



Second expert scoping workshop: Charting future horizons – harnessing advanced technologies for the protection and sustainable use of the international seabed area

Focus theme: Monitoring

Kingston, Jamaica

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OPENING REMARKS

Ms. Leticia Carvalho,
Secretary-General of the International Seabed Authority

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Distinguished guests,

Ladies and gentlemen,

I am pleased to welcome you to this second expert scoping workshop, “Charting future horizons - harnessing advanced technologies for the protection and sustainable use of the international seabed area,” with a thematic focus on monitoring.

The workshop is organized in collaboration with the Kobe Ocean-Bottom Exploration Center (KOBEC) at Kobe University in Japan. It marks the first tangible outcome of the partnership between the International Seabed Authority (ISA) and KOBEC, established through a joint letter of cooperation signed in 2024.

I wish to express my sincere appreciation to Mr. Yuzo Yamaguchi, Minister of Economy, Trade and Industry of Japan, Prof. Masato Fujiwara, President of Kobe University, Prof. Hiroko Sugioka and Prof. Junichiro Ishibashi, KOBEC, including Prof. Tomohiko Fukushima, a member of ISA Legal and Technical Commission, for their excellent support in organizing this workshop.

I also wish to extend my gratitude to all participants, both those joining in person and those participating online.

As many of you know, the United Nations Convention on the Law of the Sea (UNCLOS) entrusts the ISA with the unique mandate to organize and control mineral resource-related activities in the Area for the benefit of humankind as a whole. In fulfilling this responsibility, the ISA is mandated to ensure the effective protection of the marine environment from any harmful effects that may arise from such activities. The ISA also has a duty to design and implement mechanisms to promote and encourage the transfer of technology to developing States.

In 2021, the ISA Assembly unanimously adopted an Action Plan in support of the UN Decade of Ocean Science for Sustainable Development. It identifies six strategic research priorities, including one that specifically targets the development of technology to support activities in the Area.

In line with the principles of UNCLOS, ISA’s work to facilitate the development and transfer of deep-sea technology will add significant value to increasing our knowledge of the deep ocean and ensuring sustainable and equitable use of seabed resources in the Area, recognized as the common heritage of humankind.

Technological innovation is key to establishing reliable, low-impact, transparent and cost-effective systems for the monitoring of exploration and future exploitation activities, which is precisely the focus of this workshop. It is also central to ISA’s ability to fulfil its regulatory responsibilities and ensure an evidence-based approach to decision-making.

To advance this work, ISA has launched a series of workshops that explore the role of technological innovation within its mandate. Five specific areas were identified for focused consideration:

- (i) ocean observation and communication
- (ii) monitoring
- (iii) autonomy, automation and robotics
- (iv) machine learning and artificial intelligence and
- (v) mining, energy and processing.

To inform discussions currently under way across ISA's bodies, the ISA Secretariat is initiating studies to assess the state of available technologies in these five specific areas, identify the best industry practices and explore the need for further technological innovation.

This workshop in Kobe will focus on technical and environmental monitoring, as well as the technologies needed to support scientific and technological discussions, including those related to the development of regional environmental management plans and environmental thresholds. It aims to assess the current design, challenges and future requirements of ocean and seabed monitoring.

Discussions will cover a broad range of topics, from existing and emerging technologies to advanced monitoring designs, best industry practices, innovation and opportunities for strengthening the capacities of developing countries in this field.

I am confident that your exchanges over the coming days will help identify synergies and foster strategic partnerships that facilitate innovation, technological development and capacity-building.

I trust that your collective engagement will help us design and implement tangible actions that promote sound and innovative deep-sea technologies for the sustainable management of the Area and its resources, benefiting all humankind.

I thank you all for your participation and continued support of the ISA's work.

I wish you fruitful and productive discussions and look forward to the outcomes.

Thank you.
