
Centre for International
Governance Innovation



Liability Issues for Deep Seabed Mining Series | Paper No. 4 – January 2019

Responsibility and Liability for Damage Arising Out of Activities in the Area: Attribution of Liability

Tara Davenport



Liability Issues for Deep Seabed Mining Series | Paper No. 4 – January 2019

Responsibility and Liability for Damage Arising Out of Activities in the Area: Attribution of Liability

Tara Davenport

CIGI Masthead

Executive

President **Rohinton P. Medhora**
Deputy Director, International Intellectual Property Law and Innovation **Bassem Awad**
Chief Financial Officer and Director of Operations **Shelley Boettger**
Director of the International Law Research Program **Oonagh Fitzgerald**
Director of the Global Security & Politics Program **Fen Osler Hampson**
Director of Human Resources **Susan Hirst**
Interim Director of the Global Economy Program **Paul Jenkins**
Deputy Director, International Environmental Law **Silvia Maciunas**
Deputy Director, International Economic Law **Hugo Perezcano Díaz**
Director, Evaluation and Partnerships **Erica Shaw**
Managing Director and General Counsel **Aaron Shull**
Director of Communications and Digital Media **Spencer Tripp**

Publications

Publisher **Carol Bonnett**
Senior Publications Editor **Jennifer Goyder**
Senior Publications Editor **Nicole Langlois**
Publications Editor **Susan Bubak**
Publications Editor **Patricia Holmes**
Publications Editor **Lynn Schellenberg**
Graphic Designer **Melodie Wakefield**

For publications enquiries, please contact publications@cigionline.org.

Communications

For media enquiries, please contact communications@cigionline.org.

Copyright © 2019 by the Centre for International Governance Innovation

The opinions expressed in this publication are those of the authors and do not necessarily reflect the views of the Centre for International Governance Innovation or its Board of Directors.

The designations employed, as well as the content and presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of the Secretariat of the International Seabed Authority or the Commonwealth Secretariat, including, *inter alia*, concerning the legal status of any country or territory or of its authorities, or concerning the delimitation of its frontiers or maritime boundaries.



This work is licensed under a Creative Commons Attribution – Non-commercial – No Derivatives License. To view this license, visit (www.creativecommons.org/licenses/by-nc-nd/3.0/). For re-use or distribution, please include this copyright notice.

Printed in Canada on paper containing 100% post-consumer fibre and certified by the Forest Stewardship Council® and the Sustainable Forestry Initiative.

Centre for International Governance Innovation and CIGI are registered trademarks.

Centre for International Governance Innovation

67 Erb Street West
Waterloo, ON, Canada N2L 6C2
www.cigionline.org

Table of Contents

vi	About the Project
vi	About the LWG
vii	About the Author
vii	Acronyms and Abbreviations
1	Executive Summary
1	Introduction
1	Policy Considerations
6	Existing Framework on Attribution of Liability for Damage Arising Out of Activities in the Area
11	Other Actors Not Addressed by the Current Framework on Liability
15	Conclusion
17	About CIGI
17	À propos du CIGI

About the Project

The Liability Issues for Deep Seabed Mining project was developed by the Centre for International Governance Innovation (CIGI), the Commonwealth Secretariat and the Secretariat of the International Seabed Authority (ISA) to assist in clarifying legal issues of responsibility and liability underpinning the development of exploitation regulations for the deep seabed. CIGI, in collaboration with the ISA Secretariat and the Commonwealth Secretariat, in 2017, invited leading legal experts to form the Legal Working Group on Liability for Environmental Harm from Activities in the Area (LWG) to discuss liability related to environmental damage, with the goal of providing the Legal and Technical Commission, as well as members of the ISA with an in-depth examination of potential legal issues and avenues.

Papers in the series cover the following topics: the current legal architecture for liability/responsibility under the United Nations Convention on the Law of the Sea; the scope of activities covered under a liability regime; the responsible parties; the potential claimants; the range of recoverable damages; and the appropriateness of using insurance and compensation funds to ensure adequate resources for compensation. CIGI Senior Fellow Neil Craik coordinated the development of the paper series.

About the LWG

The LWG was co-convened by CIGI, the Commonwealth Secretariat and the Secretariat of the ISA, under the joint direction of Neil Craik (CIGI), Hannah Lily (Commonwealth Secretariat) and Alfonso Ascencio-Herrera (ISA Secretariat). Other members of the LWG were invited based on their expertise in areas related to international law of state responsibility and liability, international environmental law and law of the sea. While working under the auspices of the ISA, the LWG is an independent group of legal experts.

The members of the LWG are:

- Alfonso Ascencio-Herrera, Deputy Secretary-General, ISA
- Christopher Brown, Legal Officer, ISA
- Eden Charles, Independent Consultant on International Law, and former Deputy Permanent Representative of Trinidad and Tobago to the United Nations*
- Neil Craik, Senior Fellow, CIGI, and Professor of Law, University of Waterloo*
- Tara Davenport, Research Fellow, Centre for International Law, National University of Singapore*
- Elie Jarmache, Special Adviser on the Law of the Sea, Member, Legal and Technical Commission, ISA
- Hannah Lily, Legal Adviser, Commonwealth Secretariat*
- Ruth Mackenzie, Reader in International Law, University of Westminster*
- Stephen E. Rody, Professor of the Practice of Law, Duke University School of Law
- Andres Rojas, Diplomat, Ministry of Foreign Affairs and Worship, Argentina*
- Dire Tladi, Professor, University of Pretoria, and Member, International Law Commission
- Guifang (Julia) Xue, Professor, KoGuan Law School, Shanghai Jiao Tong University*

*Contributing authors to the paper series.

About the Author

Tara Davenport is currently an instructor at the Faculty of Law, National University of Singapore (NUS) and a research fellow at the Centre for International Law at NUS. She has an LLB from the London School of Economics, an LLM in maritime law from NUS, and an LLM and JSD from Yale Law School. She received the NUS Overseas Graduate Scholarship in 2014 and a Fulbright Scholarship in 2013. She is a qualified advocate and solicitor in Singapore. Her current research areas are public international law, law of the sea and international dispute settlement.

Acronyms and Abbreviations

CLC	International Convention on Civil Liability for Oil Pollution Damage
ILC	International Law Commission
IMO	International Maritime Organization
IOM	Interoceanmetal Joint Organization
ISA	International Seabed Authority
ITLOS	International Tribunal for the Law of the Sea
LOSC	United Nations Convention on the Law of the Sea
LWG	Legal Working Group on Liability for Environmental Harm from Activities in the Area
OECD	Organisation for Economic Co-operation and Development
PAA	Price-Anderson Act
SDC	Seabed Disputes Chamber

Executive Summary

This paper explores a critical component of any liability and compensation regime, namely which actors, among the many involved in a particular activity, should ultimately be held liable for risks related to damage arising from a particular activity. The central question that this paper is concerned with is whether the current attribution of liability under the 1982 United Nations Convention on the Law of the Sea (LOS¹) is adequate, or whether it would be preferable to also explicitly address the liability of other actors whose acts or omissions result in damage in some form or another. This paper examines the actors that are responsible for deep seabed mining under the LOSC and are consequently held liable for damage arising out of deep seabed mining, i.e., the contractor (which could be states, a state acting through an international organization, state enterprises or private companies), the International Seabed Authority (ISA), the sponsoring state and the Enterprise. The paper then discusses the issues that arise when more than one of these actors engage in conduct that results in damage, in other words, the issue of shared responsibility. Last, it examines other actors whose acts or omissions may result in damage but are not directly attributed liability under the current regime, such as the owner/operator of the vessel/installation or other equipment, the manufacturer or supplier of deep seabed equipment, the flag state, the parent company of a privately owned contractor and the home state of the parent company.

Introduction

The question of attribution of responsibility and consequent liability (known as “attribution of liability”) is a question of who, among the many parties involved in a particular activity, should ultimately be held liable for risks related to damage arising from a particular activity. To facilitate the ease of *ex post* compensation of victims and the fulfillment of concomitant corrective justice

¹ United Nations Convention on the Law of the Sea, 10 December 1982, 1833 UNTS 397 (entered into force 16 November 1994) [LOS^C].

goals, channelling liability to only one actor may be appropriate.² On the other hand, to provide effective deterrence for the prevention of damage, it may be necessary to impose some level of liability on all actors involved in the activity so that there are sufficient incentives to take the necessary care.³

Deep seabed mining involves a variety of actors, all of whom could engage in acts or omissions that result in damage. However, the LOS^C⁴ attributes primary responsibility for deep seabed mining activities to the ISA, the contractor (which could be states, a state acting through an international organization, state enterprises or private companies) and the sponsoring state. Consequently, the current legal framework attributes liability for damage arising out of activities in the seabed area beyond national jurisdiction (“the Area”) to these three actors. When the Enterprise becomes operational, it will presumably be another actor that could be held responsible for damage.

The central question that this paper is concerned with is whether the current attribution of liability to the ISA, the contractor and the sponsoring state is adequate or whether it would be preferable to also explicitly address the liability of other actors whose acts or omissions result in damage in some form or another. In this regard, this paper first examines policy considerations that shape decisions on attribution of liability. This is followed by a discussion on the existing framework governing the attribution of liability for damage arising out of activities in the Area. The next section will examine the potential liability of actors that are not expressly addressed under the existing framework.

Policy Considerations

As a starting point, it should be borne in mind that it has generally proven difficult to develop rules that directly attribute liability to states for damage arising out of activities carried out by states themselves or by non-state actors under their jurisdiction. While the 2001 International

² See Michael Faure, “Attribution of Liability: An Economic Analysis of Various Cases” (2016) 91 Chicago-Kent L Rev 603 at 603.

³ *Ibid* at 605.

⁴ LOS^C, *supra* note 1, art 153(1).

Law Commission (ILC) Draft Articles on State Responsibility stipulate that states are responsible for damage arising out of their wrongful acts⁵ and are obliged to make full reparation for the injury caused by the internationally wrongful acts,⁶ this only applies vis-à-vis other states. Further, as discussed in a separate paper in this series on the standard for liability, the law of state responsibility, in cases of environmental harm in particular, has proved to be limited.⁷ The only international treaty that has imposed strict liability on states for damage arising out of their activities is the 1972 Convention on International Liability for Damage Caused by Space Objects⁸ where states bear direct and absolute liability for damage on earth. As a result of the inherent difficulties in establishing the direct liability of states, emphasis shifted to the development of civil liability regimes.⁹

Under private-law civil liability regimes, different approaches to the attribution of liability to certain actors have been adopted depending on a variety of factors, including the number of actors involved in the activity, the nature of the activity, the availability of insurance, as well as the availability of compensation funds. This section will briefly explore three different approaches: channelling of legal liability; channelling of economic liability; and non-exclusive channelling of liability.

Channelling of Legal Liability Exclusively to One Actor

A common option in many national jurisdictions and international liability regimes is to channel legal liability to one party, excluding the liability of other parties involved. Under legal channelling, the liability is attached to one party who becomes

fully liable for the damage, and the provisions of the applicable legislation or international convention will indicate which party can be held liable. The victim can only sue the designated party and not another actor that may have contributed to such loss.¹⁰ Channelling of legal liability exclusively to the operator has been utilized in the nuclear industry (see, for example, the 1960 Paris Convention on Third Party Liability in the Field of Nuclear Energy)¹¹ and the shipping industry (see, for example, the 1969 International Convention on Civil Liability for Oil Pollution Damage [1969 CLC]).¹²

Such channelling of exclusive legal liability in these conventions is usually accompanied by the following provisions:

→ *Exclusive liability of the owner/operator*: There will be definitions of the actor to which liability is channelled, either the operator¹³ or the owner.¹⁴ There may also be express provisions stating that no other person shall be liable for damage, and right to compensation can only be claimed against the operator.¹⁵

5 A wrongful act refers to an act or omission that is attributable to the state under international law and that constitutes a breach of an international obligation: ILC, *Draft Articles on Responsibility of States for Internationally Wrongful Acts, with commentaries*, UNGAOR, 53rd Sess, UN Doc A/56/10 (2001), arts 1–2 [ILC, *Draft Articles on State Responsibility*].

6 *Ibid*, art 31.

7 See generally Malgosia Fitzmaurice, “International Responsibility and Liability” in Daniel Bodansky, Jutta Brunnée & Ellen Hay, eds, *Oxford Handbook of International Environmental Law* (Oxford, UK: Oxford University Press, 2008) at 1010; Neil Craik, “Determining the Standard for Liability for Environmental Harm from Deep Seabed Mining Activities” CIGI, *Liability Issues for Deep Seabed Mining Series Paper No 2*, 23 October 2018.

8 *Convention on International Liability for Damage Caused by Space Objects*, 29 March 1972, 961 UNTS 187, 24 UST 2389, 10 ILM 965 (1971) art II (entered into force 1 September 1972) [*Space Objects Convention*].

9 Fitzmaurice, *supra* note 7 at 1012.

10 Faure, *supra* note 2 at 621.

11 *Convention on Third Party Liability in the Field of Nuclear Energy*, 29 July 1960, 956 UNTS 251, 55 AJIL 1082 (196) (entered into force 1 April 1968) (amended by 1964 and 1982 Protocols) [1960 Paris Convention]. The 1960 Paris Convention was adopted under the auspices of the Nuclear Energy Agency, while the Vienna Convention on the Civil Liability for Nuclear Damage was adopted under the auspices of the International Atomic Energy Agency. Both conventions set out the basic principles on nuclear liability law. These conventions have been supplemented by subsequent conventions. For a detailed history of nuclear liability law, see Michael Faure, Jing Liu & Hui Wang, “Analysis of Existing Regimes” in Michael Faure, ed, *Civil Liability and Financial Security for Offshore Oil and Gas Activities* (New York: Cambridge University Press, 2016) 68 at 170–90.

12 *International Convention on Civil Liability for Oil Pollution Damage*, 29 November 1969, 973 UNTS 3, 9 ILM 45 (1970) (entered into force 19 June 1975) [1969 CLC]. The 1969 CLC was accompanied by the 1971 International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage of 1971. In 1992, two protocols were adopted to revise the existing regime in order to expand the geographical application and the scope of recoverable damages, as well as increase the amount of compensation. These protocols are the 1992 Protocol to Amend the International Convention on Civil Liability for Oil Pollution Damage, 27 November 1992, 1956 UNTS 255 (entered into force 30 May 1996) [1992 CLC] and the 1992 Protocol on the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, 27 November 1992, 1953 UNTS 330 (entered into force 30 May 1996). For a history of the civil liability regime on oil pollution, see Faure, Liu & Wang, *supra* note 11 at 69–81. See also Sarah Gahlen, *Civil Liability for Accidents at Sea* (Berlin: Springer-Verlag, 2015) at 49–68.

13 1960 Paris Convention, *supra* note 11, art 1(a)(vi).

14 1969 CLC, *supra* note 12, art I(3).

15 See e.g. 1960 Paris Convention, *supra* note 11, arts 6(a), (b).

- *Strict liability of the owner/operator*:¹⁶ Channelling of liability to one actor is usually accompanied by strict liability, i.e., it is not necessary to establish the fault of the owner/operator,¹⁷ although there are exceptions to the imposition of strict liability, such as armed conflict, civil war, natural disasters, insurrection and so forth.¹⁸
- *Owner/operator's right of recourse against other parties*: Channelling of legal liability to one actor may or may not recognize certain rights of recourse by the owner/operator against responsible third parties depending on the nature of the regime. For example, under the 1960 Paris Convention, operators in principle do not have a right of recourse for indemnity in respect of any compensation that the operator has paid to third parties, although there are exceptions to this rule, which include when the action is done with the intent of causing damage or to the extent it is provided for in the relevant contract.¹⁹ This was motivated by concerns that allowing recourse to third parties will make it necessary for suppliers to seek insurance coverage and will lead to costly duplication of insurance.²⁰ In contrast, the 1969 CLC recognizes that shipowners have a right of recourse against third parties²¹ and will also not be strictly liable if the damage was wholly caused by an act or omission done with intent to cause damage by a third party.²²

- *Limitation of liability*: the owner/operator is usually allowed to limit their liability.²³
- *Obligation to take out insurance or financial security*: most liability conventions that channel liability to the owner/operator will oblige the owner/operator to take out insurance or some other form of financial security.²⁴
- *Supplementary funds*: since the limits of liability are often not sufficient to provide adequate compensation and to relieve owners/operators from additional financial burdens, supplementary funds are usually established to complement compensation.

There are several justifications for the channelling of legal liability to one actor (usually the owner/operator in operational control of the activity). First, the owner/operator is usually in the best position to exercise control over the source of potential damage and, consequently, may most effectively prevent damage.²⁵ Second, the “one who created high risks seeking economic benefit must bear the burden of any adverse consequences of controlling the activity.”²⁶ Third, it has been argued that such channelling facilitates the identification of liable parties vis-à-vis victims. This is because victims do not have to go through the complicated process of identifying the person liable and avoids the uncertainties that arise in cases concerning contributory fault of another party. Channelling of liability to the owner/operator coupled with the imposition of strict liability (where fault does not have to be established) further simplifies the process for victims.²⁷ This limits the potential problems arising from the concurrence of lawsuits and decreases administrative costs.²⁸ Fourth, it

16 For a discussion on standards of liability, see Craik, *supra* note 7.

17 1960 Paris Convention, *supra* note 11, arts 3(a), (b); 1969 CLC, *supra* note 12, art III(1).

18 1960 Paris Convention, *supra* note 11, art 9; 1969 CLC, *supra* note 12, art III(2). There are differences in the circumstances in which the operator of a nuclear installation and a shipowner can exonerate themselves from strict liability. While both are not liable in cases of an armed conflict, hostilities, civil war or insurrection, under the 1969 CLC, a shipowner can rely on a natural phenomenon of an exceptional, inevitable or irresistible character, whereas under the 1960 Paris Convention, the operator will only not be liable for damage caused by a grave natural disaster, provided that such an exemption is recognized in the legislation of the contracting party in whose territory the nuclear installation is situated.

19 1960 Paris Convention, *supra* note 11, arts VI(f)(i), VI(f)(ii); see also Organisation for Economic Co-operation and Development (OECD), Nuclear Energy Agency, “Exposé des Motifs [Revised text of the Exposé des Motifs for the Paris Convention, approved by the OECD Council on 16th November 1982]” at para 16, online: <www.oecd-nea.org/law/nlparis_motif.html>.

20 OECD, *supra* note 19 at para 18.

21 1969 CLC, *supra* note 12, art III(5).

22 *Ibid*, art III(2)(b).

23 1960 Paris Convention, *supra* note 11, art 7; 1969 CLC, *supra* note 12, art V; see Craik, *supra* note 7.

24 1960 Paris Convention, *supra* note 11, art 10; 1969 CLC, *supra* note 12, art VII; see Julia Xue, “Civil Liability Regimes and Compensation Funds” CIGI, Liability Issues for Deep Seabed Mining Series [forthcoming in 2019].

25 Jan Albers, *Responsibility and Liability in the Context of Transboundary Movements of Hazardous Wastes by Sea* (Berlin: Springer-Verlag, 2015) at 249.

26 ILC, *Draft principles on the allocation of loss in the case of transboundary harm arising out of hazardous activities, with commentaries*, 58th Sess, UN Doc A/61/10 (2006), Principle 3 at 155 [ILC, *Draft Principles*], online: <http://legal.un.org/ilc/texts/instruments/english/commentaries/9_11_2011.pdf>.

27 Craik, *supra* note 7.

28 Michael Faure & Tom Vanden Borre, “Compensating Nuclear Damage: A Comparative Economic Analysis of the US and International Liability Schemes” (2008) 33 *Wm & Mary Env't L & Pol'y Rev* 219 at 264.

has also been argued that channelling of liability “affords a guarantee of prompt compensation to the victims and facilitates the transfer of prevention and liability costs to the price of goods.”²⁹ Fifth, channelling legal liability to the owner/operator facilitates the availability of insurance as it reduces the number of persons required to obtain insurance coverage and also avoids overlapping insurance coverage.³⁰

On the other hand, there are also several disadvantages to this approach. First, it has been argued that to concentrate liability on an actor that may not have caused the damage was a deviation from ordinary rules on liability and hence unjust.³¹ Second, it has been contended that channelling of liability to one party is inefficient from an economic point of view as it “negatively affects the incentives to take care more particularly by all other parties who could have equally influenced the accident risk,”³² thus undermining the deterrence goals of liability regimes. Third, channelling liability to the operator may not facilitate prompt and adequate compensation to the victim in the event the operator is insolvent, lacks sufficient funds or insurance coverage or invokes a limitation of liability.³³ Fourth, it has also been argued that the insurability justification often used to rationalize exclusive channelling to the owner/operator is “simplistic and to some extent even incorrect.”³⁴ This is because there are several potentially liable parties that have to take out insurance coverage, which does not necessarily mean that total insurance costs will increase. Further, because the insurer will also have to cover losses in cases where the losses may not have been theoretically caused by the insured but by a third party, channelling actually creates a greater risk exposure and, consequently, uncertainty for

the insurer.³⁵ Indeed, the exclusive channelling of liability to the operator of nuclear installations, coupled with limited rights of recourse against the parties actually responsible, adopted in the 1960 Paris Convention and subsequent conventions after that, has been criticized.³⁶

Channelling of Economic Liability

Legal channelling means that all liability is channelled to one actor and, in the usual case, no other entity can be held liable for damage. An alternative to legal channelling is *economic channelling*, which means that any entity can be held legally liable, but the economic consequences of that liability are channelled to the liable actor. This actor, usually the operator, takes insurance coverage, known as umbrella or omnibus insurance, whereby the potential liability of the subcontractors of the operator is also covered. The operator thus bears the ultimate financial liability burden of the accident. While this is similar to legal liability, rules of ordinary tort law remain applicable, and victims are not precluded from suing other parties apart from the operator who may have been responsible for the damage. While these parties can be held legally liable, if necessary, the operator who is obliged to guarantee satisfaction will indemnify them.³⁷ At the same time, the operator (and insurer) have subrogation rights of recourse against third parties that have been responsible for the harm, which could include suppliers and designers of equipment.³⁸

An example of such economic channelling can be found in the 1957 Price-Anderson Act (PAA) on nuclear damage in the United States. The PAA requires operators of nuclear power plants to obtain financial protection to the maximum amount available from private sources, which could be private insurance, private contractual

29 Julio Barboza, *The Environment, Risk and Liability in International Law* (Leiden, the Netherlands: Brill, 2011) at 32–33.

30 Albers, *supra* note 25 at 200; Faure, *supra* note 2 at 623; Kristel de Smedt, Hui Wang & Michael Faure, “Towards Optimal Liability and Compensation for Offshore Oil and Gas Activities” in Michael Faure, ed, *Civil Liability and Financial Security for Offshore Oil and Gas Activities* (New York: Cambridge University Press, 2016) 303 at 313–14.

31 Evelyn M Ameye, “United States and India: Two Nuclear States with Legislation that Truly Holds Responsible Parties Liable in Case of a Nuclear Accident” (2015) 18:8 J Risk Research 1070 at 1073–74.

32 de Smedt, Wang & Faure, *supra* note 30 at 314.

33 Albers, *supra* note 25 at 249.

34 Faure, *supra* note 2 at 629.

35 *Ibid.*

36 *Ibid* at 626–27. The problems with legal channelling came to the forefront during the March 2011 Fukushima nuclear incident in Japan where it was possible that the resultant damage was the result of negligent actions by TEPCO, the operator, or a fault in design or bad engineering by General Electric. Under Japanese law (which, like the Paris Convention, channels liability to the operator), General Electric would not be found liable even though it may have contributed to the risk: de Smedt, Wang & Faure, *supra* note 30 at 314. A lawsuit has been filed against General Electric and other manufacturers to try to challenge the immunity of manufacturers from suit. News Network and Broadcasting Collective, “Fukushima: Landmark Lawsuit filed against General Electric, Toshiba and Hitachi” (30 January 2014).

37 Faure & Vanden Borre, *supra* note 28 at 242.

38 de Smedt, Wang & Faure, *supra* note 30 at 315–17.

indemnities, self-insurance or other proof of financial responsibility, or a combination of such measures.³⁹ This financial protection also covers the operator's contractors. The PAA does not impose exclusive liability on the nuclear operators, and others who would have contributed to a nuclear accident (such as the supplier) are still exposed to legal liability. The liability can be called on either by potential victims directly or through a recourse action exercised, for example, by the insurer of the nuclear operator.⁴⁰

The advantage of such economic channelling lies in the fact that other parties, such as subcontractors, do not have to take out expensive insurance coverage themselves, but can rely on the umbrella coverage of the operator, resulting in a larger total insurance capacity being generated compared to when each subcontractor would have to take full liability insurance coverage for the same amount as the operator.⁴¹ Further, the fact that all participants in the activity are potentially exposed to liability provides further incentives for these parties to take more care in risk prevention or mitigation. On the other hand, while it does ensure that victims are compensated, it may lead to a multitude of legal suits and hence increase administrative costs.

Non-exclusive Channelling of Liability

Other conventional liability regimes do not channel liability exclusively to the operator. For example, the 1999 Protocol to the Basel Convention on Liability and Compensation for Damage Resulting from the Transboundary Movement of Hazardous Wastes and Their Disposal, which is not in force, does not exclusively channel liability to the owner/operator and imposes liability on several persons involved in hazardous waste movements. This is in recognition of the fact that "different persons exercise operational control over the hazardous wastes, depending on which stage of the movement is concerned"⁴² and channelling liability to only one person would create "a disincentive in the other persons involved to exercise the best possible care in order to prevent the occurrence of damage."⁴³

It ensures that each occurrence of damage can be attributed to the sphere of responsibility of one person, depending on which stage the damage occurs.⁴⁴ Accordingly, the Basel Protocol allocates strict liability to the notifier (which can be the generator or exporter of hazardous wastes) and the importer or the disposer of hazardous wastes.⁴⁵ In addition, the Basel Protocol also provides for a secondary tier of fault-based liability in order to supplement strict liability.⁴⁶

Another noteworthy example is the 2001 International Convention on Civil Liability for Bunker Oil Pollution Damage (the Bunker Convention). The Bunker Convention defines a shipowner as the "owner, including the registered owner, bareboat charterer, manager and operator of the ship."⁴⁷ The Bunker Convention makes the shipowner strictly liable for pollution damage caused by bunker fuel.⁴⁸ However, the definition of shipowner includes a wider group of actors as compared to the 1969 CLC (namely the owner, registered owner, bareboat charterer, manager and operator of the ship⁴⁹) who have control over the operation of the ship, who victims can potentially sue on the basis of strict liability.⁵⁰ The registered owner of the ship is the only actor obliged to take out compulsory insurance.⁵¹ The difference between the Bunker Convention and the CLC system has been attributed to the fact that the regime for bunker pollution does not have a second tier of compensation, as there is no other industry other than the ship-owning industry that could contribute to compensation payments (in contrast to the CLC system, which

39 Faure, Liu & Wang, *supra* note 11 at 176–77.

40 Faure & Vanden Borre, *supra* note 28 at 242.

41 de Smedt, Wang & Faure, *supra* note 30 at 316.

42 Albers, *supra* note 25 at 250.

43 *Ibid.*

44 *Ibid* at 251.

45 *Basel Protocol on Liability and Compensation for Damage Resulting from Transboundary Movements of Hazardous Wastes and their Disposal*, 9 December 1999, UNTS 120(2005) art 4 (not yet entered into force).

46 Under article 5, "any person shall be liable for damage caused or contributed to by his lack of compliance with the provisions implementing the Convention or by his wrongful intentional, reckless or negligent acts or omissions."

47 *International Convention on Civil Liability for Bunker Oil Pollution Damage*, 23 March 2001, IMO LEG/CONF.12/19, OJ, L 256/7 (2002) art 1(3) (entered into force 21 November 2008) [*Bunker Convention*].

48 *Ibid*, art 3(1); there are exceptions to the strict liability of the shipowner provided for under art 3(3) and 3(4).

49 *Ibid*, art 1(3). The 1969 CLC, *supra* note 12, defines shipowners as the registered owner of a ship or the persons owning that ship (article 1[3]). The 1992 Protocol to the CLC expressly excludes the charterer, manager or operator of the ship from liability (see 1992 CLC, *supra* note 12, art 4[2]).

50 Gahlen, *supra* note 12 at 179.

51 *Bunker Convention*, *supra* note 47, art VII.

has a second tier of compensation provided by the oil industry).⁵² Accordingly, by “providing a vast number of defendants to possible victims, the negotiating parties apparently hoped to mitigate this shortcoming in material compensation.”⁵³ Thus, the availability of multiple defendants that could be potentially liable is advantageous if one party is not carrying compulsory insurance and is insolvent, or there is no second tier of compensation available. It also places a greater burden on all actors to exercise due care in carrying out their responsibilities. At the same time, the availability of multiple defendants raises the same problems discussed above in relation to the advantages in channelling liability, i.e., it raises issues of which defendant to sue, as well as the apportionment of liability between defendants, which may hinder prompt compensation.

Existing Framework on Attribution of Liability for Damage Arising Out of Activities in the Area

There are potentially a variety of actors involved either directly or indirectly in deep seabed mining. From a *factual, causation* perspective, the acts or omissions of any of these actors could potentially result in damage. From a *legal perspective*, and as discussed above, the current legal framework distributes responsibilities for deep seabed mining between the contractor (which includes states parties, states parties acting together through an international organization, state enterprises and natural or juridical persons), the ISA and the sponsoring state. The Enterprise, once it is operational, will also have responsibilities in relation to deep seabed mining. Accordingly, the current legal framework attributes liability to contractors, the ISA and the sponsoring state, and more rules may need to be developed to accommodate the potential liability of the Enterprise. It should be borne

52 Gahlen, *supra* note 12 at 171.

53 *Ibid* at 180.

in mind that claims can be brought against all these actors before the Seabed Disputes Chamber (SDC) pursuant to article 187 of the LOSC.

Contractors

Article 153 envisages that the Enterprise, states parties, state enterprises, and natural and juridical persons shall carry out activities in the Area. The legislative history of article 139 suggests that states parties acting together through an international organization can also carry out activities in the Area.⁵⁴

As of February 2018, 29 contracts for exploration of the resources in the Area have been signed between the entities mentioned in article 153(2)(b) (referred to as “the Contractors”) and the ISA. There are 20 contractors, four of which are states,⁵⁵ 10 of which are state enterprises⁵⁶ and five of which are juridical persons or, in other words, privately owned companies.⁵⁷ The status of one of the contractors, namely, the Interoceanmetal Joint Organization (IOM), is not immediately clear — it has been set up pursuant to an intergovernmental agreement dated April 27, 1987 between six member states: Bulgaria, Cuba, the Czech Republic, Poland, the Russian Federation and Slovakia. It has been argued that it is an international organization consisting of states or, alternatively, a state enterprise jointly established by several states.⁵⁸ Accordingly, the deep seabed regime is unique in that actors that

54 Early versions of article 139 stated that “a group of States acting together, pursuant to an agreement among them or through an international organization, shall be jointly and severally responsible under this Convention” [emphasis added]. See Satya N Nandan, Michael W Lodge & Shabtai Rosenne, eds, *United Nations Convention on the Law of the Sea 1982: A Commentary*, vol 6 (The Hague: Kluwer, 2002) at 120–25. This is consistent with the general position in the LOSC, which appears to allow international organizations to participate in the LOSC regime as states parties, provided they have ratified the Convention. See LOSC, *supra* note 1, arts 1(2)(2), 305(1)(f).

55 These states are India, South Korea, the Russian Federation and Poland.

56 These state-owned enterprises are JSC Yuzhmoregeologiya; China Ocean Mineral Resources Research and Development Association; Deep Ocean Resources Development Co. Ltd.; Japan, Oil, Gas and Metals National Corporation; L’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; and China Minmetals Corporation.

57 These are Nauru Ocean Resources; Tonga Offshore Mining Ltd.; Global Sea Mineral Resources NV; UK Seabed Resources Ltd.; and Ocean Mineral Resources Inc.

58 Philippe Gautier, “Two Aspects of ITLOS Proceedings: Non-State Parties and Costs of Bringing Claims” in Harry Schreiber & Jin-Hyun Paik, eds, *Regions, Institutes and Law of the Sea; Studies in Ocean Governance* (Leiden, the Netherlands: Brill, 2011) 73 at 75–76.

are directly engaged in mining include states, international organizations and non-state actors such as state enterprises and private companies.

Article 22 of Annex III of the LOSC states that “the contractor shall have responsibility or liability 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.” Section 16.1 of the Standard Clauses for Exploration Contracts builds upon article 22 of Annex III by, first, expressly specifying that damage includes damage to the marine environment, including the costs of reasonable measures to prevent or limit damage to the same, and, second, channelling legal liability for the wrongful acts of the employees, subcontractors, agents and all persons working or acting for them to the contractor (this will be discussed further below).⁵⁹ Section 16.5 of the Standard Clauses for Exploration Contracts also obliges contractors to maintain appropriate insurance policies with internationally recognized carriers in accordance with generally accepted international maritime practice. It warrants note that the Draft Exploitation Regulations⁶⁰ currently undergoing discussion contain similar terms to section 16 of the standard contract terms of the Exploration Regulations with slight differences.⁶¹

It should be borne in mind that the contractors, including non-state actors, bear international obligations and, hence, “if they breach their obligations, the rules on responsibility as

elaborated by the ILC in the [2001 Draft Articles on State Responsibility] would, by analogy, be applicable to these entities.”⁶² The current standard of liability applicable to the contractors is one of due diligence.⁶³

The ISA

The ISA is the primary regulator of deep seabed mining activities and “activities in the Area are organized, carried out and controlled by the Authority as a whole.”⁶⁴ Accordingly, there are several scenarios where the conduct of the ISA could cause damage, including failing to ensure sufficient supervision of activities in the Area or even in the conduct of its inspection obligations.⁶⁵

While it was originally proposed by the Group of 77 during the negotiations of the LOSC that responsibility, liability and risk arising out of conduct of operations would lie with the contractor,⁶⁶ it was eventually recognized that both the contractor and the Authority would be responsible for damage arising out of their wrongful conduct.⁶⁷ Accordingly, article 22 of Annex III provides that the ISA shall “have responsibility or liability for any damage arising out of wrongful acts in the exercise of its powers and functions, including violations under article 168, paragraph 2, account being taken of contributory acts or omissions by the contractor. Liability in every case shall be for the actual amount of damage.” Sections 16.3 and 16.4 of the Exploration Regulations⁶⁸ and sections 7.3 and 7.4 of the Draft Exploitation Regulations implement article 22 of Annex III in greater detail, except the latter also takes into account

59 ISA, *Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area*, ISBA/6/A/18 (2000); in 2013, the Regulations for Polymetallic Nodules were amended to be consistent with the regulations adopted in 2010 and 2012 for the other resources; ISA, *Decision of the Council of the International Seabed Authority Relating to Amendments to the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area and Related Matters*, ISBA/19/C/17 (2013), Annex IV, s 16.1, online: <www.isa.org.jm/sites/default/files/files/documents/isba-19c-17_0.pdf>; ISA, *Regulations on Prospecting and Exploration for Polymetallic Sulphides in the Area*, ISBA/16/A/12/Rev.1 (2010); ISA, *Regulations on Prospecting for Cobalt-rich Ferromanganese Crusts in the Area*, ISBA/19/C/17 (2013) [Cobalt Regulations]. These regulations will be referred to collectively as the “Exploration Regulations.”

60 See ISA, *Draft Regulations on Exploitation of Mineral Resources in the Area*, ISBA/24/LTC/WP.1 (2018), Annex X, s 7 [ISA, *Draft Exploitation Regulations*].

61 The standard terms of the Exploration Regulations do not state that the contractor is liable to the Authority, only that the contractor is liable for any damage, whereas the Draft Exploitation Regulations state that the contractor “shall be liable to the Authority.” In addition, the Exploration Regulations only allow the contributory acts or omissions of the ISA to be taken into account, whereas the Draft Exploitation Regulations state that the contributory acts or omissions by the ISA and third parties shall be taken into account. ISA, *Draft Exploitation Regulations*, supra note 60, Annex X, s 7; see e.g. *Cobalt Regulations*, supra note 59, Annex III, s 16.

62 Ilias Plakokefalos, “Environmental Protection of the Deep Seabed” in André Nollkaemper & Ilias Plakokefalos, eds, *The Practice of Shared Responsibility in International Law* (Cambridge, UK: Cambridge University Press, 2017) 380 at 391.

63 Craik, supra note 7.

64 LOSC, supra note 1, art 153(1).

65 Ibid, art 153(5).

66 Third United Nations Conference on the Law of the Sea, *Text on conditions of exploration and exploitation prepared by the Group of Seventy-Seven*, A/CONF.62/C.1/L.7, vol 3; the text prepared in 1974 stated, “Any responsibility, liability or risk arising out of the conduct of operations shall lie only with the person, natural or juridical, entering into a contract with the Authority” (ibid at para 13). The records do not reveal detailed reasons as to why the ISA was also added as a potentially liable party.

67 Nandan, Lodge & Rosenne, supra note 54 at 753.

68 Exploration Regulations, supra note 59, Annex IV (Standard Clauses), s 16.

the contributory acts of “third parties.”⁶⁹ Like the sponsoring state, the standard of liability applicable to the ISA should be one of due diligence.⁷⁰

One question that deserves further attention is how the ISA will pay compensation for damage if it is found liable. There is nothing in the LOSC or the Exploration Regulations that suggests how this will be done. In the Draft Exploitation Regulations currently under discussion, the contractor is obliged to include the ISA as an additional assured in insurance policies, which shall be endorsed to provide that the underwriters waive any rights of recourse, including subrogation rights against the Authority in relation to Exploration Activities.⁷¹ This implies that while the ISA may be found legally liable for acts or omissions, the channelling of economic liability to the contractor, coupled with a waiver of rights of recourse, in effect means that the ISA would not be held financially liable. The question is whether this would undermine one of the purposes of an effective liability regime, i.e., to provide sufficient deterrence for the avoidance of such damage by the ISA. Further research on how the ISA should fund compensation if found liable should be undertaken and may well go hand-in-hand with the ongoing discussions on the payment mechanism by contractors and distribution of revenue.

The Sponsoring State

Contractors that are state enterprises and privately owned entities must be sponsored by state parties (sponsoring states) — like the ISA, they also have regulatory jurisdiction over the contractor. The LOSC envisaged there could be certain situations in which the sponsoring state is also liable for damage arising out of activities in the Area, as set out in articles 139(1) and (2) and article 4(4) of Annex III.

As observed by the SDC in its Advisory Opinion, “the main liability for a wrongful act committed in the conduct of the contractor’s operations or in the exercise of the Authority’s powers and functions rests with the contractor and the Authority, respectively, rather than with the

sponsoring State.”⁷² It held that a sponsoring state will only be liable for damage arising out of the contractor’s activities in the Area if the sponsoring state has failed to fulfill its due diligence obligation to take necessary and appropriate measures to secure compliance by the contractor with the relevant framework for deep seabed mining, and that failure was causative of the damage.

The Enterprise

The Enterprise as an organ of the ISA was to “carry out activities in the Area directly, as well as the transporting, processing and marketing of minerals recovered from the Area.”⁷³ The LOSC provided that the Enterprise would be an autonomous institution,⁷⁴ directed by a governing board composed of 15 members elected by the Assembly and led by a director-general.⁷⁵ Under the 1994 Implementation Agreement, the functions of the Enterprise have been conferred on the Secretariat until it begins to operate independently of the Secretariat.⁷⁶ The Council can only consider the independent functioning of the Enterprise on the occurrence of two events: first, upon the approval of a plan of work for exploitation by any qualified entity for any mineral resource and, second, an application for a joint venture with the Enterprise. If the joint venture operations with the Enterprise accord with sound commercial principles, the Council shall issue the directive for the independent functioning of the Enterprise.⁷⁷

The Enterprise currently does not have any contracts for exploration with the ISA, but when it comes into operation after approval by the Council, the assumption is that it will

69 ISA, *Draft Exploitation Regulations*, *supra* note 60, Annex X (Standard Terms), s 7.

70 Plakokefalos, *supra* note 62 at 387.

71 ISA, *Draft Exploitation Regulations*, *supra* note 60, Reg 38.

72 SDC of the International Tribunal for the Law of the Sea (ITLOS), *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (2011), Advisory Opinion, No 17 at para 200 [SDC Advisory Opinion 2011], online: <www.itlos.org/fileadmin/itlos/documents/cases/case_no_17/adv_op_010211.pdf>; Craik, *supra* note 7, elaborates on what is meant by “wrongful act.”

73 LOSC, *supra* note 1, art 170(1).

74 *Ibid*, Annex IV, art 2(2).

75 *Ibid*, Annex IV, arts 4, 5.

76 *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, UNTS vol 1836 Annex, s 2(1-2) (entered into force 28 July 1996).

77 *Ibid*, Annex, s 2(2). In 2013, after an application was made by Nautilus Minerals Inc. to form a joint venture with the Enterprise, the Council decided it was premature for it to make a decision to permit the Enterprise to function independently. ISA, *Statement of the President of the Council of the International Seabed Authority on the work of the Council during the nineteenth session*, ISBA/19/C/18 (2013) at para 16.

engage in the exploration and exploitation of the Area and may cause damage.

Notably, article 22 of Annex III, which sets out the respective liability of the contractors and the ISA, does not refer to the Enterprise. It mentions “the contractor,” which refers to the qualified entities referred to in article 153(2)(b). While it may be argued that the Enterprise falls within the definition of “contractor” at least in functional terms, Annex III refers to “contractor” and “the Enterprise” separately, suggesting that the Enterprise cannot be subsumed within “contractor.” Annex IV on the statute of the Enterprise does not contain a provision equivalent to article 22 of Annex III. Some provisions of Annex IV are, however, relevant to liability. For example, article 2(3) states that nothing in this Convention “shall make the Enterprise liable for the acts or obligations of the Authority, or make the Authority liable for the acts or obligations of the Enterprise.” The intention of this provision was to make clear that although the Enterprise was an organ of the Authority, there was a need to separate the liability of the Enterprise from that of the ISA due to the fact that there was a distinction between the acts of the ISA as an international organization and the operations of the Enterprise as a commercial entity.⁷⁸

In principle, the Enterprise should have the same liability to compensate for damage as the contractors do, also bearing in mind that the initial operations of the Enterprise are to be done by joint ventures. The issues related to developing a liability and compensation system for the Enterprise, including standards of liability, apportionment between the Enterprise and the joint venture partner, and the insurance of the Enterprise deserve further study outside the scope of this project.

Multiple Actors Responsible for Damage

One issue that warrants further consideration is the applicable liability and compensation rules when there are multiple actors responsible for the damage. This raises issues of shared responsibility, i.e., instances where a multiplicity of actors contributes to a single harmful outcome by breaching either the same or different obligations.⁷⁹

⁷⁸ Nandan, Lodge & Rosenne, *supra* note 54 at 774.

⁷⁹ Plakokefalos, *supra* note 62 at 380–81.

In most civil law and common law jurisdictions, the principle of joint and several liability means that each joint tortfeasor is held liable for all the damage to which their behaviour may have contributed.⁸⁰ The purpose of such joint and several liability principles is to relieve the burden of proof for the victim. Victims are able to collect the entire damage from one of the contributing tortfeasors who, in turn, could claim recourse against the other liable tortfeasor in proportion to their comparative responsibility for the loss based on relative causal contribution and fault.⁸¹ In addition to facilitating adequate and prompt compensation for victims, joint and several liability also provides incentives for mutual monitoring by potential tortfeasors.⁸² In contrast to this, the general rule under article 47 of the 2001 Draft Articles on State Responsibility is that where several states are responsible for a wrongful act, each is responsible for its own wrongful act, i.e., independent responsibility, although the ILC recognized that there may be regimes where joint and several liability applies, but these are regarded as *lex specialis*.⁸³

In the context of deep seabed mining, there are several scenarios in which multiple actors could be responsible for damage arising out of activities in the Area — this will be discussed briefly below.

Multiple Contractors

There may be a situation whereby contractors acting independently contribute to common damage. The LOSC and related instruments do not expressly deal with this scenario. *Prima facie*, it would seem sensible that vis-à-vis the ISA and other third-party claimants, liability of these contractors should be joint and several.⁸⁴ When it comes to apportionment between the contractors themselves, the issues become more complex, in particular when one is dealing with cumulative damage to the marine environment where it may be difficult to establish

⁸⁰ Faure, *supra* note 2 at 608.

⁸¹ de Smedt, Wang & Faure, *supra* note 30 at 316.

⁸² *Ibid.*

⁸³ See ILC, *Draft Articles on State Responsibility*, *supra* note 5, art 47 at 124–25 (commentary). For example, under the Space Objects Convention, *supra* note 8, article IV(1) expressly provides for joint and several liability where damage is suffered by a third state as a result of a collision between two space objects launched by two states.

⁸⁴ Most of the civil liability conventions apply joint and several liability when two or more actors are responsible for damage.

the proportion of fault. In this regard, one approach may be to apportion compensation equally among the liable contractors.⁸⁵

Multiple Sponsoring States

There are situations in which the applicants for contracts of exploration or exploitation may require the sponsorship of more than one state party (see, for example, the sponsoring states for the contractor IOM). If there is more than one sponsoring state, the SDC observed that neither article 139(2) nor article 4(4) of Annex III indicate how sponsoring states are to share their liability and do not differentiate between single and multiple sponsorship. Accordingly, the SDC opined that “in the event of multiple sponsorship, liability is joint and several unless otherwise provided in the Regulations issued by the Authority.”⁸⁶ This gives some leeway to the ISA to adopt a different approach in the Exploitation Regulations, but having joint and several liability for multiple sponsoring states makes sense vis-à-vis third-party claimants. The same issues regarding apportionment of liability between multiple sponsoring states discussed above in relation to multiple contractors applies; it may be prudent to have a clear rule on apportionment, in particular when there is difficulty in establishing the proportion of fault.

Sponsoring State and Contractor

The SDC Advisory Opinion 2011 addressed the situation where both the sponsoring state and the contractor have contributed to the same damage. The SDC held that the sponsoring state and the contractor are not to be held joint and severally liable. This is because “the liability of the Sponsoring State arises from its own failure to carry out its responsibilities, whereas the contractor’s liability arises from its own non-compliance” and as a result, both “forms of liability exist in parallel.”⁸⁷ The sponsoring state is not responsible for the damage caused by the sponsored contractor. Thus, if the contractor has compensated for the

actual amount of damage, claims cannot be brought against the sponsoring state. The SDC found that there was no residual liability for the sponsoring state and, consequently, there was a gap in the liability if the contractor was unable to cover damage fully and the sponsoring state had taken all necessary measures, or if the sponsoring state had failed to meet its obligations, but that failure is not causally linked to the damage.⁸⁸

While this was arguably the intention of the drafters of the LOSC, and from a policy perspective, this removes a considerable disincentive for sponsoring states in deciding to sponsor a contractor, the question remains whether this is the most appropriate solution for the exploitation phase of deep seabed mining. After all, if the joint and several liability of two sponsoring states can be based on two independent failures to take appropriate measures, could this also equally apply to independent wrongdoing by sponsoring states and contractors?⁸⁹ Further, joint and several liability for sponsoring states and contractors vis-à-vis third-party claimants (which would include the ISA) would facilitate compensation as well as provide incentives for the sponsoring state to take proper care. Provision could then be made for an appropriate apportionment between the sponsoring state and the contractor.⁹⁰ These are issues that deserve further consideration.

The ISA and Contractor

The LOSC, the Exploration Regulations and standard terms of contract provide that the liability of the contractor and the ISA will be reduced to the extent the other contributed to the damage, and each party can claim an indemnity from the

85 For example, article IV(2) of the Space Objects Convention states, “the burden of compensation for the damage shall be apportioned between the first two States in accordance with the extent to which they were at fault; if the extent of the fault of each of these States cannot be established, the burden of compensation shall be apportioned equally between them.”

86 SDC Advisory Opinion 2011, *supra* note 72 at paras 190–92.

87 *Ibid* at para 201.

88 *Ibid* at para 203.

89 André Nollkaemper, “The Seabed Disputes Chamber clarified the meaning of joint and several liability (but also raised new questions)”, SHARES Research Project on Shared Responsibility in International Law (25 November 2011), online: <www.sharesproject.nl/the-seabed-disputes-chamber-clarified-the-meaning-of-joint-and-several-liability-but-also-raised-new-questions/>.

90 As observed in Hannah Lily, “Sponsoring State Approaches to Liability Regimes for Environmental Damage Caused by Seabed Mining” CIGI, Liability Issues for Deep Seabed Mining Series Paper No 3, 5 December 2018, several sponsoring states have provisions that provide for broad indemnifications by the sponsored contractor to the sponsoring state against all proceedings, costs and demands that may be made by any third party in relation to the contractor’s activities in the Area, regardless of whether the sponsoring state was at fault or contributed. While understandable, it may let the sponsoring state off the hook in relation to its sponsorship obligations.

other.⁹¹ The Draft Exploitation Regulations mirror this, except they also allow contributory acts of third parties to be taken into account, in addition to contributory acts of the ISA or the contractor.⁹² This applies between the ISA and the contractor.

With regard to third-party claimants, it would appear that if both the ISA and the contractor are responsible, their liability is joint and several. This is suggested by the fact that both the contractor and the ISA are obliged to indemnify each other against all claims and liabilities of any third parties arising from their respective wrongful acts and omissions. On the other hand, both the ISA and the contractor are responsible for different aspects of activities in the Area, and like the sponsoring state and the contractor, it could be argued that liability would also exist in parallel and thus be severable. In other words, *prima facie*, the reasoning of the SDC Advisory Opinion 2011 suggests that there would not be joint and several liability between the ISA and the contractor. In any event, this is an issue that would benefit from greater clarity.

The ISA and Sponsoring State

There may also be a situation where the acts or omissions of both the ISA and the sponsoring state result in damage (although it is difficult to envisage a situation where the ISA and sponsoring state are factually responsible for damage but the contractor is not). Article 139(2) of the LOSC stipulates that “States Parties or international organizations acting together shall bear joint and several liability.” “International organizations” in article 139(2) could, of course, refer to the ISA, in which case it is clear that the ISA and the sponsoring state will have joint and several liability. That said, the legislative history of this article suggests that this term refers to a group of states acting together through an international organization (such as the IOM) and does not refer to the ISA, especially as the Authority is referred to separately in Part XI. Again, it may be prudent to specify the rules applicable when both the ISA and sponsoring state are at fault.

91 Both article 22 of Annex III and section 16 of the Standard Terms of Contract for Exploration refer to “contributory acts or omissions” by the ISA or the contractor, its employees, agents and subcontractors, and all persons engaged in working or acting for them in the conduct of its operations under this contract; see Exploration Regulations, *supra* note 59.

92 See ISA, *Draft Exploitation Regulations*, *supra* note 60, Annex X (Standard Clauses for Exploration), s 7.

Other Actors Not Addressed by the Current Framework on Liability

The discussion above addressed the three primary actors that are attributed liability under the current framework governing deep seabed mining, plus the Enterprise. This section will explore the actors whose actions may lead to damage but are not attributed liability. The goal of this analysis is to assist in the discussion on whether such actors should, in some way or form, be explicitly addressed by a prospective liability and compensation regime. In this regard, it should be noted that under the current dispute settlement procedure under section 5 of Part XI, claims cannot be brought against any of the actors discussed below before the SDC, save for states parties to the LOSC.

Subcontractors, Agents and All Persons Engaged in Working or Acting for the Contractor in the Conduct of Its Operations

Existing Framework: Channelling Liability to Contractors

The contractors may carry out certain aspects of operations themselves directly, or they may subcontract these aspects to third parties, who are not parties to the contract between the ISA and the contractor. While the LOSC does not expressly refer to these actors, the Exploration Regulations refer to “subcontractors, agents and all persons engaged in working or acting for them in the conduct of its operations.”⁹³ As mentioned above, the Exploration Regulations channel the liability of subcontractors, agents and all persons engaged in working or acting for contractors in the conduct of its operations to the contractor, at least vis-à-vis the ISA.⁹⁴ With regard to insurance, there is no mention of insurance covering the liability of such subcontractors and agents.⁹⁵

93 Exploration Regulations, *supra* note 59, s 16.

94 *Ibid*, s 16.1.

95 *Ibid*, s 16.5.

The Draft Exploitation Regulations currently under discussion contain more detailed obligations on subcontractors. For instance, the contractor has to ensure that the subcontract contains appropriate terms and conditions to ensure that the performance of the subcontract upholds the same standards and requirements as the contract between the ISA and the contractor. The contractor must also ensure the adequacy of its systems and procedures for the supervision and management of its subcontractors and any work that is further subcontracted, in accordance with good industry practice.⁹⁶ It should also be noted that the contractor is obliged to ensure that its subcontractors maintain appropriate insurance policies, with internationally recognized and financially sound insurers satisfactory to the Authority, on such terms and in such amounts in accordance with generally accepted maritime practice and consistent with good industry practice sufficient to cover claims made during the duration of the exploitation contract and in respect of environmental liability insurance for a period of 10 years following the expiration of the exploitation contract.⁹⁷ Like the Exploration Regulations, the standard terms of the exploitation contract of the Draft Exploitation Regulations state that the contractor is liable to the ISA for the actual amount of any damage arising out of its wrongful acts or omissions and those of its “employees, subcontractors, agents and all persons engaged in working or acting for them in the conduct of its operations under this Contract.”⁹⁸

Implications of Channelling Legal Liability of Subcontractors, Agents and Employees to the Contractors

The current approach between the contractor and the ISA channels legal liability of subcontractors, agents and persons working for contractors to the contractors. There is no economic channelling in either the Exploration Regulations or the Draft Exploitation Regulations (the obligation of the contractor is only to ensure that its subcontractors maintain appropriate insurance policies). This approach has the advantage of facilitating the ease of litigation for the ISA as they do not have to go through the expense and effort of identifying the

wrongful subcontractor. The question is whether such legal channelling undermines the deterrent effect that the liability rules aim to produce. Indeed, as discussed above, the exclusive channelling of liability to nuclear operators, leaving subcontractors and designers exempt from liability, has been criticized as allowing the actors responsible for damage to evade liability and hence accountability.

Unlike the nuclear and shipping regimes discussed above where there were explicit provisions prohibiting suit being brought against parties other than the owner/operator, there is nothing in the LOSC equivalent to this. Accordingly, there may be other avenues in which subcontractors *et al* can be held liable, although not by the ISA before the SDC. First, the contractual arrangement between the contractor and subcontractors, agents and employees may provide for recourse for an indemnity for damage suffered by the contractor. Second, the ISA and other third-party victims who have suffered damage as a result of the acts or omissions of “subcontractors, agents and all persons engaged in working or acting for them in the conduct of its operations” may still be able to claim for damage under domestic law, depending on a variety of factors, including whether such laws cover tortious acts that occur in areas beyond national jurisdiction and whether that jurisdiction has sufficient connection to the tortfeasor.

The question is whether the prospective liability regime should expressly address the liability of subcontractors or leave it to the applicable contract and/or national law. In this regard, the following questions may warrant further discussion:

- whether, in the context of deep seabed mining, such subcontractors, agents and other persons working for the contractor should escape liability vis-à-vis the ISA;
- whether, as in the civil liability regimes on oil pollution, an express means of recourse between the contractor and the subcontractor, agents and other persons conducting operations for them should be provided for;⁹⁹
- whether some form of ultimate indemnity is preferable in terms of obliging the contractor to ensure that its insurance is so-called

⁹⁶ ISA, *Draft Exploitation Regulations*, *supra* note 60, Annex X, s 6.

⁹⁷ *Ibid*, Reg 38.

⁹⁸ *Ibid*, Annex X, s 7.

⁹⁹ 1969 CLC, *supra* note 12, art III(5).

omnibus insurance that also covers the liability resulting from third-party acts;¹⁰⁰ and

- whether the ISA and victims should be able to sue subcontractors, agents and other persons conducting operations for the contractor in other national forums and how to establish these mechanisms.

Actors Included in the Exploration Regulations Definition

Another question that arises is the definition of “subcontractors, agents and all persons engaged in working or acting for them in the conduct of its operations.” While most liability regimes use general terms and leave the definition of such terms such as “servants or agents”¹⁰¹ to national courts to decide, this has led to different interpretations by different courts. For example, under the 1969 CLC, “servants and agents of the owner” were exempt from liability vis-à-vis third parties. After the *Amoco Cadiz* oil spill, the US courts concluded that the CLC would not bar proceedings against the shipowner’s parent companies as they could not be termed “agents or servants” of the single-ship company that actually owned the *Amoco Cadiz* (this led to the widening of channelling provisions in the 1992 CLC).¹⁰²

The above example illustrates some of the issues that arise in deciding whether a particular actor falls within the definition of a class of persons excluded from liability. The terms “subcontractor,” “agents” and “all persons engaged in working or acting for the Contractor in the conduct of its operation” may all have different meanings in different jurisdictions. In laymen’s terms, subcontractors usually refer to a person or company contracted to provide some services or materials that are necessary for the performance of another’s contract.¹⁰³ An agent, on the other hand, is generally a person acting on behalf and for the account of a principal, without having independent interests as to the matter. Most national jurisdictions have developed laws on agency and when the principal is liable for the acts of the agent. Thus, it is important to be aware that whether a particular actor will fall

within the definition of “subcontractor,” “agent” and “all persons engaged in working or acting for the Contractor in the conduct of its operations” will depend on the terms of the arrangement between the contractor and that person.

Owner/Operator of Vessels, Installations and Equipment Used for Deep Seabed Mining Activities

Although the contractor may carry out many aspects of the operations itself, it may also engage third parties to carry out these operations, such as a vessel owner/operator (including charterer) of the production support vessel and/or the transport vessel;¹⁰⁴ the owner/operator of the mining platform (in the event a production support vessel is not used for mining); and the owner/operator of other equipment and devices such as remotely operated vehicles and automated underwater vehicles that may be used in mining.¹⁰⁵ Damage can happen during any of the phases of deep seabed mining and, *prima facie*, the owner/operator of the relevant vessel/installation/equipment could be factually responsible for the damage. Such owner/operators may fall within the definition of subcontractors or “all persons engaged in working or acting for the Contractor in the conduct of its operations.” In the event that these third-party owner/operators are considered subcontractors and are responsible for damage, the discussion in the section above is relevant. However, one further point to bear in mind is the possible interaction between the liability and compensation regime developed for deep seabed mining and existing or prospective liability and compensation regimes that may cover the activities described above.¹⁰⁶

¹⁰⁰ See discussion on economic channelling above.

¹⁰¹ 1969 CLC, *supra* note 12; Gahlen, *supra* note 12 at 105.

¹⁰² Gahlen, *supra* note 12 at 108.

¹⁰³ Cambridge Dictionary, 2018, *sub verbo* “subcontractor”, online: <<https://dictionary.cambridge.org/>>.

¹⁰⁴ Note that the SDC found that transportation to points on land from the high seas superjacent to the part of the Area in which the contractor operates is not included in the notion of “activities in the area” (see SDC Advisory Opinion 2011, *supra* note 72 at para 96) and transportation vessels may therefore fall outside a liability regime designed to address damage arising from activities in the Area.

¹⁰⁵ For a detailed description of the equipment that may be used in deep seabed mining, see Ecorys, *Study to investigate state of knowledge of Deep Sea Mining* (Rotterdam: Ecorys, 2014) at 61, online: <<https://webgate.ec.europa.eu/maritimeforum/sites/maritimeforum/files/FGP96656%20DSM%20Interim%20report%20280314.pdf>>.

¹⁰⁶ The International Maritime Organization (IMO), for example, has adopted several conventions addressing liability and compensation in respect of damage arising from shipping activities: see IMO, “List of IMO Conventions”, online: <www.imo.org/en/About/Conventions/ListOfConventions/Pages/Default.aspx>.

Manufacturer/Supplier of Deep Seabed Mining Equipment

Another actor not expressly dealt with in the current framework is the manufacturer or supplier of deep seabed mining equipment. It is conceivable that damage could result from a design fault in any of the equipment used for seabed mining (indeed, a design fault was said to be the cause of both the Fukushima nuclear disaster in Japan and the BP oil spill in the Gulf of Mexico).¹⁰⁷ The nuclear industry, for reasons specific to the way the industry developed, exempts suppliers from liability with certain exceptions (see discussion above). The question is how a deep seabed mining liability and compensation system should address the manufacturer/supplier of deep seabed mining equipment. For example, it could be argued that these actors fall within the definition of subcontractors and, thus, at least vis-à-vis the ISA, liability of manufacturers and suppliers is channelled to the contractor. The contractor would presumably then have a claim against the manufacturer/supplier pursuant to their own contractual arrangements. The ISA and other third parties who have suffered damage may also be able to sue manufacturers or suppliers in appropriate national courts.

The Flag State

In the high seas, the flag state has primary jurisdiction over both production support vessels and transport vessels.¹⁰⁸ The question then arises as to whether the flag state of the production support vessel and/or transport vessel could also be responsible for causing damage in the Area, given its primary regulatory jurisdiction over vessels operating in the Area.¹⁰⁹ For example, one could envisage a situation whereby the flag state failed to exercise effective jurisdiction over the vessel in administrative, technical and social matters, and this was causative of the damage. Of course, it would seem clear that the obligation of the flag state (like the sponsoring

state in relation to sponsored contractors) is one of due diligence as specified in the Advisory Opinion in Case No. 21.¹¹⁰ This points to the need for a clearer division of responsibility between the ISA and the flag state when it comes to vessels engaged in activities in the Area.¹¹¹

The situation is more complex when it comes to platforms and installations. Instead of a production support vessel, there is also the possibility that a platform could be used and, depending on the circumstances, the platform could be fixed to the ocean floor or may consist of an artificial island or may float.¹¹² Under the LOSC, the term “ship” or “vessel” is not defined and neither is “installation” (nor “artificial island” nor “structure,” for that matter).¹¹³ Jurisdiction over installations, artificial islands and structures will depend on where they are located. In the exclusive economic zone and on the continental shelf, articles 60 and 80 give the coastal state the exclusive right to construct and to authorize and regulate the construction, operation and use of artificial islands and most installations and structures.¹¹⁴ With regard to installations used for carrying out activities in the Area, regulatory jurisdiction appears to lie with the ISA and the sponsoring state. With regard to the ISA, article 147 affords authority in the ISA to regulate installations used for carrying out activities in the Area, although this authority does not seem as extensive as the authority given to coastal states under articles 60 and 80. Article 209 of the LOSC also seems to suggest that the sponsoring state, by virtue of the fact that such installations are “operating under their authority,” has regulatory jurisdiction.

With regard to the possibility of a flag state also having regulatory jurisdiction over such installations, the situation is not entirely clear.¹¹⁵ In contrast to vessels that must be flagged, the LOSC leaves registration of installations by a flag state a measure that states may take, although

¹⁰⁷ John M Broder, “Panel Says Firms Knew of Cement Flaws Before Spill”, *The New York Times* (28 October 2010), online: <www.nytimes.com/2010/10/29/us/29spill.html>; Jonathan Soble & Mure Dickie, “How Fukushima failed”, *Financial Times*, 6 May 2011, online: <www.ft.com/content/5207d550-76b9-11e0-bd5d-00144feabdc0>.

¹⁰⁸ LOSC, *supra* note 1, arts 91, 94.

¹⁰⁹ *Ibid*, arts 91–92, 94.

¹¹⁰ See ITLOS, *Request for an advisory opinion submitted by the Sub-Regional Fisheries Commission (SRFC)* (2015), ITLOS Reports 2015, No 21 at 4.

¹¹¹ Hannah Lily, “Discussion Paper: Issues of Jurisdiction and Liability in the Area” (2016) [unpublished, on file with author].

¹¹² Ecorys, *supra* note 105 at 62.

¹¹³ George K Walker, ed, *Definitions for the Law of the Sea: Terms Not Defined by the 1982 Convention* (Leiden, the Netherlands: Martinus Nijhoff, 2012) at 104.

¹¹⁴ LOSC, *supra* note 1, arts 56, 60, 80.

¹¹⁵ Stuart Kaye, “International Measures to Protect Oil Platforms, Pipelines and Submarine Cables from Attack” (2007) 31:2 Tul Mar LJ 377 at 387–88.

there appears to be some flexibility as to how they go about doing so.¹¹⁶ Whether an installation is registered with a flag state appears to depend upon “its location, the nature of the activity it is engaged in and the relevant legal instruments that define their scope of application.”¹¹⁷

Notably, the Draft Exploitation Regulations, currently under discussion, recognize that installations do not have a flag state and appear to envisage that the sponsoring state will need to have certain national laws on installations.¹¹⁸ Given that the actor who has regulatory jurisdiction over installations could potentially be liable for damage caused by that installation, it may be beneficial to have a clear division of responsibility between the ISA, the sponsoring state and the flag state (if any).

Parent Companies of Contractors and Home States of Parent Companies

As mentioned above, there are presently five contractors that are privately owned entities, which are subsidiaries of parent corporations located in either the same or different jurisdictions. The broad implications of this have been explored in detail in a separate paper on effective control and excerpted here to flag that from an attribution of liability perspective, it raises certain issues. For example, should the parent companies of the privately owned contractors be held liable for damage caused by activities carried out by subsidiary companies? Similarly, should the home state of the parent company be held liable for damage, even though they are not sponsoring states? The liability of the parent company comes into play when its subsidiary, the contractor, is unable to pay, although the risk of this may be ameliorated by ensuring the subsidiary company takes out adequate insurance or through the provision of guarantees.¹¹⁹ The question is whether and how the parent company or the home state of the parent company should be

held liable for the wrongful acts of its subsidiary that result in damage in the context of the current drive to develop a liability and compensation regime. At present, the LOSC, Annexes, Exploration Regulations and Draft Exploitation Regulations do not contemplate such a possibility.

Conclusion

The current framework governing the attribution of liability for damage caused by deep seabed mining limits the parties that can be liable to the ISA, the contractor and the sponsoring state (and presumably the Enterprise when it is operational). In this way, the deep seabed mining regime is unique in that it involves states, international organizations, state enterprises and private companies. The hybrid nature of this regime means that it may be difficult to apply wholesale civil liability concepts, such as the channelling of legal liability, exclusively to one actor.

That said, the current framework appears to adopt an approach that incorporates a certain degree of legal channelling in that legal liability of subcontractors, agents or persons working for the contractor is channelled to the contractor at least vis-à-vis the ISA, although there is no prohibition from bringing a claim against these actors in other forums. At the same time, recognizing that not only the contractor can be held liable for damage (in other words, non-exclusive liability), and that the primary regulators (the ISA and the sponsoring state) may also be held liable, places a significant obligation on these actors to take sufficient care when managing deep seabed mining in the global commons. There are also other actors whose acts or omissions may result in damage, such as the owner/operator of the vessel/installation or other equipment, the manufacturer or supplier of deep seabed equipment, the flag state, the parent company of a privately owned contractor and the home state of the parent company. These actors are not expressly addressed in the current framework, although it could be argued that the owner/operator of the vessel/installation or other equipment and the manufacturer or supplier of deep seabed equipment could be subcontractors whose liability is channelled to the contractor. Bearing this in mind, the following issues deserve

116 *Ibid* at 388. LOSC, *supra* note 1, arts 109, 209; these acknowledge that installations can be registered.

117 Richard A Barnes, “Flag States” in Donald Rothwell et al, eds, *Oxford Handbook of the Law of the Sea* (Oxford, UK: Oxford University Press, 2014) 304 at 333.

118 ISA, *Draft Exploitation Regulations*, *supra* note 60, Reg 34(3b); the contractor is obliged to ensure that all ships, platforms and installations “comply with relevant national laws relating to vessel standards and crew safety of their flag-State in the case of ships or their sponsoring State in the case of installations” [emphasis added].

119 Andres Rojas, “Effective Control” CIGI, *Liability Issues for Deep Seabed Mining Series* [forthcoming in 2019].

further consideration in deciding the attribution of liability in the context of a deep seabed mining liability and compensation regime:

- *Prima facie*, the current attribution of liability to the ISA, the contractor and sponsoring state appears to be sufficient to ensure that damage will be effectively compensated and that proper care will be taken in the prevention of such damage. As the primary actors in the deep seabed regime, this attribution of liability may not need to be drastically altered, given that it was clearly the intentions of the drafters that these three actors be held responsible. If all liability was channelled to the contractor, without the contractor having any recourse against either the ISA or the sponsoring state, it would not be an equitable or effective regime.
- Do the current rules on division of responsibility and consequent liability between the contractors, the ISA and the sponsoring state need further elaboration, building upon the SDC Advisory Opinion 2011, in particular when there are multiple actors responsible for the same damage?
- How should the ISA and the sponsoring state pay compensation in the event they are found liable?
- How (and when) should the applicable liability rules for the Enterprise be further developed?
- Should the deep seabed mining liability and compensation regime impose remedial financial responsibility on the contractor, so that the contractor is obliged to take out umbrella insurance that covers liability for damage caused by all actors?
- For damage caused by subcontractors, agents and persons working for contractors, these issues should be considered:
 - whether it is prudent to elaborate on definitions of “subcontractors, agents and persons working for Contractors” to make clear that actors, such as owners of vessels, installations or equipment, and manufacturers of deep seabed mining equipment, fall or do not fall within this definition;
 - whether, in the context of deep seabed mining, such subcontractors, agents and other persons working for the contractor should

escape liability vis-à-vis the ISA and other third parties who have suffered damage;

- whether, as in the civil liability regimes on oil pollution, an express means of recourse between the contractor and the subcontractor, agents and other persons conducting operations for them should be provided for;
- whether some form of economic channelling is preferable in terms of obliging the contractor to ensure that its insurance is so-called omnibus insurance that also covers the liability of third-party acts; and
- whether national laws should provide for judicial remedies against actors excluded from the jurisdiction of the SDC under article 187.

About CIGI

We are the Centre for International Governance Innovation: an independent, non-partisan think tank with an objective and uniquely global perspective. Our research, opinions and public voice make a difference in today's world by bringing clarity and innovative thinking to global policy making. By working across disciplines and in partnership with the best peers and experts, we are the benchmark for influential research and trusted analysis.

Our research programs focus on governance of the global economy, global security and politics, and international law in collaboration with a range of strategic partners and support from the Government of Canada, the Government of Ontario, as well as founder Jim Balsillie.

À propos du CIGI

Au Centre pour l'innovation dans la gouvernance internationale (CIGI), nous formons un groupe de réflexion indépendant et non partisan doté d'un point de vue objectif et unique de portée mondiale. Nos recherches, nos avis et nos interventions publiques ont des effets réels sur le monde d'aujourd'hui car ils apportent de la clarté et une réflexion novatrice pour l'élaboration des politiques à l'échelle internationale. En raison des travaux accomplis en collaboration et en partenariat avec des pairs et des spécialistes interdisciplinaires des plus compétents, nous sommes devenus une référence grâce à l'influence de nos recherches et à la fiabilité de nos analyses.

Nos programmes de recherche ont trait à la gouvernance dans les domaines suivants : l'économie mondiale, la sécurité et les politiques mondiales, et le droit international, et nous les exécutons avec la collaboration de nombreux partenaires stratégiques et le soutien des gouvernements du Canada et de l'Ontario ainsi que du fondateur du CIGI, Jim Balsillie.

**Centre for International
Governance Innovation**

67 Erb Street West
Waterloo, ON, Canada N2L 6C2
www.cigionline.org

