Chapter 13
Liability Under Part XI UNCLOS (Deep Seabed Mining)

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Contents

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.[1] 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 **1**

[1] 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".[2] 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.[3] 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.[4]

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.[5] For this reason, the ISA has noted that environmental protection measures are amongst some of "the most important elements" of any proposed exploitation framework.[6] 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.[7]

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

[2] Article 157(1) LOSC.

[3] 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.

[4] ISA (2016).

[5] Jaeckel (2017), p. 153.

[6] 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, accessed 1 Apr 2022.

[7] 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, 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).[8]

4 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.[9] 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.

13.2 Liability Model

13.2.1 Material Scope of the Potential Liability Regime for Deep Seabed Mining in the Area

5 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

[8] 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.

[9] 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".[10] 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'".[11] 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".[12] 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.[13] 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.[14]

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.[15] 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

[10] 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.

[11] Ibid., para. 88; see also Legal Working Group on Liability (2018), p. 11.

[12] 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.

[13] Ibid.

[14] Ibid.

[15] 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.[16] **7**

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,[17] 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.[18] 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. **8**

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 **9**

[16] Plakokefalos (2017), p. 391.

[17] 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."

[18] 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.[19]

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".[20] 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.[21] 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".[22] This obligation to "ensure" is an obligation of conduct and not of result and is, therefore, considered a due diligence obligation.[23] In assessing the liability of sponsoring States, the SDC ruled out the application of any strict liability regime.[24] 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".[25] In terms of prospects here, there seems to be little State practice that supports a move away from due

[19] Lodge (2015), p. 152.

[20] Legal Working Group on Liability (2018).

[21] 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.

[22] 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.

[23] 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.

[24] 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.

[25] Ibid., paras. 189 & 184.

diligence as the default approach to the liability of States.[26] 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.

12 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".[27] In this way:

> 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.[28]

13 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".[29]

International Seabed Authority

14 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".[30] 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

[26] 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.

[27] 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.

[28] Tanaka (2013), p. 220.

[29] 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.

[30] Article 153(1) LOSC.

sponsoring State".[31] 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.[32]

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.[33] Collectively referred to as contractors, these entities had concluded 31 contracts with the Authority as of December 2021.[34]

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.[35]

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

[31] 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.

[32] Plakokefalos (2017), p. 387.

[33] See Nordquist et al. (1990), pp. 120–125.

[34] 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).

[35] 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.[36] 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.[37] Such phrases are clearly indicative of obligations of conduct rather than result.[38] 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.[39]

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".[40] 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".[41] 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,[42] 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".[43] 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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[36] Plakokefalos (2017), p. 388.

[37] Reg. 31(5) of the Nodules Regulations; Reg. 33(5) of the Sulphides Regulations; Reg. 33(5) of the Crusts Regulations.

[38] Plakokefalos (2017), p. 388.

[39] Davenport (2019).

[40] 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.

[41] Plakokefalos (2017), p. 391.

[42] Anton (2012), pp. 250 & 254–256.

[43] 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.[44] Additionally, each party must also indemnify the other.[45] 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".[46] 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.[47] 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".[48] 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.[49] 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:

[44] 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.

[45] 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.

[46] Davenport (2019).

[47] Davenport (2019).

[48] 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.

[49] 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.[50]

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".[51] 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.[52] 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.[53] 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. **22**

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).[54] 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. **23**

[50] International Law Commission (2001), p. 154 at para. 11.

[51] 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.

[52] 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.

[53] Ibid; see also Tanaka (2013), p. 210.

[54] 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.[55]

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".[56] 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.[57]

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.[58] 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".[59]

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[55] 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.

[56] 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.

[57] Mackenzie (2019).

[58] 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.

[59] 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.[60] 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*".[61] 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.[62] 27

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.[63] 28

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".[64] 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.[65] 29

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 30

[60] Xue (2019).

[61] 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).

[62] MacMaster (2019), p. 351.

[63] Legal Working Group on Liability (2018); see also Mackenzie (2019).

[64] 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.

[65] Draft Reg. 36(3) read with Draft Reg. 103(5) of the Draft Exploitation Regulations.

shall be endorsed to provide that the underwriters waive any rights of recourse, including subrogation rights against the Authority in relation to Exploitation".[66] 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.[67] 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,[68] 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.[69] 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.[70] 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.[71] 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".[72]

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.[73] The main purpose of such a fund will be the implementation of measures necessary "to prevent, limit or remediate any damage

[66] Draft Reg. 36(2) of the Draft Exploitation Regulations.

[67] Davenport (2019).

[68] Schedule 1 of the Draft Exploitation Regulations.

[69] 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.

[70] 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.

[71] Ibid.

[72] Ibid., para. 205.

[73] 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".[74] 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.[75] 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

34 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.[76] 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.

35 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

[74] Draft Reg. 55(a) of the Draft Exploitation Regulations.

[75] Xue (2019).

[76] Legal Working Group on Liability (2018).

sea, and coastal States".[77] 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.[78] 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.[79] 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".[80]

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.[81] Additionally, the existing domestic laws are silent on measures to ensure enforcement of any judgement that may be made against a liable contractor.[82] 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".[83] 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

[77] 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.

[78] This is an oversimplification of the SDC's jurisdiction. For a more detailed analysis see Burke (2017), p. 1254.

[79] Legal Working Group on Liability (2018).

[80] Legal Working Group on Liability (2018), p. 24.

[81] Such unlikelihood is apparent given the complexities and timeframes often associated with international litigation.

[82] Lily (2018), p. 11.

[83] 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.[84] 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.[85] 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.[86] 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.[87]

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".[88] Unfortunately, issues surrounding liability and DSM activities have resulted in certain States parties becoming increasingly **38**

> 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.[89]

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.[90] 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.[91] 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 **39**

[84] Tanaka (2013), p. 225.
[85] Tanaka (2013), p. 227.
[86] Legal Working Group on Liability (2018).
[87] Legal Working Group on Liability (2018).
[88] Nordquist (1990), p. 123.
[89] Türk (2017), p. 278.
[90] Türk (2017), p. 280; see also Panel on the Law of Ocean Uses (1988), p. 363.
[91] 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'".[92]

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.[93]

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).[94] 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.[95] 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.[96] The requirement of damage departs from the Articles on State

[92] International Law Commission (2001) Commentary to Article 2, p. 153 at para. 7.

[93] 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.

[94] ISA (2019).

[95] Nordquist et al. (1990), pp. 118–128 (Article 139), pp. 753–755 (Art. 22 of Annex III), pp. 399–415 (Article 235).

[96] 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[97] whereby the ILC did not include damage as an inherent element for the attribution of responsibility.[98] This departure means that the regime established for liability and responsibility under UNCLOS departs from the general international environmental law obligation to prevent harm.[99]

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.[100] 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.[101] 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".[102] 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".[103] **43**

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."[104] **44**

Therefore, UNCLOS' rules regarding international responsibility and liability are not static but are open to elaboration and development.[105] In this way, gaps and limitations surrounding the current liability and responsibility regime may be further **45**

[97] International Law Commission, Responsibility of States for Internationally Wrongful Acts, UNGA Res. 56/83 of 12 December 2001 [ARISWA].

[98] 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.

[99] Plakokefalos (2017), p. 391.

[100] Karavias (2013), pp. 137–138.

[101] Plakokefalos (2017), p. 383.

[102] Karavias (2013), p. 138.

[103] Plakokefalos (2017), p. 392.

[104] Anton (2012), p. 250.

[105] 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.

developed either "in the context of the deep seabed mining regime or in conventional or customary international law".[106]

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.[107]

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.[108] While expectations that the Mining Code would be finalised by 2020[109] 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

[106] Ibid.

[107] 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, accessed 1 Apr 2022.

[108] 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, accessed 1 Apr 2022.

[109] Lodge (2019).

within two years of the operative date of its request (i.e. by 9 July 2023).[110] This request, however, has been met with considerable resistance with numerous organizations[111] and States calling for a moratorium on DSM until certain conditions are met.[112] 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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[110] 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.

[111] 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.

[112] 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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