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Annual report of the Secretary-General under article 166, paragraph 4, of the United Nations Convention on the Law of the Sea

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. Under the United Nations Convention on the Law of the Sea (the Convention)¹ 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 (the 1994 Agreement)², the Authority is mandated to promote and encourage the conduct of marine scientific research in the Area. The Authority also has the duty to coordinate and disseminate the results of scientific research when available, and it may also carry out marine scientific research concerning the Area. In addition, the Authority is assigned to encourage the design and implementation of appropriate programmes for the benefit of developing and technologically less developed States with a view to strengthening their capacity³.

2. In June 2022, the United Nations Conference to Support the Implementation of Sustainable Development Goal 14 of the 2030 Agenda (UN Ocean Conference) held in Lisbon, Portugal, recognised the importance of the United Nations Decade of Ocean Science for Sustainable Development⁴ in achieving its vision for ‘the science we need for the ocean we want’⁵.

* [ISBA/28/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 [Lisbon Declaration](#)

3. The relevance of the UN Decade for the work of the Authority is highlighted in the strategic plan⁶ and the high-level action plan⁷ of the Authority for the period 2019–2023. Both documents reflect the commitment of the Authority to contributing to the achievement of relevant Goals and targets of the 2030 Agenda for Sustainable Development, in particular, Goal 14 (Conserve and sustainably use the oceans, seas and marine resources for sustainable development). In 2020, the Assembly of the Authority adopted an Action Plan in support of the UN Decade⁸ to formalise and organise the contribution of the Authority to the Decade⁹. The Action Plan is structured around six strategic research priorities and will continue to evolve as new strategic research priorities are identified and endorsed by members of the Authority¹⁰. Argentina continues to serve as a Champion of the Action Plan with a view to mobilising efforts for its achievement.

4. The long-standing cooperation between the Authority and the Intergovernmental Oceanographic Commissions of the United Nations Educational, Scientific and Cultural Organisation (IOC-UNESCO), since 2000 with the signing of the memorandum of understanding (MoU), continues to support the implementation of the Action Plan. The Secretariat engages actively in the meetings of the Ocean Decade Alliance Sherpas and the Ocean Decade Advisory Board to advance the planning and implementation of the UN Decade. In February 2023, the Secretariat provided inputs, upon invitation of the IOC-UNESCO Secretariat, on a study commissioned to identify opportunities for facilitating the engagement of UN-Oceans members in the UN Decade. The importance of advancing coherence, coordination, and communication in the Decade's implementation in light of existing frameworks and mandates was recognised by several organisations as a critical element to ensure synergies and avoid duplication in the field of marine scientific research.

5. At the twenty-seventh session in 2022, the Secretary-General presented a progress report on the first year of the implementation of the Action Plan¹¹. The current report provides an overview of the second year of its implementation, from July 2022 to June 2023, through a description of the progress of the main activities¹².

II. Progress in the implementation

The present report follows the six strategic research priorities in the Action Plan for marine scientific research.

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

⁶ ISBA/24/A/10, annex.

⁷ ISBA/25/A/15, annex II.

⁸ See ISBA/26/A/17.

⁹ ISBA/26/A/4.

¹⁰ Ibid.

¹¹ ISBA/27/A/4.

¹² Four scientific objectives have been identified to guide the design and implementation of actions during the United Nations Decade of Ocean Science for Sustainable Development, namely: (a) to increase the capacity to generate, understand, manage and use ocean knowledge; (b) to identify and generate required ocean data, information and knowledge; (c) to build a comprehensive understanding of the ocean and ocean governance systems; and (d) to increase the use of ocean knowledge.

6. Advancing scientific knowledge and understanding of the deep-sea ecosystems and functions is essential to support informed decision-making processes and the continued application of the precautionary approach by the Authority.

7. In the framework of the Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socioeconomic Aspects, the Secretariat co-organized with the Division of the Law of Sea (DOALOS) of the United Nations two workshops informing the scoping process of the third World Ocean Assessment (WOA III) in Kingston, Jamaica, in September 2022. Multidisciplinary experts from more than 15 countries, including representatives of middle-income (MIC), landlocked developing countries (LLDCs) and small islands developing States (SIDS), participated. As a follow up, the Secretariat contributed to the 18th Meeting of the Ad Hoc Working Group of the whole on the Regular Process held in New York last March. At this meeting, the Secretariat highlighted the specific mandate and activities of the Authority to advance marine scientific research in the Area. The seabed and marine mineral resources were recognised as an important element to include in WOA III as part of the overview of social and ecological systems. Building on these discussions and outcomes, a workshop was hosted by the Authority in Kingston, Jamaica, in June 2023 in partnership with DOALOS to enable further discussions and progress on the preparation of the WOA III planned to be released in 2025.

8. At the regional level, progress was made in relation to the collection of background scientific information in support of the development of the Regional Environmental Management Plan (REMP) for the Area of the Indian Ocean. The scientific information compiled was discussed at the first REMP workshop for this region, organised in May 2023 in Chennai, India, in collaboration with the Ministry of Earth Sciences and the National Institute of Ocean Technology of India. This event was attended by 32 experts from 15 countries nominated by member States of the Authority, as well as observers, contractors, and academic institutions. The workshop led to the identification of parameters for defining an appropriate geographical boundary for the development of the REMP, and enabled the review of the environmental and geological/geophysical data as well as the scientific knowledge available for the Indian Ocean. The regional environmental assessment will be completed based on the feedback and further inputs received during the workshop. In February 2024, the Secretariat plans to organise a workshop to continue developing a REMP for the Area of the Northwest Pacific Ocean, in collaboration with Japan, building on the results of previous workshops for the region held in 2018 and 2020.

9. Continuing efforts to improve environmental baselines through enhanced ocean observations (also beyond contract areas) is important for the implementation of this strategic research priority. Additional scientific information on areas adjacent to the contract areas, such as the areas of particular environmental interest (APEIs), will further support the effective management of activities in the Area. In June 2023, the Secretariat launched a call for proposals inviting experts to define the needs, priorities, and actors to set up sustained deep ocean observations that will include a data synthesis across the Clarion-Clipperton Zone, as a follow-up of existing scientific publications.

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

10. Significant progress was achieved in the implementation of the Sustainable Seabed Knowledge Initiative (SSKI) launched in 2022 at the UN Ocean Conference.

The project is designed to improve the generation, standardisation and sharing of deep-sea biodiversity data, tools, and expertise, especially in deep-sea taxonomy, for the effective management of activities carried out in the Area, as well as other relevant global processes for sustainable ocean governance. It is anticipated that SSKI's contributions in improving and standardising deep-sea biodiversity assessments will directly contribute to the implementation of the international legally binding instrument under the Convention for the conservation and sustainable use of marine biological diversity in areas beyond national jurisdiction (BBNJ), especially in establishing a robust scientific basis for developing environmental impact assessments and area-based management tools in ABNJ.

11. SSKI aims at delivering ambitious targets to advance deep-sea biodiversity knowledge, such as describing at least 1,000 new deep-sea species from the Area by 2030, and supporting the increase of scientific capacity of developing countries on deep-sea biodiversity assessments. SSKI will also effectively support the implementation of the new Kunming-Montreal Global Biodiversity Framework (GBF) of the Convention on Biological Diversity (CBD) adopted in December 2022. The Secretariat and the CBD Secretariat co-organised a side-event during CBD COP-15, which demonstrated the importance of SSKI activities in advancing deep-sea biodiversity research, capacity, and data for the successful implementation of GBF. The Secretariat will continue to collaborate with the CBD Secretariat and respective members to maximise the synergies between the implementation of the Authority's Action Plan on marine scientific research and CBD's GBF.

12. In December 2022, the Secretariat organised in collaboration with the Ministry of Oceans and Fisheries (MOF) and the National Marine Biodiversity Institute of Korea (MABIK), and the European Commission¹³, the SSKI Inception Workshop, in Seocheon, Korea¹⁴. The workshop was attended by a wide range of stakeholders including non-governmental organizations universities, think tanks, scientific networks and research institutes. The participants recognised the relevance of SSKI to facilitate global actions to ensure a better knowledge of biodiversity and habitats in the Area. Drawing on the results of the workshop and inputs received from experts, a multiannual project document (2023-2030) was developed. Implementation and monitoring mechanisms and indicators have been identified to deliver against five priority outcomes, namely: i) increasing knowledge on deep-sea biodiversity and understanding of evolutionary history and resilience of deep-sea ecosystems; ii) improving consistency, efficiency, and reusability of scientific data and information for biodiversity assessments through integrative tools; iii) increasing generation and flow of taxonomic data and information, including enhanced availability, accessibility, and interoperability; iv) increasing global scientific capacity in deep-sea biodiversity assessments; and v) enhancing information of decision-making process and relevant global policy agendas through improved knowledge of deep-sea biodiversity.

13. Part of the activities initiated under SSKI is to develop inventories of species in specific geographic areas or habitats to support environmental management through taxonomic harmonisation of multiple baseline studies across the regions. In

¹³ In December 2022, the EU Council, in its conclusions on International Ocean Governance for safe, secure, clean, healthy and sustainably managed oceans and seas, explicitly expressed its support for SSKI as an opportunity for "Member States to strengthen the scientific foundation of environmental protection and management in the vast deep-sea regions beyond national jurisdiction in line with the ISA Marine Scientific Research Action Plan" (15973/22, para.18), taking note with satisfaction that SSKI is financially supported by the EU.

¹⁴ <https://www.isa.org.jm/events/inception-workshop-sustainable-seabed-knowledge-initiative/>

collaboration with the World Register of Marine Species (WoRMS), a species checklist is being developed for the Area of the Clarion-Clipperton Zone. In addition, the Secretariat is currently preparing for the organisation of a workshop in October 2023 in Vietnam on advancing deep-sea taxonomy to improve data standardisation, discuss best practices for generating FAIR (Findable, Accessible, Interoperable, and Reusable) data, and enhance capacity in sharing deep-sea biological data. This workshop will be the fourth edition of the workshop series on deep-sea taxonomic standardisation convened since 2020.

C. Strategic research priority 3: facilitating technology development for activities in the Area

14. Through this strategic research priority, the Authority is committed to monitoring and reviewing technology trends and developments relating to ocean observation, environmental monitoring and modelling, and mineral processing, including advanced automated and autonomous technological solutions and robotics relating to prospecting and exploration of mineral resources in the Area. In March 2023, India formally agreed to spearhead the work of the Authority in this area as “Deep-Sea Technology Champion” through the leadership of the Ministry of Earth Sciences.

15. Building on the results of the experts scoping meeting on advancing technology to support sustainable mining of mineral resources in the Area held in 2021, the Secretariat commissioned a desktop review on the current scientific and industrial developments, including the identification of critical gaps. The review found that new autonomous technologies enable faster mineral resource identification and environmental assessments at a larger scale. It also concluded that technology transfer from other industries should be further explored for example to design more efficient mineral resource assessment models. When comparing the technologies of mining systems and operations, most candidate technological systems have been developed and tested for polymetallic manganese nodules, while very limited trials have been carried out yet for polymetallic sulphides and ferromanganese crusts. Finally, it was recommended that state-of-the-art theoretical models developed in academic frameworks need to inform the industry for advancing their applications. These key findings will inform an upcoming workshop in 2023 on technological developments for responsible mining and environmental protection and monitoring.

16. The Secretariat organised a side event at the 27th United Nations Climate Change Conference (COP27), held in November 2022 in Sharm El Sheikh, Egypt, in collaboration with the National Institute of Oceanography and Fisheries (NIOF) of Egypt on the topic of technological and scientific knowledge in support of prospecting marine mineral resources in the deep waters, including for Africa. Participants from diverse backgrounds discussed the importance of science, technology, and capacity development in facilitating sustainable use of the oceans. Participants highlighted that deep-sea minerals present a valuable opportunity to satisfy the increasing demand for critical minerals. In particular, deep-sea exploration was mentioned as an important opportunity for African countries to advance the progress towards blue economy.

17. The Secretariat joined the Advisory board of the project “Technology based impact assessment tool for sustainable, transparent deep sea mining exploration and exploitation” (TRIDENT¹⁵) launched in January 2023. The initiative is led by INESC TEC (Portugal) with a consortium of 22 European scientific partners and financially supported by the EU Commission. This project aims at developing remote

¹⁵ <https://cordis.europa.eu/project/id/101091959>

and automated monitoring systems for deep-sea mining. It will support the development of reliable and cost-effective systems for environmental impact monitoring of activities in the Area, which will also support strategic research priority 4.

18. In June 2023, the Secretariat will present the progress under this research priority at the twenty-third meeting of the United Nations Open-ended Informal Consultative Process on Oceans and Law of the Sea, on the theme 'New maritime technologies: challenges and opportunities'.

19. Considering the growing interest in developing technologies for environmentally responsible management of activities in the Area, the work under this strategic research priority will be instrumental for developing a technology roadmap of the Authority, together with the support of interested stakeholders. Preliminary work for the development of the roadmap has been undertaken, with a view to exploring a pathway towards unlocking the full potential of technology development and innovation, in support of the sustainable development of activities in the Area, including through the use of smart tools, such as artificial intelligence and robotics.

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

20. In response to the continued demands for an enhanced understanding of the potential impacts of activities in the Area, the Secretariat commissioned scientific studies to further provide data and information, with a view to supporting the work of the Authority on ensuring sustainable management of activities in the Area based on the precautionary approach.

21. The Secretariat commissioned an analysis of the spatial interaction of deep-sea fisheries with activities in the Area, which will be published as a technical study in August 2023. The results show a negligible overlap between the occurrence of fishing with gears that operate at or near the sea floor in ABNJ. The findings also suggest that direct conflicts between fisheries and activities in the Area should be infrequent and readily managed. Discussions with the Food and Agriculture Organisation (FAO) to the United Nations have also progressed for the signing of an MoU to enhance the cross-sectoral collaboration on promoting scientific research and a coherent approach to management measures in ABNJ.

22. The Secretariat commissioned a literature review on the occurrence of microplastics in the deep sea, and the results will be published as a scientific paper. It was found that deep-sea locations sampled for microplastics are widely spread over the world and that the reported concentrations vary largely. The experts are currently investigating the Authority's potential contribution to understanding impact of microplastics in the deep-sea, including through the use of the data stored in DeepData.

23. In addition, a study was performed to examine the Authority's potential contribution to assessing and monitoring the health of the ocean. The majority of ocean health indicators currently refer to sea surface or mid-water column, which could be complemented by the data contained in DeepData for a more comprehensive assessment of the health of the ocean. A dashboard with a selection of parameters will be created on DeepData to facilitate further research and raise awareness of the health of the deep sea.

24. The Secretariat participated in two scoping meetings organised by the Joint Programming Initiative Healthy and Productive Seas and Oceans (JPI Oceans) in October 2022 and March 2023. These meetings identified knowledge gaps and

research priorities to inform the potential successor project of the MiningImpact projects¹⁶ that provided insights into potential environmental impacts and risks of deep-sea mining.

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

25. Pursuant to the Convention, the Authority has the duty to coordinate the dissemination of the research results carried out in the Area. Enhanced access to data and research outputs facilitates and enables further research, stakeholder participation, and informed decision-making towards the conservation and sustainable use of deep-sea resources for the benefit of all. This plays a key role in raising awareness of the deep sea and the work of the Authority in ensuring effective management of seabed resources beyond national jurisdiction. With the launch of its DeepData database¹⁷ in 2019, the Authority has developed a repository to share all environmental data and information collected in the Area in an open and transparent manner. As of May 2023, DeepData contains over 10 terabytes of data collected in the Area, and had approximately 2.4 million hits from 57,209 visitors and users. Three countries make up for more than half of the total visitors: (i) the United States of America accounting for 32%, (ii) China with 10%, and (iii) Russia with 8% of the total visitors.

26. The Secretariat has engaged in several strategic partnerships to enhance the availability, accessibility, and interoperability of data and information contained in DeepData. Building on the partnership with IOC-UNESCO, the Secretariat participated in the International Ocean Data Conference II (IODC-II) in Paris, France, in March 2023. This opportunity to engage with the wider community of data experts increased the international visibility of DeepData to stimulate its usage and initiate dialogues with potential partners for new collaborations.

27. While the linkage between DeepData and the Ocean Biodiversity System (OBIS) has expanded the sharing of the environmental data and increased the visibility of DeepData, the Secretariat has undertaken collaborative activities with various partners to improve the quality of DeepData's environmental data to increase further the utility of the data. The quality of the taxonomic data has significantly improved following the review of more than 60,000 biological records across all regions where exploration activities are taking place. Furthermore, a review and synthesis of more than 11,000 biological records for the Indian Ocean has been undertaken, resulting in increased quality of biological data in DeepData to inform the ongoing REMP process. The existing partnership with WoRMS adds an additional quality control mechanism by using new automated procedures for taxon-match queries and scientific reviews by WoRMS editors.

28. By the end of June 2023, four exploration contractors agreed to share their bathymetric data with the International Hydrographic Organization (IHO) through the AREA2030 initiative¹⁸. The Interoceanmetal Joint Organization (IOM) provided data collected from 1992 to 2001 in the CCZ, Belgium's Global Sea Mineral Resources (GSR) has made data from its contract area publicly available, Japan's Deep Ocean Resources Development Co. Ltd. (DORD) provided data on areas of particular environmental interest in the CCZ and Germany's Federal Institute for Geosciences and

¹⁶ <https://www.jpi-oceans.eu/en/miningimpact>

¹⁷ <https://data.isa.org.jm/isa/map/>

¹⁸ <https://isa.org.jm/area2030>

Natural Resources (BGR) provided bathymetry data for a total of 120,000 km² of seabed in the Pacific CCZ and for 188,500 km² of seabed along the Indian Ocean ridges.

29. The Secretariat carried out an assessment of the quality of DeepData's oceanographic data from the Indian and Northwest Pacific Oceans. The data were compared to the World Ocean Database (WOD) and World Ocean Circulation Experiment (WOCE). The results highlighted the uniqueness of the seabed current data in DeepData. As a next step, the oceanographic data will be exchanged with UNESCO-IODE under the existing partnership. Additional assessment of oceanographic data will be carried out for the CCZ, Mid-Atlantic Ridge (MAR), and South Atlantic Ocean to support the work of the Authority and the Legal and Technical Commission.

30. A data management strategy is being developed in close collaboration with the Legal and Technical Commission. In parallel, structural components of DeepData have been redesigned and new features developed based on the feedback from stakeholders and users. The DeepData architecture was updated to accommodate revisions to the data reporting templates. The revised templates allow the contractors to submit more information, such as resource information and assessment, and additional biological parameters. DeepData has been updated to accommodate the volume of additional data. New features were implemented to allow users of DeepData to visualise data availability in contract areas. Different modules were improved, for example, through interactive plots to visualise conductivity, temperature and depth (CTD) measurements.

31. The Secretariat has continued to undertake various initiatives to raise awareness about the Authority's mandates and activities carried out under the Convention and the 1994 Agreement, with particular emphasis on its contribution to the 2030 Agenda for Sustainable Development. Different educational tools have been developed and launched in 2023 to sensitise children between the ages of 3 to 12 to deep-sea research and the protection of the marine environment. This was notably the case through the launch in March 2023, in six official languages of the Authority, of the Wakatoon digital colouring book^{19, 20}, and an activity book conceived with the Centre for Language and Culture in Kingston, Jamaica, for children 3 to 6 years and entitled "Life Under Water Pre-School Companion²¹".

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

32. Part of the mandate assigned to the Authority to promote and encourage marine scientific research in the Area is the responsibility to support the development of scientific and technical capacities of developing States. This is done through dedicated training programmes and activities that establish a nexus between the Action Plan and the Capacity Development Strategy²² adopted in 2022.

33. Continued progress has been made to advance women's empowerment and leadership in deep-sea research particularly women scientists from LDCs, LLDCs and SIDS through the Women in Deep-Sea Research (WIDSR) project. Since its launch, over 100 women have benefited from various WIDSR training initiatives, including the contractors' training programme. A pilot mentoring programme has been launched in June 2023, through which worldwide recognized scientists have agreed to serve as

¹⁹ <https://www.isa.org.jm/isa-wakatoon/>

²⁰ Wakatoon digital colouring book activity was launched in six official languages to sensitise children between the ages of 4 and 12 to learn about the deep sea and its incredible creatures

²¹ <https://www.isa.org.jm/news/isa-launches-activity-book-for-children-3-to-6-years-old-to-promote-deep-sea-literacy-and-sensitization-to-conservation-and-sustainable-use-of-the-ocean-and-its-resources-2/>

²² https://www.isa.org.jm/wp-content/uploads/2022/12/ISBA_27_A_5-2209799E.pdf

mentors for ten young female researchers from developing States to assist in elevating their professional development over a 12-month programme.

34. To complement the capacity-building efforts, the ISA- Institut français de recherche pour l'exploitation de la mer (IFREMER) postdoctoral fellowship was launched in September 2022 to support an expert in undertaking an analysis of benthic foraminifera from samples collected in CCZ and research to advance automated image identifications. The research will continue for one more year, and the results will be presented at SSKI events and other international scientific conferences. Three manuscripts are being prepared for submission to scientific peer-reviewed journals including new species description.

35. One of the main efforts of the Authority to build scientific research capacity in developing States is the completion of the national experts deployment programme implemented under the Africa Deep Seabed Resources (ADSR) project. This project, implemented in cooperation with the African Union and the Norwegian Agency for Development Cooperation (NORAD) has enabled mid-career African experts to advance some of the Authority's core activities using the DeepData database. Between 2018 and 2022, ten selected African experts have carried out research within the Secretariat. The themes ranged from fundamental topics such as the characterization of water masses distribution, to applied research for example the assessment of the geothermal energy in the Area, as well as technological advancement such as the development of an inspection tool to support the supervision of deep seabed mining activities.

36. Additionally, the internship programme funded by the National Oceanography Centre of the United Kingdom was finalised. A junior woman scientist joined the secretariat for four months to advance the image library for species recognition. More than 30,000 image records were catalogued, but their use and sharing are currently limited by the lack of associated metadata. A second candidate advanced the quality of the biodiversity data in the Indian Ocean in preparation for the REMP workshop, as well as the data available from the Mid-Atlantic Ridge and Northwest Pacific regions, adding a total of 18,520 biological records to DeepData and OBIS.

37. Following the signature of the MoU with the Indian Ocean Rim Association (IORA) in March 2022²³, the Secretariat engaged in a joint project for strengthening deep-sea science and technology in the Indian Ocean region (SDIOR) to build and develop institutional, organisational and individual capacities of members of both organisations, particularly LDCs and SIDS.

38. The ISA Secretariat and the UN Technology Bank for LDCs developed a joint project framework with a view of implementing joint activities to develop the capacities of LDCs in support of the sustainable development of blue emerging economic sectors. The project framework is informed by the Doha Programme of Action (DPoA) for the Least Developed Countries for the Decade 2022-2031. Pilot projects will be developed in Nepal and Tanzania. In May 2023, the Secretariat and the UN Technology Bank for LDCs co-organized an online side event on leveraging the power of ocean science, technology, and innovation to support the 2030 Agenda for sustainable development during the 8th Multi-stakeholder Forum on Science, Technology and Innovation for the Sustainable Development Goals. It underscored the role of marine science in achieving the 2030 Agenda and supported broader dissemination of technology and innovation, especially to the most vulnerable countries²⁴.

²³ [ISBA/26/C/13/Add.1](#)

²⁴ <https://www.un.org/technologybank/ar/node/1209>

39. The second training workshop of the ISA-China Joint Training and Research Centre (JTRC) that will take place in October 2023 and will target the participation of developing countries (especially LDCs, LLDCs and SIDS). The participants will be invited to enrol for a two week in-person training in Qingdao, Shandong Province, China that consists of thematic and operational lectures linked to the mandates of the Authority as well as field trips.

III. Engagement and resource mobilisation

40. The Secretariat has been actively engaging the scientific community, industries, and policymakers to promote scientific research activities under the Action Plan. It delivered more than 30 presentations at various international fora during the reporting period.

41. There has been an increasing momentum for advancing marine scientific research. Diverse members of the Authority have committed, or expressed their interest in committing extra budgetary contributions to further promote scientific research, especially to reinforce the science-policy interface.

42. In November 2022, the Authority and the Ministry of Oceans and Fisheries of the Republic of Korea signed a letter of cooperation to further strengthen their collaboration on advancing deep-sea research, scientific capacity, and sustainable development of seabed minerals, reaffirming Korea's active engagement and support in promoting marine scientific research in the Area. Additional partnerships to support the implementation of the action plan were established in the reported period with the CBD Secretariat, the National Research Council (CRN) in Italy, the National Maritime Foundation in India, IFREMER, the Indian Ocean Rim Association, and United Nations Technology Bank for Least Developed Countries

43. Following the establishment in 2022 of the ISA Partnership Fund²⁵ with contributions from Norway, Germany, Japan, UK, France, Mexico, Greece, China, Korea, Spain, Nigeria, Monaco and Tonga, other multiannual research initiatives will be developed, in line with the Fund's terms of reference. The first call for proposals will be launched before the end of 2023. For further development of activities and the sustainability of their outcomes, the Secretariat will continue to engage with potential donors. This multi-donor trust fund will provide an excellent pathway in preparing the Authority to facilitate the new era of marine scientific research under the United Nations Decade.

IV. Recommendations

44. 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 mobilise 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 organisations, corporations and private persons to contribute to the implementation of the Action Plan for marine scientific research.

²⁵ [ISBA/27/A/L.2](#)