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The Practice of Shared Responsibility in relation to Environmental Protection of the Deep Seabed

Ilias Plakokefalos[*]

1. Introduction

The problem of environmental protection of the deep seabed, or the 'Area' as it is being termed in the United Nations Convention on the Law of the Sea[1] (LOSC or Convention), is scientifically delicate and legally complex. It is delicate because the deep seabed is one of the less studied and most pristine ecosystems in the world. This means that science is not as yet in a position to determine with certainty the possible effects of human intervention to the ecosystem. In principle, it would seem that even the presence of man-made equipment and the mere collection of nodules from the sea floor would, in and of itself, cause some kind of disturbance to the ecological balance. Nodules, for example, contain metals that are useful in the food chain of deep seabed organisms. The mere removal of nodules may lead to habitat loss or even extinction of nodule fauna.[2] The deep seabed is an isolated ecosystem that has not been stained by human intervention and, therefore, any type of intervention has impacts that are hard to evaluate beforehand.[3]

The legal complexity of the environmental protection in the deep seabed is evident since the exploration and exploitation of mineral resources in the Area involves states, the International Seabed Authority (ISA or Authority)[4] and private entities. In other words, the activities that are to be developed in the Area involve different actors being called to perform different tasks and being burdened with similar, or in some instances the same, obligations.

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[1] United Nations Convention on the Law of the Sea, Montego Bay, 10 December 1982, in force 16 November 1994, 1833 UNTS 3 (LOSC or Convention). The Area is defined in Article 1(1) of the LOSC as 'the seabed and ocean floor and subsoil thereof, beyond the limits of national jurisdiction'.

[2] L. Suhr, 'Environmental Protection in Deep Seabed Mining: International Law and New Zealand's Approach' (2008) NZJEL 97, at 112.

[3] Ibid., at 106.

[4] See Articles 156-158 LOSC, n. 1.

The issue of shared responsibility becomes immediately relevant if one considers the interrelationship among the various actors in the Area. It is Part XI of the LOSC that sets up, and regulates, the deep seabed regime. Part XI is applicable among states, among states and private actors, among states and the ISA, and between private actors and the ISA. These actors have obligations in relation to the protection of the environment, that if breached lead to the question of shared responsibility. Shared responsibility refers to the instances where a multiplicity of actors contributes to a single harmful outcome, in this case environmental harm in the deep seabed, by breaching either the same or different obligations.[5] The consequences of shared responsibility can be evinced in the peculiarities it creates in the determination of attribution, the difficulties that may arise in attributing the damage caused to each actor, and the procedural hurdles that might prevent an accurate allocation of responsibility among the multiplicity of actors. In the case of the deep seabed regime all of these problems are present, and they are made more complex by the fact that the actors involved are not only states, but also international organisations, as well as private parties.

These questions are increasingly practically relevant. It seems that during the past few years there has been a revival in the interest of states and private entities to explore the possibilities of viable mining in the Area. The ISA, which handles the applications for exploration, has so far concluded eleven contracts for exploration, while it keeps receiving applications.[6] This renewed interest in the resources of the Area is also the reason why the International Tribunal for the Law of the Sea (ITLOS) Seabed Disputes Chamber was requested to hand down an advisory opinion delineating the responsibilities and obligations of sponsoring states for activities in the Area.[7]

However, at present one cannot speak of factual scenarios in which the problem of shared responsibility has actually presented itself. The process of exploiting the Area is not yet underway, and therefore the only scenario that might be envisaged at present refers to harm to the deep seabed caused during the exploration phase. The harm will have to be caused by the acts or omissions of the sponsored contractor that explores the deep seabed. At the same time,

[5] P.A. Nollkaemper and D. Jacobs, 'Shared Responsibility in International Law: A Conceptual Framework' (2013) 34(2) MIJIL 359, at 366-369.
[6] For more information on the contractors see www.isa.org.jm/en/scientific/exploration/contractors.
[7] *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area*, Advisory Opinion, Seabed Disputes Chamber of the International Tribunal for the Law of the Sea, ITLOS Case No. 17, (2011) 50 ILM 458.

the responsibility of the sponsoring state(s) or the ISA might be involved, depending on whether they have breached their respective obligations of protection of the Area.

This chapter seeks to examine the manner in which the deep seabed regime accommodates the questions that emerge in the context of shared responsibility. It will show that despite its shortcomings concerning particular matters, the deep seabed regime is one of the few regimes that can resolve, to a considerable extent, all issues that emerge from the contribution of multiple actors to a single damage.

In the second section, the chapter will unpack the bundle of the relationships among the actors involved, with reference to their obligations to protect and preserve the environment in the Area. It will be shown that all relevant actors essentially share an obligation to protect and preserve the environment in the Area. This obligation – despite the fact that it appears in different provisions of the LOSC, the ISA Regulations and the contract for exploration – is of a unitary nature, and is essentially the same for states, the ISA and private contractors. This means that states, the ISA and private contractors have to take steps to ensure that the activities in the Area are conducted in such a way so as not to harm the environment. After determining the role of all the players through their primary obligations as they emerge from the LOSC, the Regulations of the ISA and the contracts for exploration, the chapter will turn to the secondary rules of responsibility. Section 3 will examine how, and to what extent, the deep seabed regime can accommodate questions of shared responsibility. The issue of damage and how can it be attributed to the various actors will form the core of this section. After the scenarios involving the various actors have been discussed, the chapter will focus on the issues of invocation and process (section 4). This discussion is necessary so as to reveal the full extent of the possibilities and limitations of the regime. Moreover, procedural considerations may also have practical repercussions on the allocation of responsibility.

2. Obligations of states, the ISA and the contractor

In order for a natural or juridical person to engage in deep seabed mining exploration or exploitation, there are two conditions that have to be met. First, the private contractor must either be a national of a state party, or controlled by nationals of a state party.[8] Second, a state

[8] Article 153(2)(b) LOSC, n. 1.

party must sponsor the prospective contractor.[9] If private contractors fulfil these requirements, then they may apply to the ISA for approval of their plan of work.[10] The ISA acts on behalf of mankind and has a general supervising role concerning activities in the Area.[11] The plan of work has to be approved by the relevant organs of the ISA[12] and must be drawn up in accordance with Annex III to the LOSC.[13] Annex III provides that the plan of work must be in conformity with the LOSC and the Regulations issued by the ISA.[14] The plan of work, if approved, must be in the form of a contract between the Authority and the applicant.[15]

The governing law of the contract is of great significance in order to understand the nature of the obligations imposed upon private actors. The contract between the ISA and private contractors is governed by international law; according to Standard Clause 27.1 which explicitly states that the contract

> shall be governed by the terms of the contract, the rules, regulations and procedures of the Authority, Part XI of the Convention, the Agreement and other rules of international law not incompatible with the Convention.

It has been pointed out that the applicability of international law on the contract was never questioned in the Conference that led to the adoption of the LOSC, and apparently was regarded as a non-controversial issue.[16] This is one of the rare occasions where the parties to a convention expressly chose international law as the governing law of a contract that is concluded under the terms of the convention between an international organisation and a private party.[17] The contract for exploration becomes even more interesting if one considers that it also incorporates, through the Standard Clauses, the relevant LOSC provisions and the Regulations of the ISA.[18] The Regulations must be viewed as secondary law enacted by the

[9] Ibid.
[10] Article 153(3) LOSC, ibid.; Articles 3, 4, 6 LOSC Annex III.
[11] Articles 137(2), 156, 157 LOSC, ibid. For a critical assessment of the ISA see T. Scovazzi, 'Mining, Protection of the Environment, Scientific Research and Bioprospecting: Some Considerations on the Role of the International Sea-Bed Authority' (2004) 4 IJMCL 383.
[12] Article 6 LOSC Annex III, ibid.
[13] Article 153(3) LOSC, ibid.
[14] Article 3(4) LOSC Annex III, ibid.
[15] Article 3(5) LOSC Annex III, ibid.
[16] M. Karavias, *Corporate Obligations Under International Law* (Oxford University Press, 2013), citing the *travaux préparatoires* of the LOSC at 137-138.
[17] Ibid.
[18] Standard Clauses 1.2 and 1.3. The Standard Clauses are available at www.isa.org.jm/files/documents/EN/Regs/Code-Annex4.pdf.

ISA,[19] which is binding both on the sponsoring state(s) and on the contractor through the Standard Clauses. Both the Regulations and the Standard Clauses contain provisions that pertain to the protection of the environment. Under Article 145 of the LOSC, the ISA has adopted so far a set of Regulations on the exploration of polymetallic nodules;[20] a set on the exploration of polymetallic sulphides;[21] as well as Regulations on the exploration of cobalt-rich ferromanganese crusts.[22]

2.1 Obligations of states

The LOSC contains a large number of provisions pertaining to the protection of the marine environment. Part XII of the Convention, entitled 'Protection and Preservation of the Marine Environment', contains the bulk of environmental protection provisions. Besides the general obligation in Article 192, according to which states have the obligation to protect and preserve the marine environment, Article 194(3)(c) stipulates that states must take measures to minimise pollution that might arise from the exploration or exploitation of the natural resources of the seabed. Article 209 LOSC also targets pollution from activities in the Area. It posits in its first paragraph that international rules must be established in accordance with Part XI for the protection of the environment. The second paragraph of Article 209 LOSC imposes an obligation on states to adopt laws and regulations so as to protect the Area from pollution from vessels, installations and structures flying their flag or operating under their authority.

Part XI of the Convention deals specifically with the Area. In Article 136, the LOSC stipulates that '[t]he Area and its resources are the common heritage of mankind.'[23] The idea of the common heritage of mankind defines the status of the Area and has a number of

[19] See Karavias, *Corporate Obligations Under International Law*, n. 16, at 197; D. French, 'From the Depths: Rich Pickings of Principles of Sustainable Development and General International Law on the Ocean Floor – the Seabed Disputes Chamber's 2011 Advisory Opinion' (2011) 26 IJMCL 525, at 533.
[20] Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area, ISBA/6/A/18, 4 October 2000 (Nodules Regulations).
[21] Regulations on Prospecting and Exploration for Polymetallic Sulphides in the Area, ISBA/16/A/12/Rev.1, 7 May 2010 (Sulphides Regulations).
[22] Regulations on Prospecting and Exploration for Cobalt-rich Ferromanganese Crusts in the Area, ISBA/18/A/11, 22 October 2012 (Crusts Regulations).
[23] On the concept of the common heritage of mankind see, among others, C. Joyner, 'Legal Implications of the Concept of the Common Heritage of Mankind' (1986) 35 ICLQ 190; R.-J. Dupuy, 'The Area as the Common Heritage of Mankind', in R-.J. Dupuy and D. Vignes, *A Handbook on the New Law of the Sea*, Vol. 1 (Leiden: Martinus Nijhoff, 1991), 579.

important implications. First, no state is free to exploit the resources in the deep seabed.[24] Second, the ISA, through its organs and according to the provisions of LOSC, administers the Area on behalf of mankind.[25] Third, damage caused to the Area can be perceived as damage to the whole of mankind.[26]

After defining the status of the Area, the LOSC sets out the basic principles of the regime. Article 139(1) provides that states have the obligation to ensure that activities in the Area shall be carried out in accordance with Part XI. The second paragraph of the Article stipulates that damage caused by the failure of a state party or an international organisation to fulfil their respective obligations shall entail liability. Article 139(2) LOSC goes on to state that: 'States Parties or international organizations acting together shall bear joint and several liability'. Article 139 confirms the supervisory role played by the states parties to the Convention in regulating the activities in the Area.

Because of the complexity of the pertinent rules as they emerge both from the LOSC and the ISA Regulations, the Council of the ISA after being prompted by a proposal by Nauru, requested the ITLOS Seabed Disputes Chamber to issue an advisory opinion on the responsibilities and obligations of states sponsoring activities in the Area. The Seabed Chamber opinion is of great importance, because it clarifies a number of issues pertaining to the obligations and responsibilities of sponsoring states. It must be conceded, however, that the opinion said little on the responsibilities and liability of private actors and the ISA, although probably understandably so, due to the nature of the questions presented before it.

The fact that states have to 'ensure' that the contractors will carry out the activities in the Area in accordance with Part XI means that states are under a due diligence obligation. In other words, states have to make an effort towards the result specified in Article 139 LOSC, yet they will not be held responsible if, despite their effort, the result is not achieved.[27] This is

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[24] Article 153(1) LOSC, n. 1.

[25] S. Rosenne, 'The United Nations Convention on the Law of the Sea, 1982. The Application of Part XI: An Element of Background', in S. Rosenne, *Essays on International Law and Practice* (Leiden: Martinus Nijhoff, 2007), 457, at 458.

[26] *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area*, n. 7, para. 180.

[27] The distinction between obligations of conduct and obligations of result is an important aspect of the content of primary obligations. See J. Combacau, 'Obligations de résultat et obligations de comportement: quelques questions et pas de réponse', in P. Reuter, *Mélanges offerts à Paul Reuter: le droit international: unité et diversité* (Paris: Pedone, 1981), 181; and P.-M. Dupuy, 'Reviewing the Difficulties of Codification: On Ago's Classification of Obligations of Means and Obligations of Result in Relation to State Responsibility' (1999) 10 EJIL 371.

the conclusion the Seabed Chamber reached in examining the obligations of sponsoring states in the deep seabed regime.[28]

The Seabed Chamber saw this general obligation as containing a number of direct obligations towards the protection of the environment in the Area. These obligations include the conduct of an Environmental Impact Assessment (EIA), the application of a precautionary approach, and the use of best technologies.[29] The direct obligations of the sponsoring state(s) are on the one hand independent of the general due diligence obligation,[30] but on the other hand they are also a relevant factor in fulfilling the due diligence obligation.[31]

2.2 Obligations of the ISA

The obligation of the ISA towards the protection of the environment is also an obligation 'to ensure'.[32] The ISA must 'adopt appropriate rules, regulations and procedures'[33] to this end. The supervisory role of the ISA is cemented in Article 153(4) LOSC, where it is stated that the ISA shall exercise control over activities in the Area, and Article 153(5) LOSC whereby the ISA is endowed with the right to take measures to ensure compliance. It is clear that the obligations of the ISA are obligations of conduct. The due diligence nature of the ISA obligations is no different from that employed in the provisions that seek to control the behaviour of the sponsoring states.[34] There is no reason to assume that the interpretation of the same language would be different in the case of the ISA than it was for the sponsoring states, if a case were to be brought before the Seabed Chamber.

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[28] *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area*, n. 7, paras. 110-111.
[29] Ibid., Section V, paras. 125-140, and Section VII.
[30] Ibid., para. 121.
[31] Ibid., para. 123.
[32] Article 145 LOSC, n. 1. While the phrase 'to ensure' is also encountered in obligations of result, it is well established that in the context of international environmental law it corresponds to an obligation of conduct.
[33] Ibid.
[34] The phrases 'to ensure', 'take appropriate measures' are repeated in all the relevant provisions. It must be noted that despite the fact that the verb 'ensure' is usually connected to obligations of result, the ITLOS Chamber decided that in the particular context it denotes an obligation of conduct.

2.3 Obligations of the contractor

The contractor bears a general obligation to protect the environment during the course of the exploration,[35] and has also reporting and monitoring obligations.[36] Among the environmental obligations of the contractor is the obligation to gather environmental baseline data.[37] In gathering the data, the contractor must take into account the recommendations issued by the Legal and Technical Commission (LTC). The LTC has issued a set of recommendations in 2002, which were updated in 2010, and they contain a detailed account of the manner in, and the activities for which, the contractor should conduct an environmental assessment.[38] The obligation to conduct an EIA is cemented in Section 1(7) of the Annex to the 1994 Implementation Agreement, where it is clearly stated that a plan for work must contain an assessment of potential environmental impacts.[39] The contractor also has an obligation to notify the Secretary General of the Authority in the case of an emergency.[40] As it has already been stated, the Standard Clauses that are incorporated in the contracts between the ISA and private or state contractors seek to transpose the Regulations in the said contracts. In the Standard Clauses, the obligation of the contractor to prevent, reduce and control pollution is being repeated,[41] as are the monitoring and reporting obligations.[42] The Standard Clauses

[35] 31(3) Nodules Regulations, n. 20; 33(5) Sulphides Regulations, n. 21; 33(5) Crusts Regulations, n. 22.

[36] 31(5), 31(6) Nodules Regulations, ibid.; 34(2), 33(6) Sulphides Regulations, ibid; 34(2), 33(6) Crusts Regulations, ibid.

[37] 31(4) Nodules Regulations, ibid.; 34 Sulphides Regulations, ibid.; 34 Crusts Regulations, ibid.

[38] ISA Legal and Technical Commission, 'Recommendations for the guidance of the contractors for the assessment of the possible environmental impacts arising from exploration for polymetallic nodules in the Area', ISBA/7/LTC/1/Rev.1, 13 February 2002; and ISA Legal and Technical Commission, 'Recommendations for the guidance of contractors for the assessment of possible environmental impacts arising from exploration for polymetallic nodules in the Area', ISBA/16/LTC/7, 2 November 2010.

[39] Agreement Relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982, New York, 28 July 1994, in force 28 July 1996, 1836 UNTS 3 (1994 Implementation Agreement). The LOSC provisions on the deep seabed were the main reason why the United States did not sign the Convention and a number of industrialised states refused to ratify it, see J.I. Charney, 'The Law of the Deep Seabed Post UNCLOS III' (1984) 63 OLR 19, at 20-21. Because of the divergence of opinion on its nature and content, it led to the adoption of a further agreement in 1994 so as to amend the contents of the relevant Part of the Convention. The 1994 Implementation Agreement accommodated in large part the demands of the United States and other developed states. It must be noted that the changes effectuated by the Agreement touched mainly upon the powers of the organs of the International Seabed Authority; financial matters; the problem of transfer of technology; and the role of the Enterprise, see B. Oxman, 'The 1994 Agreement and the Convention' (1994) 88 AJIL 687. The environmental provisions of Part XI were left largely intact.

[40] 32(1) Nodules Regulations, n. 20; 35(1) Sulphides Regulations, n. 21; 35(1) Crusts Regulations, n. 22. This is one of the few instances in which the Nodules Regulations are substantially different. First, the obligation of the contractor is implicit, since the relevant paragraph states '[w]hen the Secretary General has been notified by a contractor'. Second, the Sulphides and Crusts Regulations, as opposed to the Nodules Regulations, define the duty to notify as containing, besides an actual emergency, any incident that might pose a threat of serious harm to the environment.

[41] Standard Clause 5.1, n. 18.

[42] Standard Clauses 5.3, 5.4, ibid.

feature a detailed section on the obligation of the contractor to develop a contingency plan.[43] If one examines the language employed in the Regulations and the Standard Clauses, it becomes obvious that the nature of the contractor's obligations is not different than that of the obligations of the sponsoring state(s). The Nodules, Sulphides and Crusts Regulations all provide that the contractor 'shall take necessary measures' for the protection of the environment pursuant to Article 145 LOSC.[44] The language does not leave much room for doubt: the contractor must make an effort towards preventing pollution by taking these measures. It is a commonplace phrase indicating that the nature of the obligation imposed is one of conduct and not of result. Similarly, the sponsoring state(s) must 'ensure' that environmental harm does not occur. Moreover, in the case of contractors, the obligation is further qualified by a criterion of reasonableness.[45]

2.4 Shared obligations

It is obvious from the structure of the regime itself that it raises many issues that pertain to shared responsibility. The legal bases of the obligations of all actors involved are found in several provisions of the LOSC, and in the case of the contractor and the ISA are found also in the Regulations and the Standard Clauses of the exploration contract. This, however, does not mean that these obligations are not of a similar nature. All actors are under an obligation to protect the environment in the Area. Moreover, most of these obligations are interconnected in the sense that they provide for a relationship between the actors in discharging them. For example, the ISA bears a number of obligations that pertain to the regulation of the activities of the contractor. The relationship between the ISA and the contractor is better understood through the Regulations on the exploration of the seabed issued by the former, and through the Standard Clauses that are incorporated in the contracts the ISA concludes with entities that seek to explore the Area for mineral resources.[46] The provisions of all sets of Regulations on the protection of the environment are virtually identical and they provide for the same supervisory role of the ISA as the LOSC does.

[43] Section 6 Standard Clauses, ibid.
[44] 31(3) Nodules Regulations, n. 20; 33(5) Sulphides Regulations, n. 21; 33(5) Crusts Regulations, n. 22.
[45] The exact phrase in the Regulations is 'as far as reasonably possible'.
[46] Standard Clauses appear as Annexes to the text of the Regulations.

Of all the participants in the regime, it is the contractor that is directly engaged in the activity of exploration, prospecting or exploitation. Consequently, it is the contractor that will cause damage to the environment. Nevertheless, if the contractor causes damage to the environment, it is not only his responsibility that comes into play. The obligations of the ISA are also relevant in the sense that it will have to be determined whether, and to what extent, its acts or omissions contributed to the damage. It is important to note in this connection that the contractor is held responsible for any damage he causes but, in determining his responsibility, any contributory acts of the ISA must be taken into account.[47] At the same time, the sponsoring state might also be found responsible for a breach of its own obligation to ensure that activities in the Area are carried out in conformity with Part XI of the LOSC.[48]

It is exactly the impact that this kind of shared obligations might have on the secondary rules that must be studied, so as to be able to evaluate the ability of the regime to effectively address the problem of shared responsibility. It is clear that the deep seabed regime offers a distinct set of circumstances that are directly relevant to shared responsibility. The multiplicity of actors that engage in one form or another in exploring (and later possibly exploiting) the seabed includes states, an international organisation, as well as private entities. The uniqueness of the regime lies in the fact that all three actors bear obligations to protect the environment while engaging, each one from its own separate position, in their activities (physical or regulatory) in the deep seabed. The extent to which this situation may lead to a more accurate determination of each actor's responsibility will depend on the way the Articles on Responsibility of States for Internationally Wrongful Acts (ARSIWA)[49] apply in the peculiarities of the regime, as well as on the way the complex dispute settlement procedures of the LOSC can accommodate shared responsibility claims.

3. Responsibility and liability of states, the contractor and the ISA

While there is no doubt that the International Law Commission's (ILC) ARSIWA are generally applicable in the LOSC, the deep seabed regime deviates in some respects from the general regime of state responsibility. There are three distinct differences of the deep seabed regime, pertaining to the requirement of damage (section 3.1); the express inclusion of

[47] Article 22 LOSC Annex III, n. 1; Standard Clause 16.1, n. 18.
[48] Article 139 LOSC, ibid.
[49] Articles on Responsibility of States for Internationally Wrongful Acts, ILC *Yearbook* 2001/II(2) (ARSIWA).

private actors, the ISA and states, in the regime that has a bearing on issues of responsibility (especially contributory negligence) (section 3.2); and joint and several responsibility (section 3.3). While the issue of damage is not directly linked to shared responsibility, the inclusion of obligations of multiple actors and of the concept of joint and several liability point towards a more coherent framework that can accommodate most issues of shared responsibility.

3.1 Damage

First, the ARSIWA leave the door open as to the requirement of damage and it is not included as a constitutive element of the breach.[50] This does not mean that the requirement of damage is altogether excluded, but it falls on specific secondary rules whether it is a requirement for the determination of responsibility under any given regime. In other words, while the ILC did not include damage as a general requirement, it allowed for its existence when specific, non-general, rules prescribed it as an element of responsibility. This is the case in the deep seabed regime. According to Article 139(2) of the LOSC, damage is required so as to establish responsibility. The ITLOS Seabed Chamber in its advisory opinion affirmed this.[51] This brings about an extra element in determining the responsibility of states regarding their activities in the Area. They have to breach their international obligations as they arise out of LOSC, this breach must be attributable to them, and also bring about damage in the Area. The requirement of damage marks also a departure from the general environmental obligation to prevent harm. This obligation, which is also of a due diligence nature, is an obligation of conduct. There is therefore a peculiar combination in the case of responsibilities of states in the Area: not only are they under a due diligence obligation, but also damage must occur in order for their responsibility to be engaged. This detracts somewhat from a more powerful preventive power the LOSC could exert in terms of the protection of the environment, since the extra element of damage can prove a complicating factor in establishing responsibility in terms of proof.

[50] Article 2 ARSIWA, ibid. While damage is not part of the secondary rules, it is being discussed here for reasons of consistency with the ITLOS Chamber, which did draw a connection between damage and secondary rules.
[51] *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* n. 7, para. 178.

3.2 Responsibility of sponsoring states, the contractor and the ISA

The second difference is that the LOSC envisages international obligations for all the entities involved in activities in the Area. The sponsoring states' obligations are clearly stated in the LOSC and have been elaborated by the Seabed Chamber. The ARSIWA are directly applicable, therefore this is a rather straightforward scenario of state responsibility. The contractors who engage in exploration and exploitation in the Area, be they private or public entities, bear international obligations. This means that if they breach their obligations, the rules on responsibility as elaborated by the ILC in the ARSIWA would, by analogy, be applicable to these entities. Nonetheless, it is not clear and it cannot be predicted how much tweaking the ARSIWA would require so as to apply in this case. Article 22 of the LOSC Annex III – entitled 'responsibility' – stipulates that the contractor 'shall have responsibility or liability for any damage arising out of wrongful acts in the conduct of its operations'. The wrongful acts would probably arise out of a breach of one of the obligations of the contractor stemming from the LOSC, the Standard Clauses and the Regulations of the ISA.

Article 22 of the LOSC Annex III also envisages the responsibility of the ISA in case it breaches one of its obligations. Article 176 LOSC provides that: 'The Authority shall have international legal personality and such legal capacity as may be necessary for the exercise of its functions and the fulfilment of its purposes.' The Articles on the Responsibility of International Organizations (ARIO)[52] are applicable here. Unlike the case of private contractors, there is no need for analogies since the ARIO provide for the requirements of the determination of the responsibility of the ISA.[53]

If Article 22 of Annex III is read in conjunction with Article 139 LOSC, it becomes clear that the LOSC provides for responsibility at all three levels: states, private entities and international organisations. This is not commonplace in international law, especially not in a single instrument. What is more, Article 22 stipulates that when the liability of the contractor is examined, any contributory acts of the ISA must be taken into account, and vice versa. Therefore, the ISA and the contractor will pay according to their contribution to the actual damage, something that seems, at first glance, to be in line with the standard rule of

[52] Articles on the Responsibility of International Organizations, ILC Report on the work of its sixty-third session, UNGAOR 66th Sess., Supp. No. 10, UN Doc. A/66/10 (2011) (ARIO).
[53] Articles 3-4 ARIO, ibid.

responsibility, according to which each wrongdoing party is responsible for the whole damage, unless the damage is causally divisible.[54]

Regarding reparation, Section 16 of the Standard Clauses, in accordance with Article 22 of Annex III, features the liability of the contractor and the ISA for the *actual amount* of any damage, which includes damage to the marine environment and any costs of reasonable measures to prevent or limit that damage.

It is fair to conclude that the deep seabed regime expressly opens the door to shared responsibility, albeit in a limited fashion since it applies between the ISA and the contractor, leaving the sponsoring states outside the equation.

3.3 Joint and several responsibility

The third difference in terms of secondary rules in the deep seabed regime relates to joint and several responsibility. The ARSIWA stipulate that when a plurality of actors commits a single wrongful act, each is responsible for its own wrongful act. This is the default secondary rule.[55] The ILC recognised that there might be regimes where joint and several liability applies, but these are to be regarded as *lex specialis*.[56] According to Article 139 LOSC, when a plurality of states (or international organisations, in this case the ISA) engages in activities in the Area, their responsibility for damage is joint and several. The LOSC posits that this is the case if the said states and the ISA act together. The Seabed Chamber in its advisory opinion took this provision to the next level. It held that joint and several liability may occur not only when there is concerted action, but also when states are acting independently and they contribute to common damage.[57] This interpretation of Article 139 renders its application much wider. Strict adherence to the 'common wrongful act' (as it is stipulated in Article 47 of the ARSIWA) would apply in cases where two or more states would cooperate in activities in the Area. The Chamber's interpretation means that joint and

[54] Article 47 ARSIWA, n. 49.
[55] Ibid. This might be a rule of invocation but it has a bearing on the determination of responsibility as well.
[56] Commentary to the Articles on Responsibility of States for Internationally Wrongful Acts, ILC *Yearbook* 2001/II(2) (ARSIWA Commentary), Commentary to Article 47, at 125.
[57] *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area*, n. 7, para. 201. For a critique of the approach of the Seabed Chamber see P.A. Nollkaemper, 'The Seabed Disputes Chamber clarified the meaning of joint and several liability (but also raised new questions)', *SHARES Blog*, 25 November 2011, available at www.sharesproject.nl/the-seabed-disputes-chamber-clarified-the-meaning-of-joint-and-several-liability-but-also-raised-new-questions/.

several liability would be applicable in a wider variety of circumstances: the requirement of common damage can accommodate for the responsibility of states and international organisations when they caused a harmful outcome in an non-concerted manner, covering thus cases of cumulative shared responsibility.[58]

4. Procedural rules

The possible contribution of a multitude of entities (states, private contractors, ISA) towards a single damage in the Area, in a number of combinations, would, in principle, be extremely problematic to deal within a traditional international law dispute settlement procedure (DSP). The LOSC provides for a compulsory DSP, subject to a number of limitations.[59] It gives states parties a number of options regarding the forum that will hear the dispute, including the International Court of Justice, ITLOS and arbitration.[60] Article 14 of Annex VI of the Convention also sets up a special Deep Seabed Disputes Chamber, and Section 5 of Part XI provides for a number of distinct provisions that are designed to tackle disputes that might arise in the Area. What is of special interest in terms of shared responsibility is how the LOSC DSP would accommodate disputes arising among a plurality of entities.

4.1 Invocation

First of all, it is important that the Seabed Chamber pointed in its advisory opinion at the entities which can invoke the responsibility of a state in relation to damage in the Area. After reaffirming that the Area is the common heritage of mankind, it proceeded to quote Article 48 of the ARSIWA.[61] According to this Article, the responsibility of a state may be invoked by states, other than the one directly injured, when the obligation breached is of an *erga omnes* or *erga omnes partes* character. The Chamber held that not only states, but also international organisations, entities engaged in deep seabed mining, and other users of the sea can invoke the responsibility of the wrongdoing state.[62] This opens the door to all the entities that bear

[58] Nollkaemper and Jacobs, 'Shared Responsibility in International Law', n. 5, at 368-369.
[59] Articles 281-282 LOSC, n. 1.
[60] Article 287 (1), (5) LOSC, ibid.
[61] *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area*, n. 7, para. 180.
[62] Ibid.

obligations in the Area, but also to states that are not engaged in activities there, to bring a claim before a competent court or tribunal. As it has already been pointed out, states may also bring a case against the ISA, since the latter bears obligations under the LOSC and the Regulations. What is more, the contractor may invoke the responsibility of the ISA for breaches of the obligations arising from the contract.[63] The finding of the Seabed Chamber, if read in combination with Article 47 ARSIWA, leads to the conclusion that the claimant may choose among a number of possible respondents whom to bring before a court or a tribunal under the LOSC. Under Article 47 ARSIWA, this does not mean that if a wrongdoing entity (a state, ISA or the contractor) is not brought before a court or a tribunal that they also escape responsibility. The question then becomes where such a claim can be brought.

The only problematic instance will arise when a case concerns damage caused by a private contractor. In this scenario, the contractor can be brought before an international tribunal only by the ISA, and not by any other entity. This is so because the contractor bears international obligations in the Area through the Standard Clauses of the exploration contract.[64] The other party to the contract is the ISA. This means that states parties to the LOSC are not privy to the contract, and therefore would not have a legal basis for a cause of action against the contractor in the court or tribunals stipulated in the LOSC.

4.2 Jurisdiction

The provisions of the LOSC regarding DSP on issues pertaining to the Area are indeed capable of tackling the main problem that arises with regard to the deep seabed, namely the different nature of the actors involved. The Chamber has jurisdiction to hear cases that involve states, but also private entities and the ISA.[65] This is a welcome expansion of the jurisdiction *rationae personae* of ITLOS. This expansion is confined to the Deep Seabed Chamber, and under certain circumstances may be extended to commercial arbitration, or to a special Chamber of ITLOS.[66] It effectively means that in almost all possible scenarios in which damage may occur in the deep seabed, all responsible parties may be brought before a tribunal in accordance with the provisions of the LOSC. It must be noted here that ITLOS has

[63] Section 16 Standard Clauses, n. 18.
[64] See section 2.3 above.
[65] Article 187 LOSC, n. 1.
[66] Article 188 LOSC, ibid.

a rather wide discretion as to when it may decide to join cases.[67] This means that even if cases are not brought together before ITLOS, they may still be joined by the Tribunal, a move that can enhance the possibility of rendering a more accurate decision regarding shared responsibility.

The contractor might be brought before the national courts of the sponsoring state based on the national law of that state, but at the same time might be brought before the Deep Seabed Disputes Chamber by the ISA. Despite the distinct possibility that the national court might defer to the Chamber, this move might have a fragmenting effect on the LOSC DSP applicable in the Area. This means that it might transpire that the actors that have contributed to the damage in the deep seabed might appear before different tribunals or, alternatively, that some might not be brought before a court or tribunal at all.

An equally fragmenting effect would be present in a claim against the ISA before ITLOS and a claim against the sponsoring state(s) or the contractor before national courts. The problem here arises because the liability of the ISA and the liability of the contractor are closely connected through Article 22 of Annex III of the Convention. Article 22 stipulates that when the liability of the contractor is examined, any contributory acts of the ISA must be taken into account, and vice versa. In such a case, ITLOS would have the power to join the cases and it would probably do so in order to form a more coherent picture of the dispute.[68] This cannot be done in case a claim is brought against the sponsoring state(s) before an arbitral tribunal, and against the contractor before the Seabed Chamber. Nevertheless, the express provision on contributory negligence shows that the LOSC includes a shared responsibility component. This is true at least in cases where both the contractor and the ISA have contributed to the damage and they both appear before the same tribunal. The fact that the contribution of both actors to the damage must be taken into account means that each actor's share of responsibility will have to be determined by the competent tribunal.

Finally, a note should be made regarding the possible application of the *Monetary Gold* principle[69] in the context of a dispute arising in the Area. Given that the LOSC provides for a compulsory DSP, there are no *prima facie* difficulties in bringing all the relevant parties

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[67] Article 47 of the ITLOS Rules of the Tribunal, ITLOS/8, 17 March 2009, available at www.itlos.org (Rules of the Tribunal).
[68] Ibid.
[69] *Monetary Gold Removed from Rome in 1943 (Italy* v. *France, United Kingdom of Great Britain and Northern Ireland and United States of America)*, Preliminary Question, ICJ Reports 1954, 19, at 32.

before a tribunal. Nevertheless, there is a scenario wherein the indispensable parties rule could be of relevance. In case a party to the Convention brings a claim against a sponsoring state before a tribunal in order for the sponsoring state to be held responsible, there must be a causal link present between its breach of its obligations and the damage occurred. It is highly probable that the damage can occur through a breach of the sponsoring state's obligation and consequently through the wrongful conduct of the contractor. As we have seen, the contractor may only be brought before an international tribunal by the ISA. Therefore, in this case the tribunal will have to establish the causal link involving the obligations of an absent party, since the contractor will not appear before it. It is submitted, however, that the issue could be settled without forcing the tribunal to make any kind of determination of the rights of the contractor. It should suffice for the Chamber to examine the behaviour of the contractor only in so far as it is connected to the alleged breach of the obligation of the sponsoring state(s). It must be remembered that ITLOS for example has the power to call expert witnesses – including the contractor[70] – and that it can also appoint no fewer than two experts to sit with it.[71] It seems that the factual inquiry into the causal link between the alleged breach by the sponsoring state(s) and the actual damage, probably more closely connected with the contractor, can be established without passing any judgment on the contractor's responsibility.

5. Conclusion

This chapter has sought to show that the deep seabed regime is one of the most forward looking in terms of the determination and implementation of shared responsibility. Of course, the fact that there have not been actual cases so as to establish the effectiveness of the regime detracts from the equation a practical aspect. Nevertheless, all actors involved bear obligations towards the protection of the Area. The states have a number of direct obligations, as well as a due diligence obligation. The ISA too bears a number of obligations both under the LOSC and under the regulations it adopts. The rather outstanding feature of the regime, however, is the 'internationalisation' of the obligations of the contractor. The fact that the contractor bears obligations under the LOSC and the ISA Regulations through the Standard Clauses of the contract is very important as far as shared responsibility is concerned. The

[70] Article 289 LOSC, n. 1; Rule 15 of the Rules of the Tribunal, n. 67.
[71] Ibid.

innovations do not stop there. The provision of joint and several liability of a plurality of sponsoring states, and the wide interpretation of this provision by the Chamber also help towards a better implementation of the responsibility in the Area. The provision on the contributory negligence of the contractor and the ISA also points towards the same direction. In terms of procedure, the deep seabed regime is also forward looking. This is so despite its understandable shortcomings, that probably will not allow for the determination and implementation of responsibility of the relevant actors by a single international tribunal. Nevertheless, the regime provides, to a significant extent, mechanisms for the international settlement of dispute at all levels.

A final thought on the subject would have to point towards the future. It is true that the mining code, as it stands, only deals with the phase of exploration. The future will also bring out the issue of exploitation of the resources in the Area. It is in this, far more important stage, that the ISA, the states and the private contractors will have to face the issue of responsibility more rigorously. It remains to be seen which direction the ISA will take regarding the regulations and the contracts for exploitation. This direction will show what one can expect from the regime in that phase. Until then, it is clear that the body of rules that exist so far will probably overcome most of the challenges a shared responsibility scenario might pose.