seen as the first international environmental law mechanism to assign comprehensive liability and provide adequate and prompt compensation to those injured by both the legal and illegal international transportation of hazardous wastes. For this reason, UNEP considered the Protocol to constitute “a major breakthrough” in international environmental law.<sup>16</sup>

<sup>12</sup>See [decision BC-10/3](#), adopted in 2011 by the tenth meeting of the Conference of the Parties.

<sup>13</sup>Widawsky (2008), p. 580.

<sup>14</sup>Choksi (2001), p. 511.

<sup>15</sup>The Protocol can be accessed online: <http://www.basel.int/Countries/StatusofRatifications/TheProtocol/tabid/1345/Default.aspx>, last accessed 9 Apr 2022.

<sup>16</sup>Choksi (2001), p. 522.

## 15.2 Liability Model

### 15.2.1 Scope of the Liability Regime

Article 3 of the Protocol contains differentiated and rather complex provisions regarding the scope of application of the liability regime. It applies only during certain stages of the transboundary movement of hazardous wastes, imposes liability either on the Party of export or the party of import, determines the geographical scope of its provisions based on the location of the damage and, finally, delimits its scope with respect to the Protocol's application to transboundary movements covered by Article 11 of the Convention agreements and the relationship between the protocol and other liability instruments.<sup>17</sup> **8**

Regarding relevant stages of the transboundary movement, Article 3.1 provides that the protocol applies only to damage due to activities that occur during a transboundary movement of hazardous wastes and other wastes and their disposal, including illegal traffic, from the point where the wastes are loaded on the means of transport in an area under the national jurisdiction of a State of export. This narrow targeting, according to critics, can leave wide gaps in coverage for many types of environmental damage: Injuries from the transport of hazardous waste in international commerce are addressed by the Basel Liability Protocol, whereas an accident arising from the improper management of hazardous waste near a border may not be covered by the treaty.<sup>18</sup> **9**

With respect to its geographical scope, the Protocol shall apply only to damage suffered in an area under the national jurisdiction of a Contracting Party, as such, if neither the exporting nor State of import is a Contracting Party, the Protocol does not apply. Notably, Article 2(2)(c)(i), (ii) and (v) of the Protocol specify that the Protocol does apply to damage occurring in areas beyond any national jurisdiction. This mainly concerns "traditional" damage to life, personal injury, property as well as costs of preventive measures; costs of taken measures of reinstatement of the impaired environment in such areas (Article 2(c)(iv), on the contrary, are not included.<sup>19</sup> **10**

The protocol restricts its scope to damage occurring during stages in which the Party to the Protocol has possession of the waste: i.e., if only the State of import is a Contracting party, the Protocol only applies to damage which takes place after the disposer has taken possession of the hazardous wastes and other wastes. When only the State of export is a Contracting Party, the Protocol only applies to damage that arises prior to the moment the disposer takes possession of the hazardous wastes and other wastes. Finally, Article 3(3)(d) of the Protocol stipulates that the Protocol also applies to damage suffered in an area under the national jurisdiction of a State of transit which is not a Contracting Party provided that this State is listed in Annex A **11**

<sup>17</sup>Cf. Daniel (2003), p. 230.

<sup>18</sup>Sachs (2008), p. 851.

<sup>19</sup>¶ 19 *et seq.*

and has acceded to a multilateral or regional agreement concerning transboundary movements of hazardous waste which is in force.

**12** The contracting party can also exclude the application of the protocol by way of notification to the depository with respect to all transboundary movements for which the notifying State is the State of export, for such incidents which occur in an area under its national jurisdiction, as regards damage in its area of national jurisdiction.

**13** Article 3(7)(a) of the Protocol exempts Parties from liability and compensation when they have made a bilateral, multilateral or regional agreement or arrangement that provide liability regimes that “fully meet or exceed” the Protocol’s provisions and the damage occurred in an area under the national jurisdiction of any of the Parties to the agreement or arrangement. This provision is quite controversial as many critics argue that it provides a vague exemption that allows the majority of hazardous waste transportation to go unregulated.<sup>20</sup>

### *15.2.2 Standard of Liability*

**14** Articles 4 and 5 of the Protocol contain, as noted above, provisions regarding strict and fault-based liability. The Protocol stipulates strict liability in Article 4 which, given the scope of application outlined above, broadly applies to two constellations: First, when both the importing and the State of exports are Parties to the Basel Convention, the Protocol imposes strict liability on the person that notifies in accordance to the Convention until the disposer takes control of the wastes.<sup>21</sup> Second, when only one of the contractors is a Party to the Convention, the Protocol applies strict liability for damages that occur while the Party has control of the wastes. The Protocol thus allocates full liability for any damage resulting from the movement of hazardous wastes on the entity in operational control.<sup>22</sup> If two or more persons are liable, liability is joint and several according to Article 4(6).<sup>23</sup>

**15** In addition to strict liability, the Protocol imposes fault-based liability for failure to comply with the provisions of the Basel Convention or, as Article 5 states, due to “wrongful intentional, reckless or negligent acts or omissions”. This thereby extends the reach of the provisions of the Protocol as any person can be subject to fault-based liability under the general principles of tort law, and compliance with the provisions of the Basel Convention can be considered a foundational duty of persons transporting hazardous waste between countries.<sup>24</sup> Notably in this respect, Article 6 of the Protocol provides a general rule requiring every person in operational

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<sup>20</sup>Choksi (2001), p. 519.

<sup>21</sup>¶ 8 et seq.

<sup>22</sup>Choksi (2001), p. 523.

<sup>23</sup>Cf. Bergkamp (2001), p. 36.

<sup>24</sup>Cf. Pratt (2011), p. 602.

control or possession of waste to take reasonable measures to mitigate damage arising from an incident.<sup>25</sup>

With respect to State responsibility, Article 16 stipulates that the Protocol shall not affect the rights and obligations of the contracting Parties under the rules of general international law.

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### 15.2.3 *Actors Addressed by the Liability Regime*

As outlined above, the Protocol differentiates between the addressees of its provisions regarding those subject to strict liability and those subject to fault-based liability. Strict liability only applies to persons which are subject to the jurisdiction of either the State of export or the State of import and who act as the notifier, the exporter, the importer or the disposer of the wastes.<sup>26</sup> The carrier, i.e. any person who simply undertakes the actual transport of hazardous wastes or other wastes, is not subjected to strict liability. In contrast, fault-based liability has no such restrictions and may, in principle, apply to any person involved.

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States can also be exposed to civil liability if they are to be considered a person within the meaning of Articles 4 or 5 of the Protocol and act in a private capacity rather than in the exercise of their sovereign rights.<sup>27</sup> However, *Albers* points out that the Protocol contains several provisions that attempt to avoid the imposition of civil liability on States. In particular, Articles 4(1) and 4(2) of the Protocol provide that it is not the States but only the exporter or importer of the waste can be held liable if the State has notified the transport. Additionally, the Protocol does not establish any explicit rule imposing subsidiary liability on States which would apply in cases where sufficient compensation cannot be attained from the liable person.<sup>28</sup>

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### 15.2.4 *Definitions of Damage and Limits of Liability*

Unlike, for example, the Nagoya Kuala Lumpur-Supplementary Protocol, the Basel Protocol primarily addresses 'traditional' damage to private parties occurring during a transboundary movement of hazardous wastes.<sup>29</sup> Article 2(c) defines damage broadly to include loss of life, personal injury, damage or loss of property; loss of

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<sup>25</sup> Cf. Bergkamp (2001), p. 36.

<sup>26</sup> Cf. Tsimplis (2001). Albers points to problems regarding the definition of the "disposer" in the Convention, as it does not clarify whether agents to either the seller or the buyer are included in the term, cf. Albers (2015), p. 256.

<sup>27</sup> Cf. Albers (2015), p. 246.

<sup>28</sup> Cf. Albers (2015), p. 246.

<sup>29</sup> Orlando (2014).

income deriving from an economic interest in the use of the environment incurred as a result of impairment of the environment; the costs of measures of reinstatement of the impaired environment, limited to the costs of measures actually taken or to be undertaken; and the costs of preventive measures, including any loss or damage caused by such measures, to the extent that the damage arises out of or results from hazardous properties of the wastes involved. Damage as a loss of income or the costs of measures of reinstatement is, as previously outlined, explicitly excluded when the damage occurred in areas beyond national jurisdiction.<sup>30</sup>

20 With respect to the limitations placed on liability, several points are noteworthy: Parties found liable under the negligence standard can have an unlimited amount of damages imposed on them, whereas parties found liable under strict liability are liable only up to a certain amount.<sup>31</sup> Article 4 of the Protocol requires Parties to establish individual national limits on liability, the details of which can be found in Annex B to the Protocol. This same annex also provides financial minimums regarding the limitations on the amount that claimants must be awarded when the damaging party is strictly liable. These minimum limits are proportional to the amount of waste involved in the harmful trade.<sup>32</sup>

21 Notably, according to Article 13 of the Protocol, both strict and fault-based liability also have temporal limits as claims are deemed inadmissible unless they are brought within 10 years from the date of the incident. Furthermore, these claims must be filed within 5 years from the date the claimant first knew, or should have known, of the damage.

### 15.2.5 Causation

22 The Basel Protocol does not provide for specific rules of causation that would determine how courts could eliminate causes for environmental damage which may be considered too indirect or too remote to give rise to liability.<sup>33</sup> *Albers*, however, points out that the combination in the Protocol of strict liability and fault-based liability regimes implicates different ways to determine causation related to these types of liability. He argues that the absence of the requirement to prove fault on the part of the respondent in cases regarding strict liability places special emphasis on the determination of the causal link. With regard to strict liability, a person is deemed liable solely on the grounds that an incident has occurred which can be linked back to a certain risk for which that person is deemed responsible but regardless of the particulars of the person's conduct in terms of subjective fault or negligence. In contrast, to claim compensation based on fault it is necessary to

<sup>30</sup>Cf. Bergkamp (2001), p. 36.

<sup>31</sup>Cf. Kohm (2009), p. 176.

<sup>32</sup>Choksi (2001), p. 523.

<sup>33</sup>Albers (2015), p. 264.

establish a causal link, not between the risk and the damage, but between the particular conduct of the liable person on the one hand, and the actual damage on the other.<sup>34</sup>

### 15.2.6 Exemptions from Liability

Article 4 of the Protocol contains a list of exonerations from strict liability, including where it results from armed conflict, hostilities, civil war or insurrection; a natural phenomenon of exceptional, inevitable, unforeseeable and irresistible character; or where it wholly is the result of compliance with a compulsory measure of a public authority of the State where the damage occurred, or of the wrongful intentional conduct of a third party, including the person who suffered the damage.<sup>35</sup>

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According to Article 6(2), any person in possession and/or control of wastes for the sole purpose of taking preventive measures provided that this person acted reasonably and in accordance with any domestic law regarding preventive measures, is not subject to liability.

### 15.2.7 Insurance and Possible Funds

Strict liability must be covered by compulsory insurance to minimise the risk of insufficient compensation being available should an involved person become liable.<sup>36</sup> As such, Article 14 of the Protocol requires notifiers, exporters and importers to carry insurance, bonds or other financial guarantees to cover their liability for amounts not less than the minimum limits specified in Annex B. Insurance premiums may depend on the type of operation, such as whether it is a one-time or routine operation, and the degree of specialisation of the operator and so forth.<sup>37</sup> Notably, according to *Sachs*, States frequently refer to high limits of liability and the alleged non-availability of domestic insurance products that could cover these limits as reasons for not ratifying civil liability regimes such as the Basel Liability Protocol.<sup>38</sup>

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The Protocol does not establish a fund to cover damages arising from any incidents that occur. In 1999, the Conference of Parties decided, on an interim basis, to enlarge the scope of the Technical Cooperation Trust Fund of the Basel Convention to assist developing and transitioning countries that are Parties in cases

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<sup>34</sup> Albers (2015), p. 264.

<sup>35</sup> Daniel (2003), p. 230.

<sup>36</sup> Cf. Albers (2015), p. 246.

<sup>37</sup> Choksi (2001), p. 523.

<sup>38</sup> E.g., Poland stated with respect to the Basel Liability Protocol that the minimum limits of liability “could be considered too high for entrepreneurs in Poland.” Cf. Sachs (2008), p. 887.



of emergency and compensation for damage, thereby establishing an emergency mechanism.<sup>39</sup> This mechanism shall, until the Protocol enters into force, coordinate cooperation and mutual assistance and help parties estimate the magnitude of damage that has occurred or damage that may occur along with the measures needed to prevent damage and to take appropriate emergency measures to prevent or mitigate any the damage.<sup>40</sup> A draft report of the Secretariat containing recommendations regarding, *inter alia*, the adequacy of resources available for use under the mechanism and cooperation with other international organisations and agencies in responding to emergencies, however concluded that the level of funding does not seem sufficient if a more comprehensive and responsive assistance to be conducted to prevent and mitigate the short-term effects of an incident.<sup>41</sup>

### 15.2.8 Enforcement and Jurisdiction

- 26 Claims for compensation may be brought in the courts of the party either where the damage was suffered, where the incident occurred or where the defendant has its residence or a principal place of business, Article 17. According to Article 18 any court other than the court first seized can stay its proceedings in cases of related actions brought in the courts of different Parties, while the actions are pending at first instance. A court may also decline jurisdiction if the law of that court permits the consolidation of related actions and another court has jurisdiction over both actions.
- 27 Regarding the applicable law, Article 19 of the Protocol stipulates that all matters which are not specifically regulated in the Protocol shall be governed by the law of the competent court, including any rules of such law relating to conflict of laws. The Protocol also provides stipulations regarding the mutual recognition and enforcement of judgements.

## 15.3 Rationale Behind the Chosen Liability Model

- 28 The differentiated combination of strict liability and fault-based liability is supposed to enable the optimal allocation of liability with respect to the specific advantages and shortcomings of each of the models.<sup>42</sup> *Albers* cites a range of the advantages of

<sup>39</sup>See Decision V/32 “Enlargement of the scope of the Technical Cooperation Trust Fund”, available online at: <http://www.basel.int/portals/4/download.aspx?d=UNEP-CHW-COP.5-BC-V-32.English.pdf>, last accessed 9 Apr 2022.

<sup>40</sup>Cf. UNEP, Basel Convention – Protocol on liability and compensation. Texts and Annexes, p. 6.

<sup>41</sup>Secretariat of the Basel Convention, Draft report on the implementation of Decision V/32 in responding to emergency situations (2012), p. 10.

<sup>42</sup>See Chap. 2 ¶ 54 *et seq* (Sect. 2.4.1).

the specific legal configuration of the Protocol: Strict liability allows avoiding cumbersome procedures to determine the adequate standard of care or questions of fault or negligence and, thus, is supposed to ensure an effective reaction to damage as well as a prompt and more effective compensation of the victims of pollution. It does so, as prove of fault, which might require information and data about complex or technical processes or installations, is not necessary. In addition, strict liability provides an increased incentive to amicably settle disputes. Potentially liable persons are incentivised to invest in the prevention of damage rather than in endeavours to dispute the existence of fault. A strictly-liable person can take recourse against any other person who is strictly liable or subject to liability based on fault. Hence, on this secondary level, an allocation of the financial burden among all the liable persons can be sought based on the responsibility of the contributors regarding fault and negligence, irrespective of any predominant concerns of promptness and efficiency. In contrast, fault-based liability considerably broadens the range of actors addressed: Every person that comes in contact with the hazardous wastes is potentially liable for damage caused by negligent actions in breach of the rules of the Convention or as a result of their intentional or negligent breaches of standards of due care. Therefore, fault-based liability can be seen as providing an incentive to adhere to the rules and standards surrounding the transboundary movement of hazardous wastes and is consistent with the polluter-pays principle.<sup>43</sup>

The lack of subsidiary liability for an involved State should, according to *Albers*, not be considered a weakness of the Protocol's approach. On the one hand, the risk of insolvency of the liable person may be minimised given the mandatory insurance requirement and the establishment of a trust fund. On the other hand, the availability of information about risks and adequate means of prevention is not a factor that supports there being any subsidiary liability for States: With regard to damage caused by the activity of private persons, a State usually lacks sufficient information about the conduct of such activities and, consequently, cannot sufficiently supervise and control these activities.<sup>44</sup> The non-inclusion of subsidiary State liability thus also corresponds to the regulatory ratio of allocating liability according to the availability of information about the hazards and modes of prevention pertaining to a given activity.<sup>45</sup>

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## 15.4 Special Features of the Liability Regime

The Protocol combines relatively broad provisions regarding the definition of damage covered and the potential actors addressed with finely tuned stipulations regarding the multiple stages of the transportation chain and the territorial scope of

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<sup>43</sup> For a further elaboration of these arguments see *Albers* (2015), p. 245, pp. 262–263.

<sup>44</sup> *Albers* (2015), p. 246.

<sup>45</sup> Chapter 2¶ 51 (Sect. 2.4.1).

the regime: The Protocol, as outlined above, sequentially shifts liability from generators to exporters to importers to disposers, depending on which entity has operational control of the waste at each a given stage of transport.<sup>46</sup> This limited window for assessing liability, as *Kohn* points out, keeps causation problems at a minimum. Either damage is caused when an exporter has control and is thus the exporter's responsibility, or when an importer has control, making the importer liable.<sup>47</sup>

- 31** One particularly limited aspect of the Protocol's scope, critics focus on, is its failure to assign liability for the 'aftercare' of disposed wastes. Accordingly, waste generators who benefit from the activities that created the hazardous wastes should retain some responsibility for any long-term damage that results, such as ground-water pollution.<sup>48</sup> The Protocol, however, fails to hold either generators or exporters liable for any future damage to the environment and public health.<sup>49</sup>
- 32** In addition, critics highlight that the 'mitigated' strict liability<sup>50</sup> employed by the Protocol establishes incentives for generators to circumvent their (strict) liability by simply hiring exporters to act as notifying and controlling entities,<sup>51</sup> furthermore, the Protocol fails to establish any general secondary liability for generators of hazardous waste.<sup>52</sup> The person acting as notifier and exporter, and to which strict liability solely would be imposed, would most likely be a waste broker, letter-box trading company or another shelf company established to incur liabilities and may, should damage arise, lack sufficient funds for compensation, become insolvent or be dissolved.<sup>53</sup>
- 33** The question of whether the fault-based liability provision of the Protocol may close the loopholes that circumvent strict liability remains unanswered. In principle, it seems plausible that courts may determine liability for damage due to intentional or negligent violations of a standard of care regarding the diligent selection of exporters or disposers of hazardous wastes.<sup>54</sup> A rule which stipulates fault-based liability of actors who are not (anymore) in control of the hazardous waste in question may be able to contribute to the evolution of such standards of care regarding the diligent selection of third parties. In this context, it is noteworthy

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<sup>46</sup>Cf. *Kohm* (2009), p. 176.

<sup>47</sup>*Kohm* (2009), p. 176.

<sup>48</sup>*Albers* (2015), p. 257.

<sup>49</sup>*Choksi* (2001), p. 525. According to *Albers*, such allocation of liability however would disregard the importing states' sovereign decision to take part in the global waste trade as recognized by the Basel Convention. In this case it hence seems appropriate that the State bears the potential remaining risks. In addition, such an allocation of liability would diminish the incentives of the importing states to implement an effective liability regime and enforcement into its domestic laws. Finally, the generator lacks any opportunity to execute control in the stage of aftercare and thus cannot prevent damage, see *Albers* (2015), pp. 257–258.

<sup>50</sup>*Kohm* (2009), p. 176.

<sup>51</sup>*Choksi* (2001), p. 524.

<sup>52</sup>*Albers* (2015), pp 256–257.

<sup>53</sup>*Albers* (2015), pp. 256–257.

<sup>54</sup>E.g. cf. BGH 7.10.1975 – VI ZR 34/74, NJW 1976, 46, cf. *Wagner* (2016).

that the Basel Convention has led to an elaboration of a significant number of policy instruments with a non-binding character: “Within the framework of the Convention, a large body of technical guidelines on the management of specific waste streams has been developed by technical government expert groups and approved by the COP. These non-binding instruments have been designed for the use of Governments at all levels, as well as other stakeholders, to provide practical guidance and thus facilitate the management of the relevant waste streams.”<sup>55</sup> Given the potential significance of non-binding standards regarding a due level of care, these instruments also may contribute to the evolution of an adequate standard to determine fault-based liability.

## 15.5 Practical Relevance

As noted above, the Basel Protocol has not yet entered into force; its stipulations therefore cannot be judged based on practical experiences with its implementation and enforcement by parties and competent courts. The reasons brought forward to explain its lack of practical relevance, however, are instructive as they are mentioned to explain the lacking success. *Daniel* elucidates a number of criticisms regarding disincentives to join the Protocol: First of all, he identifies the complexity of the implementation of the protocol as an obstacle to higher acceptance. For example, uniform maximum limits of liability should have been established instead of these being subject to national laws. Other criticisms concern the lack of a permanent and adequate compensation fund, the complexity of the application section as it relates to Article 11 agreements and the channelling of liability to persons other than those with operational control, which presumably does not take into account the polluter-pays principle.<sup>56</sup>

*Choksi* identifies a lack of incentives with regard to the non-ratification of the US, as most of the waste trade engaged in by potential Parties is covered under the Article 11 exemption for bilateral and multilateral agreements. In addition, the overall failure of the Basel Convention to provide for an effective regime of waste control is considered a reason for non-ratification: “Since the United States already uses a prior informed consent mechanism to regulate hazardous wastes under RCRA and imposes its own joint and several liability regime, it has no reason to ratify a weaker and more narrow international law requiring domestic legislation on identical environmental issues.”<sup>57</sup> Finally, economic disincentives to ratify have been identified, in particular, there is concern that the Protocol lacks specific liability limits and that its stipulations and vague provisions may be interpreted and implemented differently

<sup>55</sup> See UNEP, Basel Convention – Protocol on liability and compensation. Texts and Annexes, 7–8.

<sup>56</sup> *Daniel* (2003), p. 231.

<sup>57</sup> *Choksi* (2001), p. 534. For a critique given the insufficient efficacy of the administrative” instruments of the Basel Convention also see *Widawsky* (2008), p. 580.

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by exporting States, leading to protracted disputes, increased liability and uncertain outcomes.<sup>58</sup>

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<sup>58</sup>Choksi (2001), p. 537.

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# Chapter 16

## Paris Agreement



Kirsten Schmalenbach

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## 16.1 Article 8 of the Paris Agreement: Loss and Damage

The starting point for any consideration on environmental liability is Article 8 of the Paris Agreement which, in its para. 1, recognises the importance of averting, minimising and addressing loss and damage associated with the adverse effects of climate change. With this, Article 8 connects with the Warsaw International Mechanism (WIM)-work programme of 2013 which specifies that adverse effects resulting from climate change can be both sudden and slow onset events. Sudden onset events include occurrences such as storm surges, tropical cyclones, droughts, floods and heatwaves; slow onset events can take the form of a rise in sea level, desertification, increasing average temperatures, salinisation, loss of biodiversity, glacial melting, land and forest degradation as well as ocean acidification.<sup>1</sup> Loss and damage linked to these events can occur in man-made environments as well as natural systems, although the WIM’s emphasis is centred more on the damage to man-made environments. Generally speaking, the phrase “loss and damage” addressed by Article 8 Paris Agreement in reference to the WIM differs between economic losses and non-economic losses: Economic losses are understood as the

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<sup>1</sup>Warner and van der Geest (2013), p. 386.

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loss of resources, goods and services that are commonly traded in markets<sup>2</sup> and may entail both physical assets (e.g. property and public infrastructure) as well as income. Non-economic losses concern material and non-material values that are usually incommensurable and thus not tradable: impairment of life, health, dignity, human mobility and cultural heritage, as well as negative impacts to the natural world, such as damage to biodiversity and ecosystem services.<sup>3</sup> Most non-economic losses are the result of specific human-environment interactions, which renders them highly context-dependent in terms of the values assigned to them.<sup>4</sup>

## 16.2 Responsibility, Liability and Compensation

- 2 The Paris Agreement does not explicitly address any form of liability or financial responsibility in connection with loss and damage associated with the adverse effects of climate change, neither does it provide any tools for assessing divergent responsibilities.<sup>5</sup> Having said that, the agreement's preamble refers to "the principle of equity and common but differentiated responsibilities (. . .), in the light of different national circumstance" (3rd recital), which echoes Article 3 of the UNFCCC. One fundamental element of the principle "common but differentiated responsibility" is the need to take into account the different circumstances, particularly each State's contribution to the problem and capacity to remedy it (Decision 3/CP.19). Any further interpretation of the principle, such as it being a legal basis for enforceable financial liability, is untenable in the light of current State practice. Most importantly, differentiated responsibility has found its expression through a multitude of responses and schemes. Nevertheless, the simple fact that the Paris Agreement explicitly addresses loss and damage induced by climate change is in itself remarkable. Through Article 8 para. 1, the parties recognise the importance of addressing loss and damage without actually specifying possible forms of actions and remedies. This has been left to the political processes undertaken by the WIM on Loss and Damage, which itself has been given some prospects for enhancement by para. 2 of Article 8 Paris Agreement. By the same token, Article 8 also makes it clear that the WIM remains firmly under the supervision of the CMA (Conference of the Parties serving as the meeting of the Parties to the Paris Agreement).
- 3 The UNFCCC-COP, which adopted the text of the Paris Agreement in its 21st session, was well aware of the possibility that the "loss and damageParis Agreementloss and damage" reference in Article 8 para. 1 Paris Agreement may develop over time, either internally or externally to the WIM framework, into a legal

<sup>2</sup>Van der Geest et al. (2019), p. 223.

<sup>3</sup>For non-economic losses, see UNFCCC, Non-economic losses in the context of the work programme on loss and damage, Technical Paper of 9 October 2013, Doc FCCC/TP/2013/2.

<sup>4</sup>Serdeczny (2019), p. 209.

<sup>5</sup>Lees (2016), p. 61.



basis for financial responsibility including liability claims associated with the adverse effects of anthropogenic climate change. However, most developed States represented in COP had little interest at the time to lay the groundwork for any system to deal with financial claims as part of climate change justice.<sup>6</sup> In the end, the UNFCCC-COP representatives agreed in para. 51 of Decision 1/CP.21, to which the Paris Agreement is annexed, that Article 8 of the Paris Agreement provides no legal basis for liability or compensation.<sup>7</sup> This para. 51 of Decision 1/CP.21 is part of the chapter entitled “Decisions to give effect of the agreement” and its sub-chapter “loss and damage” (para. 49-51).

### 16.3 Terminology of Paragraph 51 of COP Decision 1/CP.21

The text of para. 51 states that the COP “Agrees that Article 8 of the Agreement does not involve or provide a basis for any liability or compensation”. While the terms “compensation” and “liability” are not defined, the choice of terms in para. 51 echoes Principle 13 of the Rio Declaration and thus provides a connection to the common usage of the terms in international environmental law. For reference, Principle 13 stipulates that: 4

States shall develop national law regarding liability and compensation for the victims of pollution and other environmental damage. States shall also cooperate in an expeditious and more determined manner to develop further international law regarding liability and compensation for adverse effects of environmental damage caused by activities within their jurisdiction or control to areas beyond their jurisdiction.

Even though the COP-preparatory work does not disclose the rationale for para. 51’s wording, it stands to reason that its intent is to prevent from the outset any context interpretation of Article 8 Paris Agreement in the light of Principle 13. What the soft law Principle 13 envisages for environmental damage in general, namely that States have a duty to establish a liability and compensation regime for victims, shall not be provided for under Article 8 Paris Agreement. 5

As is the case with Principle 13, para. 51 of Decision 1/CP.21 embraces all forms of redress without differing between the domestic and international legal order. Given the plethora of nuanced meanings, liability and compensation can have within various domestic legal orders, the sole focus of this chapter is on the understanding of these terms in international law. As pointed out in Chapter 3 of this study, international law’s usage of the term “liability” denotes the primary-rule requirement to provide reparations for damage irrespective of whether the harmful act was wrongful (Sect. 3.2). In addition, the term extends to encompass both operators 6

<sup>6</sup>Mace and Verheyen (2016), p. 203 f.

<sup>7</sup>Of course, under international law this is not the end of the matter.

and States. From an international law perspective, para. 51's use of the term "compensation" is more intriguing. Based on the conjunction "or" between the terms "liability" and "compensation", para. 51 indicates that a duty to compensate may occur outside of a liability regime. This understanding gives rise to the interpretation where the two terms may be viewed as not being strictly interdependent, a position that can be supported by the fact that the term "compensation" is closely connected to the law of State responsibility. In the *Gabčíkovo-Nagymaros* case, the ICJ's now well-known ruling is now reflected in Article 36 Articles on State Responsibility: "It is a well-established rule of international law that an injured State is entitled to obtain compensation from the State which has committed an internationally wrongful act for the damage caused by it."<sup>8</sup> Although the term "compensation" is firmly rooted in the law of State responsibility, para. 51's clear focus on Article 8 Paris Agreement confirms that the COP did not rule out State responsibility for every breach of the Paris Agreement.<sup>9</sup> Most importantly, the Paris Agreement is not a self-contained regime that precludes any recourse to customary international law because the latter alone provides for secondary rules in cases of primary rule breaches, e.g. by introducing a comprehensive compliance regime. Indeed, by exclusively referring to and clarifying the meaning of Article 8, para. 51 of Decision 1/CP.21 neither curtails nor excludes any secondary rules of customary international law.<sup>10</sup> What para. 51 exclusively tries to prevent is that Article 8 Paris Agreement is used as a basis for understanding that its reference to "common but differentiated responsibility" triggers the duty of emitting States to compensate losses and damage outside of their jurisdiction.

7 The wording of para. 51 is obviously designed to comprehensively prevent the development of an international legal regime designed to provide redress for loss and damage related to climate change suffered by States, other international actors, as well as natural and legal persons. As such, Decision 1/CP.21 makes it plain that Article 8 Paris Agreement should not be interpreted as a sound legal basis for

<sup>8</sup>ICJ *Gabčíkovo-Nagymaros* (Hungary v Slovakia) [1997] ICJ Rep 7, para. 152.

<sup>9</sup>The question that is beyond the topic of this chapter is what legal obligations the Paris Agreement stipulates the breach of which triggers State responsibility. The Paris Agreement is composed of both legally binding obligations and non-binding commitments. Under Article 4.2, the States parties are obligated to prepare, communicate and implement successive plans to achieve their nationally determined contribution to cutting greenhouse gas emissions. Whereas a State party actually achieving its nationally determined goal is not compulsory, the duty of each State party to pursue domestic mitigation measures with the aim of achieving the promised goal is (second sentence of Article 4.2: "shall"). Consequently, the failure of a State party to sufficiently cut its greenhouse gas emissions as promised does not trigger its international responsibility vis-a-vis the other State parties to the Paris Agreement. If, however, a State party does not adopt any meaningful national mitigation measures or refuses to act, it is (arguably) in breach of the Paris Agreement. The uncertainty here is created by the views of some States parties regarding Article 4.2, however, a growing number of commentators maintain that this article in the Paris Agreement does indeed establish a legally binding obligation of conduct, irrespective of the eventual result; see Voigt (2016); Mayer (2018), p. 135.

<sup>10</sup>Lees (2017), p. 68; Wewerinke-Singh (2019), p. 69.

international claims for damages and compensation (“Article 8 of the Agreement does not involve. . .”), nor should Article 8 be construed as imposing an international obligation on States to establish a liability regime under domestic law (“Article 8 of the Agreement does not. . . provide a basis for any liability. . .”). However, given that the Paris Agreement is a conventional climate regime that will evolve over time, future CMA decisions may reference the ‘historical’ understanding of Art 8 Paris Agreement at the time of its adoption.

## 16.4 Legal Impact of Paragraph 51 of COP Decision 1/CP.21

The legal impact of para. 51 on the interpretation and application of the Paris Agreement over time depends on many factors, most importantly on the future approach of the CMA (and the WIM, under the CMA’s supervision) regarding liability and compensation. Accordingly, one of the most pressing questions is whether or not para. 51 of COP decision 1/CP.21 will prevent any future legal development towards an international liability regime for climate loss and damage. The decision and its para. 51 have been adopted by the UNFCCC-COP when the Paris Agreement was adopted. Consequently, the decision is to be classified as an “agreement relating to the treaty which was made between all the parties in connection with the conclusion of the treaty” (Article 31(2)(a) VCLT). Essentially, this is the case because para. 51 sets the context in which Article 8 Paris Agreement has to be interpreted. At the same time, it is important to note that documents such as the COP Decision 1/CP.21 are extrinsic to the Paris Agreement, i.e. they are not an integral part of the treaty and thus not backed by the treaty’s binding force.<sup>11</sup> As a means of context interpretation, para. 51’s main purpose is to resolve all ambiguities left by the wording, object and purpose of Article 8 Paris Agreement (Article 31(1) VCLT).

A further, and very much supplementary, means of interpretation is the circumstance of the agreement’s conclusion (Article 32 VCLT), which only carries weight if all methods of interpretation under Article 31 VCLT leave the meaning of Article 8 Paris Agreement unclear. It is therefore substantially immaterial that para. 51 was introduced *inter alia* for domestic reasons, specifically to enable Barack Obama, the then US President, to avoid seeking approval for ratification from a hostile Senate, which would have been necessary if the agreement had financial implications for the US.<sup>12</sup>

With regard to events following the conclusion of the Paris Agreement, Article 31(3) VCLT differs between subsequent agreements (lit a) and subsequent practice in the application of the treaty (b). Subsequent agreements regarding the

<sup>11</sup>Dörr (2018), Article 31 para. 62.

<sup>12</sup>Mace and Verheyen (2016), p. 203.

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interpretation or application of Article 8 Paris Agreement can be any CMA decision, provided that it is based on the consent of all the parties to the Paris Agreement. According to Article 16(4) Paris Agreement, the CMA shall make, within the limits of its mandate, any decisions necessary to promote the agreement's effective implementation. In other words, the CMA does not have the mandate to create entirely new legal obligations for the States parties to the Paris Agreement. Arguably, it would be *ultra vires* if the CMA decides that Article 8 Paris Agreement is a proper legal basis to establish strict liability for the States parties' regarding climate change damage.

**11** Having said that, Article 16(4) Paris Agreement does not prevent the CMA from construing Article 8(3) Paris Agreement as the source of the States parties' obligation to enhance, through the WIM, international and domestic liability regimes with respect to loss and damage associated with climate change. Such a CMA decision would not be a supplement to the Paris Agreement but simply a further interpretation of Article 8 Paris Agreement by way of subsidiary agreement (Article 31(3) (a) VCLT). Nevertheless, the obvious conflict of any such CMA decision with para. 51 of COP Decision 1/CP.21 is not easy to resolve given that Article 31 VCLT does not delineate a hierarchy between its para. 2 (context interpretation) and para. 3 (subsequent agreement) as evidenced by para. 3's chapeau: "There shall be taken into account, together with the context: a) any subsequent agreement. . .". In this particular case, it is not the formal value of the specific means of interpretation that is decisive but the moment in time that the process of interpretation refers to. In other words, it depends on whether the interpretation seeks to establish the meaning of the treaty provision at the time of the treaty's conclusion (static approach) or at the time of the treaty's interpretation (dynamic approach).<sup>13</sup> Whereas inter-State courts, such as the ICJ, traditionally lean towards the static approach,<sup>14</sup> the dynamic approach is nevertheless routinely used when the wording of the provision indicates that the parties envisaged an evolving meaning over time.<sup>15</sup> In short, if the concept embodied in the treaty is evolutionary and dynamic from the outset, this should be reflected in any approach used when interpreting the treaty's provision.<sup>16</sup>

**12** Irrespective of whether or not it is practical or even futile to wait for a liability-oriented interpretation of Article 8 by the CMA, it is safe to say that the normative concept of the Paris Agreement in general, and Article 8 in particular, is inherently dynamic and development-oriented. Theoretically, this paves the way for re-interpretation of Article 8 Paris Agreement at some point based on the consent of all the parties to the Paris Agreement that overrules para. 51 of COP Decision 1/CP.21.

<sup>13</sup>Dörr (2018), Article 31 para. 23 *et seq.*

<sup>14</sup>See ICJ *Dispute Regarding Navigational and Related Rights* [2009] ICJ Rep 213, para. 63.

<sup>15</sup>ICJ *Pulp Mills on the River Uruguay* (Argentina v Uruguay) [2010] ICJ Rep 14, para. 204.

<sup>16</sup>Dörr (2018), Article 31 para. 25.

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