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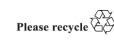
Implementation of the action plan of the International Seabed Authority in support of the United Nations Decade of Ocean Science for Sustainable Development

Report of the Secretary-General

I. Introduction

- 1. Pursuant to the United Nations Convention on the Law of the Sea¹ and the 1994 Agreement relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982,² the Authority is mandated to promote and encourage the conduct of marine scientific research in the Area and to coordinate and disseminate the results when available. It may also carry out marine scientific research concerning the Area. In addition, the Authority has the responsibility to encourage the development of appropriate programmes to strengthen the capacity of developing and technologically less-developed States.³ To deliver its mandate, the Authority serves as a global driving force in fostering scientific collaborations to advance knowledge and technological innovations in deep-sea research.
- 2. In 2017, the General Assembly proclaimed the United Nations Decade of Ocean Science for Sustainable Development. ⁴ In 2020, the Assembly of the Authority formalized its contribution by adopting a dedicated action plan for marine scientific research in support of the Decade. ⁵ The action plan puts forward six strategic research priorities and has since served as a global framework and agenda to advance deep-sea research in support of the strategic directions endorsed by members of the Authority through the strategic plan for the period 2019–2025. ⁶

⁶ See www.isa.org.jm/wp-content/uploads/2022/03/Strategic_Plan_Booklet.pdf and ISBA/28/A/18, para. 48.







^{*} ISBA/29/A/L.1.

¹ United Nations Convention on the Law of the Sea, art. 143 (2).

² 1994 Agreement, para. 5 (h).

³ United Nations Convention on the Law of the Sea, art. 143 (3).

⁴ General Assembly resolution 72/73, para. 292.

⁵ ISBA/26/A/17.

- 3. The Authority's contribution to the Decade includes its cooperation with the Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization (UNESCO), which was formalized by the signing of a memorandum of understanding in 2000 to promote the conduct of marine scientific research in the Area.⁷
- 4. Since adopting the action plan, the secretariat of the Authority has organized 29 events to promote scientific deep-sea research, encompassing online and in-person workshops, webinars, information series and side events in global forums involving over 1,000 experts. In addition, 44 strategic partnerships were forged to deliver the action plan, and 19 member States and the European Union have provided support. Among the knowledge products produced, five technical studies were delivered.⁸
- 5. In the context of the Decade, the Intergovernmental Oceanographic Commission commissioned a report in 2023 on enhancing the engagement of UN-Oceans in the Decade. As a member of UN-Oceans, the Authority emphasized the need to advance coordination in the Decade's implementation among United Nations agencies, taking into consideration existing frameworks and mandates in marine scientific research.
- 6. The Secretary-General delivers an annual progress report to the Assembly of the Authority regarding the implementation of the action plan. The present report provides an update for the period from June 2023 to June 2024. In summary, the secretariat increased its efforts, with 11 events organized, compared with 7 in the previous reporting period. A strategic road map on data management for the period 2023–2028 was delivered and four new initiatives under strategic research priorities 2 and 6 were launched. The achievements will be highlighted in two global forums, the Partnership Fund was operationalized and the Secretary-General issued a call to action to accelerate the implementation of the action plan.

II. Progress in the implementation

7. The present report provides an update on the implementation of the six strategic research priorities contained in the action plan for marine scientific research.

A. Strategic research priority 1: advancing scientific knowledge and understanding of deep-sea ecosystems, including biodiversity and ecosystem functions, in the Area

- 8. Under this strategic research priority, the secretariat facilitates activities to develop a robust scientific knowledge base to support decision-making processes based on the precautionary approach used by the Authority.
- 9. Three workshops were organized during the reporting period. In June 2023, over 30 policymakers and scientists, including 6 representatives of small island developing States and 2 representatives of landlocked developing countries, participated in two workshops organized in Kingston by the secretariat in collaboration with the Division

⁷ ISBA/6/A/9, para. 13.

⁸ See www.isa.org.jm/publications/technical-study-28-regional-environmental-assessment-of-the-northern-mid-atlantic-ridge; www.isa.org.jm/publications/technical-study-29-remote-monitoring-systems-in-support-of-inspection-and-compliance-in-the-area; www.isa.org.jm/publications/technical-study-30-marine-mineral-resources-scientific-and-technological-advances; www.isa.org.jm/publications/21773; and www.isa.org.jm/publications/technical-study-33-potential-interactions-between-fishing-and-mineral-resource-related-activities-in-areas-beyond-national-jurisdiction-a-spatial-analysis.

⁹ See ISBA/27/A/4 and ISBA/28/A/8.

for Ocean Affairs and the Law of Sea of the United Nations. The first workshop focused on key components of the third World Ocean Assessment and the second on enhancing science-policy interfaces. ¹⁰ As a result, experts identified key elements of sustainability pathways for mineral resources in areas beyond national jurisdiction to be included in the third World Ocean Assessment. In February 2024, the secretariat organized, in Tokyo, in collaboration with four Japanese partners, a workshop to advance the development of a regional environmental management plan for the area of the north-west Pacific Ocean. ¹¹ It brought together 38 experts from 15 countries. Newly available environmental data were compiled and synthesized to update the data report and environmental assessment for this region. ¹²

B. Strategic research priority 2: standardizing and innovating methodologies for deep-sea biodiversity assessment, including taxonomic identification and description, in the Area

- 10. To implement this strategic research priority, the Authority launched the Sustainable Seabed Knowledge Initiative in 2022 in partnership with the European Commission, the Republic of Korea and the Government of France. ¹³ The Initiative accelerates species descriptions and has five objectives: increasing deep-sea biodiversity knowledge and understanding of resilience; improving consistency for biodiversity assessment; generating taxonomic data; enhancing scientific capacity in this domain; and supporting global decision-making processes.
- 11. During the reporting period, two new initiatives were launched. In May 2023, the "One Thousand Reasons" campaign awarded 10 grants to eight research institutions ¹⁴ and two citizen scientists. Under the campaign, the scientists will describe nearly 100 species by the end of 2024. A species checklist was launched in July 2023 in collaboration with the World Register of Marine Species. ¹⁵ It currently comprises data on 285 species of the Clarion-Clipperton Zone. As a result, consistency in the biodiversity assessment of these species will be improved.
- 12. In addition, the secretariat organized two scientific workshops in collaboration with the Ministry of Oceans and Fisheries of the Republic of Korea and the National Marine Biodiversity Institute of Korea. The first, held in Viet Nam in October 2023, focused on enhancing data-sharing and establishing best practices for standardization. ¹⁶ As a result the interoperability of data stored in DeepData with global initiatives such as the Darwin Core¹⁷ was enhanced. The second scientific workshop will be held in June

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¹⁰ See www.isa.org.jm/news/isa-and-doalos-successfully-conclude-two-international-workshops-in-support-of-the-development-of-the-third-world-ocean-assessment-and-science-policy-interface-capacity/.

The Ministry of Economy, Trade and Industry of Japan; the Japan Organization for Metals and Energy Security; Deep Ocean Resources Development Co., Ltd.; and the National Institute of Advanced Industrial Science and Technology of Japan.

¹² See www.isa.org.jm/events/workshop-on-the-regional-environmental-management-plan-for-the-area-of-the-northwest-pacific/#BG%20Docs.

¹³ See www.isa.org.jm/sski/.

¹⁴ The National Museum of Natural History, Smithsonian Institution; the University of Lodz; the National University of Singapore; Museums Victoria; the Biology Centre of the Upper Austria Landes-Kultur GmbH; the Second Institute of Oceanography, Ministry of Natural Resources of China; the Complutense University of Madrid; and the University of Cape Town.

¹⁵ See www.isa.org.jm/news/isa-and-worms-release-a-species-checklist-for-the-clarion-clipperton-zone-in-celebration-of-the-one-year-anniversary-of-the-sustainable-seabed-knowledge-initiative/.

¹⁶ See www.isa.org.jm/events/workshop-on-enhancing-biological-data-sharing-to-advance-deep-sea-taxonomy/.

¹⁷ See https://dwc.tdwg.org/.

2024 and will aim at developing a scientific approach for identifying key deep-sea taxa relevant to environmental impact assessments and monitoring programmes.¹⁸

- 13. To raise awareness of the achievements of the Initiative's first year and seek support for its further implementation, the secretariat hosted a side event during the twenty-eighth session of the Council of the Authority. In addition, at the fiftieth annual session of the Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection, hosted in Kingston in September 2023, the global environmental contributions of the Initiative were underscored. ¹⁹ As a result, the Authority's role in promoting synergies with existing and new initiatives, as well as the importance of the DeepData database, were highlighted.
- 14. To enhance scientific capacity, the secretariat, supported by the Institut français de recherche pour l'exploitation de la mer and the Government of France, launched a deep-sea taxonomy fellowship for an expert from a developing country. The taxonomist from India concluded her taxonomic descriptions in February 2024 and developed novel technologies for species identification. As a result, three scientific articles will be published.
- 15. Furthermore, the secretariat will participate in global initiatives, including the fourth meeting of the Sustainable Ocean Initiative Global Dialogue with Regional Seas Organizations and Regional Fishery Bodies organized by the secretariat of the Convention on Biological Diversity, the Food and Agriculture Organization of the United Nations (FAO) and the United Nations Environment Programme, in Seoul in June 2024. It will also attend the twenty-sixth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice of the Convention on Biological Diversity in Nairobi in May 2024. At these events, the secretariat will highlight the Authority's contributions to the Kunming-Montreal Global Biodiversity Framework and emphasize the potential benefits to the 2023 agreement on biodiversity beyond national jurisdiction that would arise from the implementation of the action plan for marine scientific research.

C. Strategic research priority 3: facilitating technology development for activities in the Area, including ocean observation and monitoring

- 16. The secretariat stays updated on innovative technological trends to implement this strategic research priority. It advanced the Authority's technology assessment and identified five priority domains needing further progress: ocean observation and communication; monitoring; autonomy, automation and robotics; machine learning and artificial intelligence; and mining, energy and metal processing. In addition, the secretariat organizes capacity development initiatives and facilitates international cooperation to ensure all States have the necessary tools to participate in activities in the Area, fulfilling its mandate to transfer technology to developing States.²¹
- 17. In April 2024, the secretariat organized a workshop on advanced technologies for the international seabed area in collaboration with the Institute for Systems and Computer Engineering, Technology and Science of Portugal. ²² The Institute coordinates the European Union Horizon project ²³ on the development of a

¹⁸ See www.isa.org.jm/events/workshop-on-the-development-of-a-scientific-approach-to-identifying-key-deep-sea-taxa-in-support-of-the-protection-of-the-marine-environment-in-the-area/.

¹⁹ See www.isa.org.jm/news/gesamp-concludes-its-50th-annual-session-held-at-isa-headquarters/.

²⁰ See www.cbd.int/marine/soi/soi-gd4.png.

²¹ United Nations Convention on the Law of the Sea, art. 144.

²² See www.isa.org.jm/events/expert-scoping-workshop-on-charting-future-horizons-harnessing-advanced-technologies-for-the-protection-and-sustainable-use-of-the-international-seabed-area/.

²³ See www.h2020.md/en/horizon-cl4-2022-resilience-01-digitised-resource-efficient-and-resilient-industry-2022-single-stage.

technology-based impact assessment tool for sustainable, transparent deep sea mining exploration and exploitation (known as TRIDENT),²⁴ and the secretariat is seated on its Advisory Board. The workshop was held in Porto, Portugal, with over 120 participants, including government representatives from 29 countries, members of the Legal and Technical Commission of the Authority and contractors. During the workshop, participants reviewed best practices and innovations in deep-sea observation, monitoring, exploration and exploitation and discussed the capacity development needs for all countries to benefit from technological innovation.

- 18. In support of the workshop preparations, an expert from Brazil affiliated with the Institute was deployed to the secretariat from March to April 2024. The expert junior engineer undertook a comprehensive data compilation during this period, mapping over 300 sensors across various sectors. These findings informed the discussion held during the scoping workshop.
- 19. In May 2024, the secretariat will participate online in the annual meeting of the Deep Ocean Observing Strategy as part of its Advisory Board. The gaps and solutions that the ocean-observing community identify will inform discussions on a coordinated framework under the Authority to expand long-term deep-ocean observation programmes.

D. Strategic research priority 4: enhancing scientific knowledge and understanding of potential impacts of activities in the Area

- 20. Assessing the potential impacts of activities in the Area is crucial to discharging the Authority's mandate under the Convention and the 1994 Agreement to protect the marine environment in the Area and to enabling the Authority to take measures to prevent damage to marine flora and fauna resulting from activities in the Area. ²⁵
- 21. This strategic research priority includes assessing the potential interactions of other industries with activities in the Area. During the reporting period, the secretariat published a technical study on interactions between fishing and mineral resource-related activities in areas beyond national jurisdiction. ²⁶ The authors of the study concluded that direct spatial conflicts between fisheries and future mineral resource exploitation were likely to be infrequent and manageable, but recognized the need for further research. To further enhance cross-sectoral coordination in managing areas beyond national jurisdiction, the Council of the Authority approved a memorandum of understanding with FAO during the first part of its twenty-ninth session. ²⁷ The cooperation will include sharing non-confidential deep-sea data and exchanging best practices on scientific approaches to the sustainable management of activities. ²⁸
- 22. During the reporting period, the secretariat facilitated the further elaboration of scientific approaches and tools for cumulative impact assessments. Qualitative mathematical models were discussed during the regional environmental management plan workshops for priority regions in the Area in collaboration with the Commonwealth Scientific and Industrial Research Organization. This continued work will advance the understanding of cumulative impacts from future exploitation activities and other stressors on different ecosystem components.
- 23. Furthermore, the secretariat provided input for a scoping paper that informed the joint call on the ecological aspects of deep-sea mining launched by the Joint

²⁴ See https://deepseatrident.eu.

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²⁵ United Nations Convention on the Law of the Sea, art. 145.

²⁶ See www.isa.org.jm/wp-content/uploads/2023/07/ISA_Technical-Study_33.pdf.

²⁷ ISBA/29/C/9, para. 25.

²⁸ See ISBA/29/C/2.

Programming Initiative Healthy and Productive Seas and Oceans (JPI Oceans) in October 2023.²⁹ The secretariat stressed that any research endeavour should facilitate synergies and align with the strategic research priorities of the action plan. The secretariat also communicated that potential overlap between research facilitated by JPI Oceans and existing processes led by the Authority should be avoided.

- 24. The secretariat continued its role on the Advisory Board of the project entitled "Seabed mining and resilience to experimental impact", funded by the Government of the United Kingdom of Great Britain and Northern Ireland. During the online annual meeting in October 2023, experts discussed outputs informing deep-sea ecosystem responses to broad-based disturbance.
- 25. Upon invitation from the Secretary-General of the United Nations, in reference to paragraph 388 of General Assembly resolution 77/248, the secretariat contributed to drafting a publication on managing marine geospatial information for sustainable ocean governance. The report will catalogue global marine geospatial data collection initiatives to identify potential "data deserts". DeepData will be profiled as a spatial Internet-based data management system and a one-stop shop for deep-sea-related data.

E. Strategic research priority 5: promoting dissemination, exchange and sharing of scientific data and deep-sea research outputs and increasing deep-sea literacy

- 26. Sharing non-confidential data, following the findable, accessible, interoperable and reusable (FAIR) principle, and disseminating information is essential to advancing deep-sea literacy and informing policymaking processes. The launch of the DeepData database in 2019 fulfils this responsibility. DeepData has become a one-stop shop for all environmental data collected in the Area. ³⁰ As of April 2024, the database had an average of 5,580 monthly visitors.
- 27. During the second part of its twenty-eighth session, the Legal and Technical Commission endorsed a strategic road map for data management for the period 2023–2028. The Council welcomed the significant progress made. ³¹ The road map's objective is to ensure that the best available data informs decision-making, and that marine scientific research is enhanced by an increase in the quantity and quality of the data while also empowering developing States. Subsequently, during the first part of the twenty-ninth session, the Commission endorsed the implementation workplan for this road map.³²
- 28. Further enhancing data quantity and quality is a short-term priority. To facilitate this, the secretariat set up individual data-management review training sessions for contractors in Kingston. Since May 2024, four contractors have participated in the hands-on training, resulting in a review of their data submissions to the Authority.
- 29. Strategic partnerships are essential in order to enhance the data quality and leverage the public use of DeepData. The secretariat continued its partnership with the Ocean Biodiversity Information System. To date, the System contains 99 data sets covering the period from 2004 to 2021, with data from 456 species. ³³ The secretariat is also working with the International Oceanographic Data and Information Exchange

²⁹ See https://jpi-oceans.eu/en/announcement-new-jpi-oceans-joint-call-ecological-aspects-deep-sea-mining.

³⁰ See https://data.isa.org.jm/isa/map/.

³¹ ISBA/28/C/27, para. 17.

³² See https://ltc.isa.org.jm/wp-content/uploads/2024/02/ISBA_29 LTC CRP.6.pdf.

³³ See https://obis.org/node/9d2d95be-32eb-4d81-8911-32cb8bc641c8.

project office of the Intergovernmental Oceanographic Commission of UNESCO to incorporate oceanographic data into the Ocean Infohub.³⁴

- 30. During the reporting period, six additional contractors ³⁵ voluntarily disclosed their bathymetric data, totalling 92.9 gigabytes, to the Area 2030 initiative. The secretariat established this initiative with the International Hydrographic Organization to accelerate the mapping of the seabed. ³⁶ The data, collected at an unprecedented high resolution (100 meters), significantly contributes to the global efforts of initiatives such as the General Bathymetric Chart of the Oceans Seabed 2030 project. ³⁷
- 31. Furthermore, the secretariat advanced deep-sea literacy through the launch of "Deep Dive", an e-learning platform uniquely designed to address all elements of the legal regime governing activities in the Area. ³⁸ In the course, internationally renowned deep-sea experts lecture on scientific and technological aspects of activities in the Area. To date, 50 students have been awarded the Deep Dive certificate. Deep-sea literacy among young children is also promoted through tools such as a digital colouring book about deep-sea research and environmental protection. ³⁹ Finally, two art competitions on the theme "Beneath the surface: unveiling hidden realms" were launched to engage youth on the deep sea on World Oceans Day. ⁴⁰

F. Strategic research priority 6: strengthening deep-sea scientific capacity of Authority members, in particular developing States

- 32. The secretariat continues to design, facilitate and implement various training programmes relevant to the needs of developing States and aligned with the objectives of Authority's capacity development strategy. ⁴¹ During the reporting period, expert training activities were conducted in-house, in collaboration with contractors, and also within the framework of the joint training research centres.
- 33. Two female experts from the United Republic of Tanzania and Nepal were deployed to Kingston from February to April 2024 under the joint project framework between the Authority and the Technology Bank for the Least Developed Countries. The pilot projects involved research on the lithium cycle and the potential radioactivity of manganese nodules that will inform knowledge products.
- 34. During the reporting period, 13 training opportunities were made available under the contractors' training programme for candidates from developing States. The placements were offered by 19 contractors pursuant to 26 exploration contracts. More than half of the opportunities involved at-sea training, and 59 per cent of the placements went to female candidates, while 37 per cent went to experts from least developed countries, landlocked developing countries and small island developing States.
- 35. In October 2023, the International Seabed Authority-China Joint Training and Research Centre in Qingdao, China, organized a two-week workshop on marine science and technology. 42 This was the second workshop on marine science and

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³⁴ See https://oceaninfohub.org.

³⁵ The Cook Islands Investment Corporation; the Government of the Republic of Korea; Loke Marine Minerals; Marawa Research and Exploration Ltd.; Nauru Ocean Resources Inc.; and Tonga Offshore Mining Limited.

³⁶ See www.isa.org.jm/area-2030/.

³⁷ See https://seabed2030.org.

³⁸ See www.isa.org.jm/deep-dive/.

³⁹ See www.isa.org.jm/isa-wakatoon/.

⁴⁰ See www.isa.org.jm/news/isa-launches-two-art-competitions-on-the-theme-beneath-the-surface-unveiling-hidden-realms/.

⁴¹ See ISBA/27/A/5.

⁴² See www.isa.org.jm/capacity-development-training-and-technical-assistance/isa-china-joint-training-and-research-centre/.

technology held by the Centre and involved 25 participants from 21 developing countries, including 3 participants from small island developing States and 6 from least developed countries. Under the International Seabed Authority-Egypt Joint Training and Research Centre framework established by the memorandum of understanding between the Authority and the National Institute for Oceanography and Fisheries of Egypt, 43 the first training course on environmental impact assessment is scheduled for September 2024. 44

36. Women's empowerment remains a central focus under this strategic research priority. In the context of the Authority's Women in Deep-Sea Research project, 10 additional contractors pledged to allocate 50 per cent of their training opportunities to qualified women applicants. ⁴⁵ Moreover, as part of the Authority's global mentoring programme See Her Exceed, which supports women experts from developing countries, the secretariat successfully matched eight mentors with mentees. These mentors stimulate the personal, professional and scientific development of their mentees in online sessions. ⁴⁶

III. Engagement and resource mobilization

- 37. During the reporting period, the secretariat engaged in three global forums to raise awareness and attract additional partners and resources to accelerate the implementation of the action plan.
- 38. In September 2023, the Secretary-General of the Authority launched a call to action at a side event during the Sustainable Development Goals Summit in New York, urging accelerated investment in deep-sea science and technology.⁴⁷ Seven member States signed onto the call during the event and three more followed later, including one developing country, one least developed country and four small island developing States.⁴⁸
- 39. In April 2024, the secretariat engaged in the Ocean Decade Conference, reaffirming the Authority's commitment to delivering the action plan in three side events organized with three member States and eight international partners. ⁴⁹ The first event highlighted the pivotal role of science in supporting the stewardship of the Area. The second event, organized with four partners, ⁵⁰ focused on the harnessing of data from the private sector to boost ocean data. The secretariat presented DeepData as a best practice example of such a public-private partnership. The third event, organized with three partners, ⁵¹ celebrated concrete actions catalysed by the Authority for women's empowerment in deep-sea science and technology, identifying structural measures as crucial for future progress.

⁴³ ISBA/28/A/18, para. 49.

⁴⁴ See ISBA/28/A/13.

⁴⁵ See www.isa.org.jm/capacity-development-training-and-technical-assistance/widsr-project/.

⁴⁶ See www.isa.org.jm/widsr-mentoring-programme-2/.

⁴⁷ See www.isa.org.jm/news/global-call-to-action-for-accelerating-progress-under-the-2030-agenda-through-deep-sea-research-technology-and-innovation-launched-at-the-sdgs-summit-high-level-event-co-organized-by-bangladesh-arge/.

⁴⁸ Argentina, Nauru, the Cook Islands, Tonga, Malta, Norway, Singapore, Bangladesh, Italy and Mauritius.

⁴⁹ See www.isa.org.jm/news/isa-concludes-engagement-at-the-2024-ocean-decade-conference-with-renewed-support-and-commitment-towards-its-msr-action-plan-in-support-of-the-un-decade-of-ocean-science/.

⁵⁰ The Corporate Data Group of the Intergovernmental Oceanographic Commission of UNESCO, the United Nations Global Compact, Fugro and HUB Ocean.

⁵¹ The World Maritime University, the Sasakawa Global Ocean Institute and the International Hydrographic Organization.

- 40. In May 2024, the Secretariat will participate in the fourth International Conference on Small Island Developing States in Antigua and Barbuda and organize two side events. The first will focus on leveraging partnerships to advance women's empowerment and leadership in deep-sea research to support sustainable ocean governance. It will showcase concrete actions and future partnerships to enhance the participation of women from small island developing States and least developed countries in marine scientific research. The second side event will focus on leveraging the knowledge, technology, innovation and capacities of small island developing States to advance deep-sea research for the benefit of humanity. It will highlight the Authority's 30 years of experience in protecting the environment beyond national jurisdiction through rigorous regulatory frameworks based on the precautionary approach and transparency. In addition, it will present flagship capacity development initiatives such as the Abyssal Initiative for Blue Growth.
- 41. The implementation of the action plan was accelerated through the projects and initiatives initiated under the Authority's Partnership Fund. ⁵² The multi-donor fund, launched in 2022, aims at promoting marine scientific research and contributing to capacity development programmes and activities. ⁵³ Five projects received financial support from the Partnership Board: establishing a diplomatic deep-sea academy for African diplomats; developing a data visualization platform of the Area for the benefit of humankind; enhancing the knowledge of African experts in deep-sea research through the establishment of the International Seabed Authority-Egypt Joint Training and Research Centre; promoting deep-sea research in the Indian Ocean to advance knowledge and understanding in support of seabed minerals exploration; and advancing the Caribbean blue economy through the Centre for Excellence for Oceanography and the Blue Economy.

IV. Next steps

42. To take stock of the achievements of the Authority in advancing the scientific knowledge of the deep sea, the Secretary-General commissioned a report on the contributions of the Authority to the scientific objectives of the United Nations Decade of Ocean Science for Sustainable Development. The report is being prepared in collaboration with the National Oceanography Centre and the United Kingdom, and a group of 16 experts will provide strategic advice. ⁵⁴ In addition, 10 interviews

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⁵² See www.isa.org.jm/isa-partnership-fund/.

⁵³ See ISBA/ST/SGB/2022/1.

⁵⁴ Tomasz Abramowski, Director, Interoceanmetal Joint Organization, Poland; Natalia Amezcua, Research Deputy Manager, Mexican Geological Survey, Mexico; Rima Brown, Senior Knowledge Management Officer, Seabed Minerals Authority, Cook Islands; Georgy Cherkashov, Managing Director, Institute for Geology and Mineral Resources of the Ocean, Russian Federation; Suzan M. El-Gharabawy, Vice-President, National Institute of Oceanography and Fisheries, Egypt; Hank Hedge, Senior Geologist, Mines and Geology Division, Ministry of Transport and Mining, Jamaica; Federica Irene Falomi, Economic Affairs Officer, Technology Bank for the Least Developed Countries; Pedro Madureira, University of Evora, Portugal; John Astony Mataro, Senior Geologist, Mining Commission, United Republic of Tanzania; Sandip Mukhopadhya, Scientist, Ocean Sciences and Technology Division, Ministry of Earth Science, India; Sai Navoti, Chief of the Small Island Developing States Unit, Department of Economic and Social Affairs of the United Nations; Marzia Rovere, Senior Research Scientist, National Research Council, Italy; Katy Soapi, Coordinator, Pacific Community Centre for Ocean Science, secretariat of the Pacific Community, Fiji; Samantha Smith, President, International Marine Minerals Society, Canada; Joshua Tuhumwire, Independent Consultant and Member of the Legal and Technical Commission, Uganda; and Gao Xiang, Executive Director, International Seabed Authority-China Joint Training and Research Centre, China.

are being conducted as part of the process. The report will be launched later in 2024, and its findings will inform the next era of deep-sea research.

V. Recommendations

- 43. The Assembly is invited to:
 - (a) Take note of the information provided in the present report;
- (b) Request the Secretary-General to continue his efforts to mobilize the necessary resources for the implementation and upscaling of the strategic research priorities under the action plan for marine scientific research;
- (c) Encourage all members of the Authority, other States, relevant international organizations, academic, scientific and technical institutions, philanthropic organizations, corporations and private persons to contribute to the implementation of the action plan for marine scientific research.