

**Models in Environmental Decision-making:
Possible Applications to Deep Seabed Mining From Other Sectors and Regimes
Wednesday, 14 April, 2021
Webinar Summary**

Introduction and Background

The Pew Charitable Trusts and RESOLVE convened a webinar on Wednesday, 14 April, 2021, to hear experts' perspectives on environmental decision-making models in other sectors and regimes that may be applicable to governance of mining on the deep seabed.

Andrew Friedman, The Pew Charitable Trusts, welcomed webinar participants. He noted that the International Seabed Authority (ISA) recently released a set of draft standards and guidelines touching on core aspects of environmental decision-making, including environmental impact assessments (EIAs) and statements (EISs), environmental management and monitoring plans, the establishment of baseline data, and hazard identification and risk assessment, among others (available [online](#)). The draft standards and guidelines, which complement the draft regulations for the exploitation of mineral resources in the international seabed area (the Area), are open for stakeholder consultation until 3 July 2021. Mr. Friedman encouraged participants on the webinar to make comments to strengthen these drafts, considering lessons learned from environmental decision-making under other regimes. The webinar was facilitated by Paul De Morgan, RESOLVE.

The webinar agenda, slides presented, participant list, and recording are available on [RESOLVE's website](#).

Perspectives on Environmental Decision-making

Stakeholder Engagement in Environmental Decision-making: Elements and Rationale

Angelique Pouponneau, Seychelles' Conservation and Climate Adaptation Trust, provided an overview of the relevant stakeholders in international processes related to deep seabed mining, as well as how to proactively engage impacted communities and stakeholders. Ms. Pouponneau highlighted the ISA's responsibility to govern the Area and protect the common heritage of mankind (CHM), noting the high standards for ISA in this role established in United Nations (UN) Sustainable Development Goal 16 (SDG16) related to accountability and transparency for institutions, including representative decision making at all levels. A weakness of the ISA's engagements, highlighted by Ms. Pouponneau, is the lack of observer organizations representing indigenous communities, youth, or women. In particular, Ms. Pouponneau noted that coastal communities lack a clear understanding of how the ISA's regulations on DSM will impact them. In contrast, Ms. Pouponneau spoke to her experience participating in an inclusive, consultative Seychelles marine planning process, in which small scale fisheries actively participated. Effective participation by stakeholders was supported by clear documentation of the planning process, including meeting minutes made easily available online. Ms. Pouponneau explained that this not only facilitated participation and transparency, but also increased trust in the planning process. Ms. Pouponneau credited the ISA, noting the Annual Council and Assembly meetings have been livestreamed, and that they maintain an updated website with information pertaining to intersessional workshops. Ms. Pouponneau closed her presentation by explaining that, despite the ISA's limitations with respect to financing and capacity, the ISA will need to rethink its responsibilities as it moves away from a meeting convening body to a regulatory institution with the capacity to manage the Area as intended by the UN Convention on the Law of the Sea (UNCLOS).

The slides associated with Ms. Pouponneau's presentation are available on [RESOLVE's website](#).

Surveying the EIA Landscape: Comparing the ISA's EIA Regime to Other Global Models

Dr. Neil Craik, University of Waterloo and Senior Fellow at the Centre for International Governance Innovation (CIGI), presented on findings from his recent study, developed with the Pew Charitable Trusts, comparing the ISA's EIA regime to eleven other EIA processes from across the world, including international conventions and EIA systems from developed and developing countries. Dr. Craik emphasized that the study explored the fitness of each process within the specific context of their regulatory regimes, with a focus on oversight and accountability. Dr. Craik explained that ISA's EIA regime is quite different from many domestic, terrestrial regulatory regimes because of the informational asymmetry in DSM; much of the DSM research is conducted by mining proponents, who have the ability and capital to do the work. In addition, the ISA lacks comprehensive regulations or precise standards to guide implementation and oversight. The ISA is further constrained by long-term leases and protections under UNCLOS that limit the degree to which the ISA can change lease conditions. Dr. Craik highlighted the importance of the scoping process within EIAs, which defines the study boundaries and methodologies. As it relates to DSM, Dr. Craik noted the scoping process is fairly closed, largely driving by the project proponent, and not subject to oversight, which is out of step with appropriate practices in other contexts. Furthermore, consultation largely takes place at the end of the EIA process, after the EIA is completed, whereas other EIA processes typically involve iterative consultation during scoping and drafting. A key concern highlighted by Dr. Craik is the lack of transparency and oversight for the ISA's EIA decision making process.

The slides associated with Dr. Craik's presentation are available on [RESOLVE's website](#).

The Benefits of Experience: Comparing the ISA to the U.S. Mining Regime

Dr. Mark Squillace, Professor of Law and Director of the Natural Resources Law Center at the University of Colorado School of Law, presented lessons for DSM from terrestrial mining, recognizing the mining activities are fundamentally different in terms of the environmental impacts and approaches to reclamation. Dr. Squillace emphasized that a good regulatory program includes meaningful engagement with stakeholders at all stages of the decision making process, including during the development of comprehensive performance standards for exploration and mining activities. In addition, decisions should be made by an agency with comprehensive regulatory authority over mining, through a robust and public-facing planning and permitting process. Dr. Squillace highlighted the importance of the ISA's Legal and Technical Commission (LTC), and in particular noted that the LTC is required by UNCLOS to recommend approval for contracts when the conditions for approval are met, and those substantive decisions can only be overturned by a two-thirds vote by the ISA's Council. Because of the LTC's important role in decision making, Dr. Squillace suggested that the Council must be vigilant in its oversight of the LTC, and impartial technical staff should assist the LTC in decision making. In addition, the ISA must adopt strict standards that promote transparency, as well as baseline requirements and procedures that contractors must follow. Dr. Squillace shared specific suggestions for guiding principles for contracts, informal and formal contract review, performance standards for contractors, and inspection/enforcement of standards. Dr. Squillace emphasized that it is important for stakeholders play a role in ensuring mining operations are conducted appropriately, which includes opportunities for stakeholders to file complaints, as well as whistleblower protections for employees.

The slides associated with Dr. Squillace's presentation are available on [RESOLVE's website](#).

Panel Discussion & Participant Questions

Following their presentations, Ms. Pouponneau, Dr. Craik, and Dr. Squillace shared their perspectives on initial discussion questions. Webinar participants were also invited to share questions through the Zoom Question and Answers pod.

Q: What considerations can be taken from the stakeholder engagement aspects of other models?

Ms. Pouponneau suggested lessons could be learned from the UN Framework Convention on Climate Change (UNFCCC), which is another global, multilateral process. While not a perfect example, Ms. Pouponneau explained that the UNFCCC includes meaningful representation from a variety of stakeholders, including concerted efforts to engage youth constituencies and Indigenous peoples. She suggested the ISA's definition of stakeholder could be wider and more aspirational, seeking to connect to humankind. Dr. Squillace agreed and highlighted the difficulties in helping people engage with and feel connected to the seabed. He suggested that increased transparency, both through reporting and visible monitoring (e.g., underwater cameras), could support meaningful stakeholder engagement. Dr. Craik added a different perspective, flagging the risks posed by a fragmented governance structure for the world's oceans including an unintegrated set of approaches to marine planning in the deep ocean. Dr. Craik also noted that more careful consideration is needed to understand how to appropriately apply the rights of Indigenous peoples in ocean spaces broadly.

Q: During this past year, the ISA's Council has used silent procedures to address certain issues, which has limited stakeholder participation. During a non-COVID year, are there any hindrances you see that prevent youth, women, and Indigenous groups from participating in sessions?

Ms. Pouponneau responded first, describing a range of barriers to participation such as a lack of basic awareness of the overall processes to a lack of understanding the various pathways to engagement, even once processes are understood. She noted that non-state actors are not as actively engaged as they could be; one potential strategy for addressing this issue is a robust communications strategy accompanied with a clear roadmap for engagement. Dr. Craik added that it is also difficult to achieve broad engagement for detailed project-level assessments, and many stakeholders are interested in engaging in larger overarching, threshold issues concerning DSM. He suggested that a more robust, strategic EIA process that provides for public engagement would support more meaningful engagement. Dr. Squillace further suggested that starting to engage students and youth could help develop a population with a better understanding of civic engagement broadly.

Q: The ISA has done a great job of encouraging and supporting observers to participate in the ISA, however, currently contractors do not have the same status as Observers during formal ISA meetings – given they are a key stakeholder, is this an oversight that should be reconsidered?

Speaking from his experience at ISA meetings, Dr. Craik observed that contractors have access to decision making processes and are well resourced, with robust support from scientific experts. Dr. Craik noted that contractors deserve the same fairness as Observers, but contractors also have additional, exclusive rights, including the right to appeal decisions of the Council. In his opinion, the balance between contractors and Observers is fairly well struck.

Q: What do you consider to be the essential elements of an effective environmental decision-making framework and why?

Dr. Craik noted that many related ideas were covered in his presentation (see [slides](#)), but he specifically highlighted that DSM decisions are made in an imperfect knowledge environment with deep uncertainty, which requires an adaptive management approach. As new information is gained there will be changes to both our scientific understanding and normative understanding of DSM, and Dr. Craik suggested the ISA should seriously consider potential adjustments to standards and guidelines in response to new information. Dr. Craik also emphasized that the ISA's multi-lateral decision making process does have a role for observers, but it is primarily a state-based process. Ms. Pouponneau agreed with Dr. Craik and noted the ISA is listening to and reacting to submissions made by different representative groups (perhaps because coalition recommendations carry more persuasive weight). Dr. Squillace added that an adaptive management approach helps to avoid the shortcomings of a typical EIA process, which is usually exercised as a static, pre-decisional tool, rather than a dynamic process for collecting information in an ongoing manner.

Q: While there has been a lot of work to better understand the deep sea and impacts of DSM, there is still a lot we don't know. Are there examples of effective environmental decision making in a knowledge poor environment? If so, how did those work/what steps were taken? What additional thoughts would you have on how to move forward?

Dr. Squillace did not have specific examples to share but instead explained that state-sponsored projects usually rely on sponsoring states to ensure compliance with standards, which is highly problematic. Although states may have adequate laws and/or agencies to implement enforcement, in most cases non-compliance is not actually appropriately addressed.

Q: What would be your top one or two key takeaways that may be applicable to governance of mining on the deep seabed?

Ms. Pouponneau highlighted the importance of stakeholder engagement and the challenges in identifying the range of people impacted by DSM decisions. Furthermore, there are varying capacities among stakeholders to engage, and the ISA should be conscious of these differences. Building on the need to engage stakeholders, Dr. Craik suggested we consider the DSM decision-making processes as not just technical processes, but also political and normative processes likely to be contested for the foreseeable future. Dr. Craik noted that a successful regime will allow engagement of diverse voices in a respectful way, including states and contractors. Dr. Craik also suggested that the role of the LTC needs to be reconsidered, given it was largely designed as a technical body and now appears to be performing a different set of functions. Dr. Squillace emphasized the importance of taking adequate time to fully assess the potential environmental consequences of DSM, and he reiterated the earlier point that an adaptive management approach will help address the challenges of operating in highly uncertain context such as DSM.

Closing Remarks and Next Steps

Mr. Friedman closed the webinar by thanking the panelists and participants for their time, and then inviting participants to share thoughts on topics for future webinars in the series of substantive discussions Pew will sponsor before the next meeting of the ISA Council.

In an effort to ensure wide participation of stakeholders in different time zones, the timing for future webinars will be staggered, and sessions will be recorded and shared. Please visit [RESOLVE's website](#) for more information on future webinars in this series on draft regulations for seabed mining.

Webinar Participation

Panelists

- Neil Craik, Professor, University of Waterloo and Senior Fellow at the Centre for International Governance Innovation (CIGI)
- Angelique Pouponneau, Chief Executive Officer at Seychelles' Conservation and Climate Adaptation Trust
- Mark Squillace, Professor of Law and Director of the Natural Resources Law Center at the University of Colorado School of Law

Participants

- Erika Ablett, JAPAN NUS
- Medard Ainomuhisha, Permanent Mission of Uganda to the UN
- Rear Admiral (Retd.) Md. Khurshed Alam, Ministry of Foreign Affairs, Dhaka
- Mercy Amai, National Environment Management Authority
- Giovanni Ardito, Sapienza University of Rome
- Jeff Ardron, Commonwealth Secretariat
- Juan Azofeifa, Universidad de Costa Rica
- Jessica Battle, WWF
- Kathryn Bomey, The Pew Charitable Trusts
- Indira Brown, Department of Environmental Planning & Protection
- Neus Companyà-Llovet, Imar-Okeanos-University of the Azores
- Assheton Carter, TDi Sustainability
- Malcolm Clark, NIWA
- Ana Colaço, Okeanos
- Bronwen Currie, retired from Ministry of Marine Resources
- Laurens de Jonge, Royal IHC
- Minna Epps, IUCN
- Livia Ermakova, VNIIOkeangeologia
- Elva Escobar, UNAM
- Patricia Esquete, Aveiro University
- Teresa Fernandes, Heriot-Watt University
- Tomohiko Fukushima, Japan Oil, Gas and Minerals National Corporation
- Christine Gaebel, University of Edinburgh
- Matthew Gianni, Deep Sea Conservation Coalition
- Patrick Govaert, Federal Public Service Foreign Affairs
- GINA GUILLEN-GRILLO, Permanent Mission of Costa Rica to the ISA
- Randi Hagemann, Equinor
- Daniel Hill, Natural Resources Canada
- Mitsuru Hiromi, Kaitu'u Funaki
- Becky Hitchin, JNCC
- Sioni Iikela, International University of Management
- Mark Irvine, ERM
- Daniel Jones, NOC
- Megan Jungwiwattanaporn, The Pew Charitable Trusts
- Paulus Kainge, Ministry of Fisheries and Marine Resources
- Naohisa Kanda, Yuzawa Shoji
- Ahmad Al Karim, Ministry of Foreign Affairs
- John Kathena, Government
- Yota Kawai, JAPAN NUS
- Hajime Kawamura, JAPAN NUS
- Nicholas Kirkham, The Pew Charitable Trusts
- Kerstin Kröger, Joint Nature Conservation Committee
- Moeketsi Lekobene, Lesotho UN

- Lisa Levin, Scripps Institution of Oceanography, UC San Diego
- Elaine Li, Shanghai Jiaotong University
- Hannah Lily, Independent consultant
- Estela Mercedes Mansogo, Mision Permanente de Guinea Ecuatorial
- Leigh Marsh, Consultant
- Corey McLachlan, DeepGreen
- Anna Metaxas, Dalhousie University
- Kamila Mianowicz, Interoceanmetal Joint Organization
- Clement Yow Mulalap, Permanent Mission of the Federated States of Micronesia to the United Nations
- Margaret Murphy, The Pew Charitable Trusts
- Arne Myhrvold, Equinor ASA
- Chilenye Nwapi, The Commonwealth Secretariat
- Karin Olson Hoal, Cornell University
- Gloria Ong, Ministry of Trade and Industry
- Angela Palacios, National Maritime Policy Implementation Committee
- Steve Persall, UK Seabed Resources
- Cherisse Preez, Fisheries and Oceans Canada & the University of Victoria
- Louisa Rio, UiT Norges arktiske universitet
- Siegfried A. Schmuck, Pew
- Patrik Schotte, Federal Public Service Economy, S.M.E.s & Energy - Belgium
- Helena Sherman, Southampton university
- Satoshi Shiokawa, JOGMEC
- Linda Siegele, University College London, Faculty of Laws
- Dale Squires, University of California San Diego
- Alison Swaddling, Commonwealth Secretariat
- Raijeli Taga, Ministry of Lands and Mineral Resources
- Andrew Thaler, Blackbeard Biologic
- Torsten Thiele, Global Ocean Trust
- Michał Tomczak, Polish Geological Institute - National Research Centre
- Siosiuua Utoikamanu, Independent Consultant
- Cindy Van Dover, Duke University
- Henk Van Muijen, IHC Mining BV
- Philip Weaver, Seascope Consultants Ltd
- Julian Wilckens, PtJ
- Christopher Williams, UK Seabed Resources
- Kenneth Wong, GAC
- Joan Yang, The Pew Charitable Trusts
- Winnie Yeh, World Economic Forum

Organizers

- Laura Bartock, RESOLVE
- Maya Breitburg-Smith, RESOLVE
- Anindita Chakraborty, The Pew Charitable Trusts
- Paul De Morgan, RESOLVE
- Andrew Friedman, The Pew Charitable Trusts
- Chris Pickens, The Pew Charitable Trusts