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**2022 United Nations Conference to Support the  
Implementation of Sustainable Development  
Goal 14: Conserve and sustainably use the  
oceans, seas and marine resources for  
sustainable development**

Lisbon, Portugal, 26 June-1 July 2022

Item **xx** of the provisional agenda\*

**Interactive dialogues**

**Interactive dialogue 7: Enhancing the conservation and sustainable use of oceans  
and their resources by implementing international law, as reflected in the United  
Nations Convention on the Law of the Sea**

**Concept paper by the Secretariat**

*Summary*

The present paper was prepared in response to paragraph 23 of General Assembly resolution 73/292, which requested the Secretary-General of the Conference to prepare concept papers on each of the themes of the interactive dialogues, taking into account the relevant ocean-related processes of the General Assembly and other possible contributions. This is the concept paper for interactive dialogue 7, entitled “Enhancing the conservation and sustainable use of oceans and their resources by implementing international law, as reflected in the United Nations Convention on the Law of the Sea”. The paper outlines the status and trends, challenges and opportunities for the achievement of relevant SDG 14 targets, under the overarching theme of the Conference: “Scaling up ocean action based on science and innovation for the implementation of Goal 14: stocktaking, partnerships and solutions”.

**I. Introduction**

1. The United Nations Convention on the Law of the Sea (UNCLOS), its implementing agreements, and other relevant instruments, both legally binding and non-binding, provide the international framework for the conservation and sustainable use of the oceans and their resources. Their effective implementation is key to the achievement of this objective, and to supporting efforts to scale up science-based ocean action to attain Sustainable Development Goal (SDG) 14.
2. This paper highlights relevant provisions of UNCLOS and related instruments, demonstrating how they underpin the conservation and sustainable use of oceans and marine resources, including through requiring the use of scientific evidence and information, the application of an ecosystem approach and a precautionary approach, and through supporting the conduct of marine scientific research (“MSR”) and the development and transfer of marine technology for these purposes. It examines those instruments, trends in relevant fields, gaps and challenges in the implementation of the legal framework, and how effective implementation may be enhanced, including through partnership, cooperation and collaboration with stakeholders at all levels.

## II. Status and trends

3. Science is crucial in the effective development and implementation of the international legal framework for the conservation and sustainable use of the oceans and their resources. The General Assembly recognises the importance of marine science for eradicating poverty, contributing to food security, conserving the world’s marine environment and resources, helping to understand, predict and respond to natural events, and promoting the sustainable development of the oceans and seas. It does so by improving knowledge, through sustained research efforts and the evaluation of monitoring results, and applying such knowledge to management and decision-making.<sup>1</sup> The Assembly calls upon States, individually or in collaboration with others, to continue to strive to improve understanding and knowledge of the oceans and the deep sea, including, in particular, the extent and vulnerability of deep-sea biodiversity and ecosystems, by increasing their MSR activities in accordance with UNCLOS.<sup>2</sup>
4. Increasing scientific knowledge, developing research capacity and transferring marine technology are specifically recognised under target 14.a as important for improving ocean health and enhancing the contribution of marine biodiversity to sustainable development. UNCLOS, its implementing agreements, other international binding agreements, including regional treaties, and several non-binding instruments, ranging from the outcome documents of United Nations conferences and summits and annual General Assembly resolutions to guidelines, codes of conduct and programmes of action, emphasize the role of ocean science and innovation in enhancing the conservation and sustainable use of the oceans.<sup>3</sup>
5. A strong and effective global legal regime can bolster ocean science and innovation by clarifying the rights and responsibilities of States and all stakeholders, harmonizing actions in and between different sectors, establishing common objectives for ocean health, productivity and resilience, and providing a stable and predictable regulatory environment for their engagement.

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<sup>1</sup> A/RES/76/72, preamble.

<sup>2</sup> A/RES/76/72, para. 291.

<sup>3</sup> A/CONF.230/10, paras. 7 and 8.

Central to this regime, UNCLOS sets out the legal framework within which all activities in the oceans and seas must be carried out and is of strategic importance as the basis for national, regional and global action and cooperation.<sup>4</sup> With 168 Parties, it enjoys close to universal acceptance, and many of its provisions reflect customary international law. It is supplemented by two implementing agreements – the Part XI Agreement,<sup>5</sup> which applies to the Area,<sup>6</sup> and the United Nations Fish Stocks Agreement (UNFSA),<sup>7</sup> as well as an array of global and regional legal instruments covering many aspects of ocean use. The intergovernmental conference on an international legally binding instrument under UNCLOS on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction (BBNJ) is currently negotiating a third implementing agreement to UNCLOS,<sup>8</sup> the General Assembly having stressed the need for the comprehensive global regime to better address this issue.<sup>9</sup>

6. UNCLOS, the “constitution for the oceans”,<sup>10</sup> provides the overarching legal framework central to the implementation of many SDGs, particularly SDG 14. The following briefly surveys UNCLOS provisions on the conservation and sustainable use of oceans, seas and marine resources, giving particular consideration to its recognition of the central role of science. Other relevant instruments and recent developments are also highlighted, focusing on five areas: the conservation and management of living resources; the sustainable use of non-living resources; the protection and preservation of the marine environment; and the conduct of MSR and the development and transfer of marine technology.

7. On living resources, UNCLOS establishes the entitlements of States to exploit, and obligations to conserve and manage, marine resources in the different maritime zones, both within and beyond national jurisdiction. The importance of science in that context is clear: Parts V and VII require States to take into account the best scientific evidence available when adopting measures to ensure the conservation and management of the living resources in their Exclusive Economic Zone (EEZ) and when determining the allowable catch and establishing other conservation measures for living resources in the high seas. They also require States to regularly contribute and exchange available scientific information, catch and fishing effort statistics, and other data relevant to the conservation of fish stocks.<sup>11</sup> UNFSA elaborates these obligations, as they relate to straddling fish stocks and highly migratory fish stocks. Obligations include those relating to the promotion, conduct and exchange of science and scientific data, and the application of the precautionary approach.<sup>12</sup> UNCLOS and UNFSA are supplemented by other instruments that recognise the importance of ocean science in their implementation, including global and regional treaties relating to sustainable fisheries management, such as instruments developed under the auspices of the Food and Agriculture Organization of the United Nations (FAO) and those

<sup>4</sup> A/RES/76/72, preamble.

<sup>5</sup> [https://www.un.org/depts/los/convention\\_agreements/texts/unclos/closindxAgree.htm](https://www.un.org/depts/los/convention_agreements/texts/unclos/closindxAgree.htm).

<sup>6</sup> The seabed and ocean floor and subsoil thereof, beyond the limits of national jurisdiction (UNCLOS. Article 1).

<sup>7</sup> [https://www.un.org/Depts/los/convention\\_agreements/texts/fish\\_stocks\\_agreement/CONF164\\_37.htm](https://www.un.org/Depts/los/convention_agreements/texts/fish_stocks_agreement/CONF164_37.htm).

<sup>8</sup> A/RES/72/249.

<sup>9</sup> A/RES/69/292.

<sup>10</sup> [https://www.un.org/Depts/los/convention\\_agreements/texts/koh\\_english.pdf](https://www.un.org/Depts/los/convention_agreements/texts/koh_english.pdf).

<sup>11</sup> UNCLOS, articles 61(2),(5); 119(1),(2).

<sup>12</sup> UNFSA, articles 5(b),(c),(k); 6(1),(2),(3), (7); 10(d), (f), (g); 14; 16(1).

relating to regional fisheries management organizations and arrangements. Given the reported overfishing of a third of the world's fish stocks,<sup>13</sup> the implementation of such obligations is critical to achieving SDG target 14.c, as well as targets 14.2 and 14.4.

8. The Code of Conduct for Responsible Fisheries provides that conservation and management decisions for fisheries should be based on best scientific evidence available, recommending that States prioritise the undertaking of research and data collection to improve scientific and technological knowledge and the wide application of the precautionary approach to the conservation, management and exploitation of living aquatic resources. Technical guidelines on various issues have been developed, promoting scientific data collection, exchange and research with respect to fisheries management, fishing operations, information and knowledge sharing, and the ecosystem approach to fisheries.

9. The role of science in sustainable fisheries management was considered during the thirteenth round of Informal Consultations of States Parties to the UNFSA, dedicated to the “science-policy interface”.<sup>14</sup> In 2019 FAO hosted an International Symposium of Fisheries Sustainability to strengthen the science-policy nexus. The Committee on Fisheries (COFI) of FAO recently endorsed the ‘2021 COFI Declaration for Sustainable Fisheries and Aquaculture’, recognising the need to strengthen the scientific basis for fisheries and aquaculture management decisions, including through using new technology, and promoting international scientific cooperation, especially transdisciplinary research, capacity-building, education and training, and ensuring that the best available scientific, sector-based advice is duly considered in the decision-making process.

10. The Review Conference on the UNFSA, to be resumed in 2023, will provide further opportunities to promote marine science and strengthen the science-policy interface for fisheries management, building on previous recommendations. The implementation of science-based fisheries and aquaculture management policies have been recognized as the minimum substantive criteria for sustainable fisheries and aquaculture. The “State of the World's Fisheries and Aquaculture” (SOFIA) contributes to data needed in relation to SDG 14 through providing an overview of global fisheries and aquaculture every biennium, and a synopsis of fisheries and aquaculture knowledge, based on a system of databases integrated through a cross-cutting set of reference data, that supports its findings and outlook.<sup>15</sup>

11. Concerns regarding deep-sea fishing led to specific guidance from the United Nations General Assembly, principally aimed at improving the management of deep-sea fisheries.<sup>16</sup> This has helped promote measures to protect benthic habitats and vulnerable marine ecosystems (VME), especially at the regional level, including through the adoption of the International Guidelines for the Management of Deep-Sea Fisheries in the High Seas and the creation of the VME Database. The crucial role of science in addressing the impacts of bottom fishing on VMEs and the long-term sustainability of deep-sea fish stocks will also be explored during a multi-stakeholder workshop convened by the General Assembly in 2022.

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<sup>13</sup> FAO, *The State of World Fisheries and Aquaculture 2020 (SOFIA)*, at 47, 54.

<sup>14</sup> [https://www.un.org/depts/los/convention\\_agreements/ICSP13/ICSP13\\_final\\_report.pdf](https://www.un.org/depts/los/convention_agreements/ICSP13/ICSP13_final_report.pdf).

<sup>15</sup> SOFIA, pp.102, 103

<sup>16</sup> E.g. A/RES/61/105; A/RES/64/72.

12. For non-living resources, science's contribution to informing decision-making processes for implementing the legal regime for the Area, is reflected in the obligations of contractors undertaking exploration to collect extensive amounts of scientific data and information, including on over a hundred environmental parameters, to establish environmental baselines for future exploitation. Data and information generated through exploration for mineral resources in accordance with Part XI of UNCLOS and the Part XI Agreement for more than 40 years has increased global knowledge of the deep-sea and its environment<sup>17</sup> and informed the development of evolving rules governing activities in the Area. Similarly, the submission of scientific information on the limits of the continental shelf beyond 200 nautical miles to the Commission on the Limits of the Continental Shelf (CLCS) by coastal States has contributed to a better geoscientific understanding of continental margins within national jurisdiction, through improving the spatial coverage and resolution of primarily bathymetric and seismic data.<sup>18</sup>

13. The International Seabed Authority (ISA) has developed regulations and recommendations regarding prospecting and exploration for mineral resources in the Area, and is currently developing exploitation regulations and associated standards and guidelines. Often referred to as the "Mining Code", these instruments are intended to provide the framework for regulating and managing exploration and exploitation in a sustainable and responsible manner, including by addressing the protection and preservation of the marine environment from the harmful effects which may arise from such activities.

14. In terms of the protection and preservation of the marine environment, Part XII of UNCLOS sets out obligations on States to prevent, reduce and control pollution of the marine environment from any source and to protect and preserve rare or fragile ecosystems and the habitats of depleted, threatened, and endangered species and other forms of marine life. Given the threats to ocean health from anthropogenic activities, including the effects of climate change, plastic pollution, and damage to marine ecosystems and biodiversity,<sup>19</sup> effective implementation of these obligations is crucial to achieving SDG target 14.c and other SDG targets, including targets 14.1, 14.2 and 14.3. Part XII acknowledges the important role of science in the protection and preservation of the marine environment, encouraging, for example, the use of scientific methods to observe, measure, evaluate and analyse the risks or effects of pollution, cooperation in research and the exchange of information and data, the establishment of appropriate scientific criteria for the formulation and elaboration of rules, standards and recommended practices and procedures, and the provision of scientific and technical assistance.<sup>20</sup> The World Ocean Assessments, as the main outputs of the Regular Process for Global Reporting and Assessment of the State of the Marine Environment, including Socioeconomic Aspects (the Regular Process),<sup>21</sup> provide a regular assessment of the state of the oceans globally, informed by hundreds of scientists worldwide, and provide an important scientific basis for policymaking.<sup>22</sup>

<sup>17</sup> A/74/70, para. 28. See also ISA, [The contribution of the International Seabed Authority to the achievement of the 2030 Agenda for Sustainable Development](#), 2021, p.32.

<sup>18</sup> UNCLOS, article 76; Annex II.

<sup>19</sup> Second World Ocean Assessment, Chapter 1.

<sup>20</sup> UNCLOS articles 204, 200, 201, 202.

<sup>21</sup> <https://www.un.org/regularprocess/>

15. Other instruments in this field recognise the importance of ocean science in their implementation, including global treaties relating to certain sources of pollution or degradation, the release of hazardous substances into the environment, and the protection of certain species or habitats, as well as regional seas conventions and action plans. Also pertinent in this context are international conventions on international maritime law, including those focusing on ship-source pollution and related liability issues.

16. More specifically on the conservation and sustainable use of marine biodiversity, an aim reflected in SDGs 14 and 15, the Convention on Biological Diversity (CBD) is to be implemented in respect of the marine environment consistently with Parties' rights and obligations under the law of the sea.<sup>23</sup> CBD Parties provide national reports on measures taken to implement the CBD, including through national biodiversity strategies and actions plans (NBSAPs). On the basis of national reports and other authoritative sources, the Global Biodiversity Outlook, synthesises information on progress towards global biodiversity targets, including in relation to marine and coastal biodiversity.<sup>24</sup>

17. Given the alarming impacts of climate change on oceans, marine species, and coastal ecosystems, the United Nations Framework Convention on Climate Change (UNFCCC), and the 2015 Paris Agreement, are essential to achieving SDG 14. Climate change effects, including ocean deoxygenation, heating, acidification, and circulation changes, substantially affect the living and non-living components of the marine environment. The major cause is increased levels of atmospheric, anthropogenic carbon dioxide, further emissions of which must be prevented, and concentrations reduced. Scientific knowledge, including that produced under the auspices of the Intergovernmental Panel on Climate Change (IPCC), is critical, and has informed an increasing recognition of climate change effects on the oceans and the role of oceans in providing solutions for meeting climate change commitments under the UNFCCC, Paris Agreement, and SDG 13.<sup>25</sup> The IPCC will release the Synthesis Report of the Sixth Assessment Report in late 2022, which will update the underlying scientific knowledge informing decision-making on climate change under the UNFCCC, including Parties' decisions relevant to the oceans and the monitoring and protection of marine environments.<sup>26</sup>

18. Marine pollution from vessels is governed by several international legal instruments, most prominently those adopted under the auspices of the International Maritime Organization (IMO): MARPOL, the London Convention and its 1996 Protocol, and several international conventions dealing with liability and compensation.<sup>27</sup>

19. With regard to marine scientific research, Part XIII of UNCLOS sets out a comprehensive legal framework for the promotion and conduct of MSR, creating legal certainty and facilitating its undertaking. Part XIII reaffirms that States and competent international organizations have the right to conduct MSR, and encourages them to promote and facilitate its development and conduct.

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<sup>23</sup> CBD, article 22.

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[https://www.cbd.int/gbo/#:~:text=Global%20Biodiversity%20Outlook%20\(GBO\)%20provides,genetic%20resources%20are%20shared%20equitably.](https://www.cbd.int/gbo/#:~:text=Global%20Biodiversity%20Outlook%20(GBO)%20provides,genetic%20resources%20are%20shared%20equitably.)

<sup>25</sup> E.g. *Special Report on the Ocean and Cryosphere in a Changing Climate* (2019).

<sup>26</sup> <https://www.ipcc.ch/report/sixth-assessment-report-cycle/>.

<sup>27</sup> <https://www.imo.org/en/About/Conventions/Pages/ListOfConventions.aspx>.

It further sets out obligations to promote international cooperation; to create favourable conditions for the conduct of such research; to make available by publication and dissemination knowledge resulting from MSR; and to promote the flow of scientific data and information and the transfer of knowledge.<sup>28</sup> UNCLOS Part XI recognizes ISA's mandate to promote and encourage MSR in the Area, which should be carried out for the benefit of humankind as a whole, and to carry out its own research. ISA must, in addition, coordinate and disseminate the results of such research when available, and promote and encourage the transfer to developing States of technology and scientific knowledge relating to activities in the Area. The Part XI Agreement similarly encourages States to promote international technical and scientific cooperation. ISA undertakes specific activities to fulfil this responsibility, with a particular focus on the needs identified by Least Developed Countries (LDCs), Land-locked developing countries (LLDCs) and Small Island Developing States (SIDS).<sup>29</sup>

20. Marine technology is essential to the conduct of marine science. Part XIV of UNCLOS is dedicated to promoting the development and transfer of marine science and marine technology, as well as the development of marine scientific and technological capacity, particularly of developing States, while having due regard for all legitimate interests of holders, suppliers, and recipients of marine technology. It sets out basic objectives, and measures for their achievement, as well as promoting international cooperation for the development and transfer of marine technology, and calling for the establishment of national and regional marine scientific and technological centres.<sup>30</sup>

21. Marine science, marine technology and innovation have gained increasing attention at the intergovernmental level in recent years and lie at the centre of the 2021-2030 United Nations Decade of Ocean Science for Sustainable Development ("Ocean Decade"). They have also featured at the Informal Consultative Process on Oceans and the Law of the Sea ("ICP"), with recent and forthcoming meeting themes including "Ocean science and the United Nations Decade of Ocean Science for Sustainable Development" and "Ocean observing", in the 2019 celebration of World Oceans Day under the theme "Innovation for a Sustainable Ocean", and in the 2022 IMO World Maritime theme "New technologies for greener shipping". Marine science, marine technology and innovation are also critical in the ongoing BBNJ negotiations and for any new agreement's effective implementation. The Convention on the Protection of Underwater Cultural Heritage also encourages technological and scientific progress to enhance understanding and conservation of underwater cultural heritage.

### III. Challenges and opportunities

22. While much progress has been made in strengthening the international legal framework, the lack of full and effective implementation of UNCLOS, its implementing agreements and other instruments continues to hamper the conservation and sustainable use of oceans and their resources.

23. First, while UNCLOS has been extensively ratified, participation is not universal, in particular for LLDCs. 17 UNCLOS States Parties have not yet ratified the Part XI Agreement,

<sup>28</sup> UNCLOS articles 238, 242-244.

<sup>29</sup> [ISBA/26/A/17](#); [ISBA/26/A/18](#).

<sup>30</sup> UNCLOS, articles 275-277.

while the UNFSA has only 91 States Parties. Similar concerns regarding participation levels apply to many of the related instruments noted above, while several instruments adopted under IMO auspices are yet to enter into force.<sup>31</sup> Increased ratification, implementation and enforcement of legal instruments would greatly contribute to the sustainable use of oceans. The BBNJ negotiations also represent a key opportunity to address gaps and provide a baseline for achieving SDG target 14a, among others.

24. Second, States Parties face challenges in the implementation of UNCLOS and related agreements, as evidenced by fish stocks being overexploited or depleted, and continued degradation of ocean and coastal ecosystem health. MSR can be impeded when working in disputed areas, and under national jurisdiction by challenges in obtaining coastal State consent and, a lack of clear national procedures for requesting clearances, the late provision of consent, and differences of opinion concerning the application of Part XIII to certain data-collection technologies.<sup>32</sup> Part XIV of UNCLOS still suffers from limited implementation, reflecting difficulties encountered by States in effectively fulfilling their obligations and exercising their rights thereunder. Obligations on flag States to exercise jurisdiction and control over their vessels are undermined by the existence of flags of convenience. Some States also struggle in delineating and delimiting their maritime zones, including in making scientifically and technically complex CLCS submissions, resulting in uncertainties concerning the area over which States exercise maritime entitlements and the Area's spatial extent.

25. Challenges for developing countries, notably LDCs and SIDS, in implementing UNCLOS and achieving sustainable development are particularly acute, given their particular situations and vulnerabilities, including limited technological and human capacity to monitor and manage ocean activities, access to historical and current data, and analyses on key indicators. Participation in activities in areas beyond national jurisdiction is limited. Although substantial ocean-related information exists, it is often fragmented among numerous institutions nationally, regionally and globally, while countries with the greatest need often have the least capacity to access and apply such information in policymaking. The lack of common standards for collecting, integrating, storing and using ocean data and statistics, and exchange of data, information and best practices, prevents evidence-based programming and optimal use of resources. To address some of these challenges, ISA released in 2021, with the support of the United Nations Office of the High Representative for the LDCs, LLDCs and SIDS (UN-OHRLS), a series of three publications outlining the relevance of UNCLOS for LDCs, LLDCs and SIDS.<sup>33</sup>

26. Upscaling of action can also be challenging, particularly for LDCs and SIDS, due to factors such as remoteness; poverty; gender inequality; and high vulnerability to extreme weather events and climate change impacts. SIDS, whose EEZs often far exceed their total terrestrial space, face challenges in managing extensive ocean areas, including implementing measures to prevent, deter and eliminate illegal, unreported and unregulated (IUU) fishing, and protect and preserve the

<sup>31</sup> Including the Hong Kong Ship Recycling Convention, the Cape Town Agreement on the Safety of Fishing Vessels and the 2010 Protocol to the International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances by Sea.

<sup>32</sup> [https://www.goosocean.org/index.php?option=com\\_oa&task=viewDocumentRecord&docID=26607](https://www.goosocean.org/index.php?option=com_oa&task=viewDocumentRecord&docID=26607).

<sup>33</sup> <https://isa.org/im/event/report-launch-law-sea-ocean-opportunity-ldcs-lllcs-and-sids>.



marine environment. Building capacity for monitoring and assessing marine resources would fill gaps in global ocean science and resource management.

27. Nonetheless, opportunities exist to strengthen the implementation of international law as reflected in UNCLOS. A critical element in doing so is ensuring effective domestic regulation and policy. For example, enforcement against IUU fishing can be strengthened through legislative reform and ensuring appropriate penalties. Indicator 14.c.1 of SDG 14 aims to assess the number of countries making progress in ratifying, accepting and implementing, through legal, policy and institutional frameworks, ocean-related instruments that implement international law, as reflected in UNCLOS. Its methodology enables the gathering of data and establishment of a baseline to inform the assessment of progress in the implementation of target 14.c and assists States in identifying their capacity-building needs and priorities.

28. In strengthening domestic implementation of ocean-related instruments and frameworks, the collection of observational ocean data and resulting marine science is essential.<sup>34</sup> Such science underpins the development of regulations and policy, the carrying out of environmental assessments, and monitoring the effectiveness of, and compliance with, such regulation. For example, remote-sensing tools deliver timely and accurate data on a global basis, while *in situ* instrumentation provides on-the-spot updates in real time. Data can be used to analyse short- and long-term trends concerning biodiversity, climate, pollution, weather patterns and ecosystem evolution. Marine observations are important for the safety of navigation and shipping, assessing and monitoring the risk of climate change impacts and taking appropriate and effective adaptation action, resilience-building and disaster risk reduction, response and recovery, and for forecasting extreme events, including through early warning systems, to reduce and minimize associated loss and damage, including to coastal infrastructure.<sup>35</sup>

29. Mobile devices can help to access ocean information and play an active role in monitoring progress against conservation targets. With the installation of new trans-ocean and regional telecommunication cable systems equipped with sensors, a global network could provide decadal real-time data for ocean climate monitoring and disaster mitigation. Earth observation data can be used to monitor ecosystems and pollution, including monitoring the spread of oil spills and facilitating clean-up efforts. Combining earth observation and oceanographic data with information from fishing vessel databases can alert officials to suspicious vessel movements to detect and reduce IUU fishing. Remotely sensed data and global navigation satellite systems can also be used to improve the productivity of fishing activities, their monitoring, control and surveillance, and compliance with fishery regulations.<sup>36</sup>

30. Technological developments will not be sufficient alone, however. Capacity development and knowledge generation are critical in developing policy and legal frameworks for the sustainable use of the oceans and their resources, including those that promote and facilitate MSR. Various capacity-building projects, including those managed by the Division for Ocean Affairs

<sup>34</sup> A/77/68.

<sup>35</sup> <https://unfccc.int/topics/adaptation-and-resilience/workstreams/loss-and-damage-ld/policy-brief-technologies-for-averting-minimizing-and-addressing-loss-and-damage-in-coastal-zones> and the work of UNCTAD: <https://unctad.org/topic/transport-and-trade-logistics/policy-and-legislation/climate-change-and-maritime-transport>; <https://SIDSport-ClimateAdapt.unctad.org>.

<sup>36</sup> A/74/630, paras. 82, 83.

and the Law of the Sea (DOALOS) and others, are aimed at enhancing States' capacity to implement UNCLOS and related instruments domestically, to improve ocean governance and achieve sustainable development.<sup>37</sup> For MSR specifically, the capacity-building programme on the conduct of MSR under UNCLOS, developed by DOALOS in cooperation with the Intergovernmental Oceanographic Commission (IOC-UNESCO) serves as an example. Going forward, capacity-building activities will need to engage political and social science to explore solutions for improved implementation of relevant legal frameworks.

31. Including LDCs, LLDCs and SIDS in future initiatives and projects to collect data relevant for the implementation of UNCLOS and the full exercise of the rights and obligations thereunder, such as mapping exercises, would assist such States to obtain data and support for delimitation and delineation. Developing States would also benefit from increased availability of, and accessibility to, scientific knowledge and data in relation to negotiation processes for new legal instruments.

32. Stimulating MSR and the transfer of marine technology through capacity development is also central to the Ocean Decade's objectives. One of the Decade's 10 challenges relates to capacity development and equitable access to data, information, knowledge and technology across all aspects of ocean science, including for SIDS and LDCs. Given science's importance for implementing the international legal framework, providing this foundation for all will strengthen the enabling environment for such implementation to be effective. The Decade also aims to foster the strengthening of the ocean science-policy interface, enabling governments and policymakers to access scientific and technical advice to inform decision-making on transboundary ocean matters based on research and observations. IOC-UNESCO has developed an Implementation Plan for the Decade,<sup>38</sup> while the ISA Assembly has adopted a dedicated Action Plan focussing on six strategic research priorities.<sup>39</sup>

33. Several programmes and instruments also specifically address the special position of developing countries, including the Vienna Programme of Action for Landlocked Developing Countries for the Decade 2014-2024 and the SIDS Accelerated Modalities of Action (SAMOA) Pathway, which, inter alia, supports action to undertake MSR and develop the technological capacity of SIDS. Bearing in mind the importance of awareness raising, capacity-building and technology transfer to LLDCs, the ISA is partnering with UN-OHRLLS in the context of the UN Roadmap for Accelerated Implementation of the Vienna Programme of Action for LLDCs to identify and address their specific challenges in undertaking MSR in the Area.<sup>40</sup>

34. To assist in addressing the challenges noted above, efforts have been made, more generally, to elaborate the regulatory framework, and to develop practical guidance, for MSR and the transfer of marine technology under UNCLOS and other instruments. For instance, to assist in the implementation of Part XIV, IOC-UNESCO adopted Criteria and Guidelines on the Transfer of Marine Technology.<sup>41</sup> DOALOS has developed practical guidance on the implementation of

<sup>37</sup> [www.un.org/oceancapacity](http://www.un.org/oceancapacity); [International workshop on capacity development, resources and needs assessment](https://www.fao.org/port-state-measures/capacity-development/ongoing-capacity-building-efforts/en/); <https://www.fao.org/port-state-measures/capacity-development/ongoing-capacity-building-efforts/en/>.

<sup>38</sup> <https://undocs.org/en/A/RES/76/72>

<sup>39</sup> [ISBA/26/A/17](https://undocs.org/en/ISBA/26/A/17).

<sup>40</sup> [ISBA/26/A/25\\*](https://undocs.org/en/ISBA/26/A/25).

<sup>41</sup> <https://unesdoc.unesco.org/ark:/48223/pf0000139193>.

UNCLOS provisions relating to MSR.<sup>42</sup> The IOC Assembly adopted the IOC Procedure for the implementation of Article 247 of UNCLOS, relating to MSR projects undertaken by or under the auspices of international organizations.<sup>43</sup> The IOC Executive Council adopted Guidelines for the Implementation of Resolution XX-6 of the IOC Assembly Regarding the Deployment of Profiling Floats in the High Seas within the Framework of the Argo Programme. Following a Technical Workshop on “Enhancing ocean observations and research, and the free exchange of data, to foster services for the safety of life and property”, the World Meteorological Organization (WMO) adopted Resolution 45 (Cg-18), urging WMO Members to facilitate and promote marine meteorological and related oceanographic observations.<sup>44</sup>

35. IOC-UNESCO is engaged in several activities to strengthen the existing enabling environment and to contribute to overcoming obstacles to the effective implementation of the legal framework for MSR, including the development of the Ocean InfoHub initiative, which includes a clearing-house mechanism to increase accessibility to data and to match capacity development and transfer of marine technology needs with the providers of support.

36. With regard to the Area, the ISA Deep Seabed and Ocean database “DeepData”,<sup>45</sup> launched in 2019, contains deep-sea related geological and environmental data and information, including biological, physical and geochemical parameters of the marine ecosystems from the seafloor to the ocean surface.<sup>46</sup> In 2021, ISA joined the International Oceanographic Data and Information Exchange network to serve as a node for the Ocean Biodiversity Information System of IOC-UNESCO for sharing data on deep-sea biodiversity and biogeography in the Area. The new partnership will contribute to enhancing the global accessibility and visibility of deep-sea biodiversity data collected and submitted by contractors, ensuring data quality and standardization, and enhancing the capacity for data analysis and synthesis.

37. In addition, the ISA is developing Regional Environmental Management Plans informed by scientific research, while the Endowment Fund for Marine Scientific Research<sup>47</sup> supports the participation of qualified scientists and technical personnel from developing countries in MSR programmes and activities, and in relevant initiatives, with 146 scientists or government officials from 51 countries having benefited from financial support.<sup>48</sup>

38. Recent developments highlight opportunities to enhance the conservation and sustainable use of oceans and marine resources, including through cooperation and the development, improved implementation, and heightened understanding of legal frameworks. For instance, the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities launched, in 2019, a project entitled “Protecting the Marine Environment from Land-Based Pollution through Strengthened Coordination of Global Action”, which aims to strengthen responses to land-based pollution, enhance co-operation and foster action to tackle issues related to wastewater pollution, nutrient management, and marine litter. The Plastic Waste Partnership

<sup>42</sup> [https://www.un.org/Depts/los/doalos\\_publications/publicationtexts/msr\\_guide%202010\\_final.pdf](https://www.un.org/Depts/los/doalos_publications/publicationtexts/msr_guide%202010_final.pdf)

<sup>43</sup> [http://ioc-unesco.org/index.php?option=com\\_content&view=article&id=309&Itemid=100024](http://ioc-unesco.org/index.php?option=com_content&view=article&id=309&Itemid=100024)

<sup>44</sup> [https://library.wmo.int/doc\\_num.php?explnum\\_id=9827](https://library.wmo.int/doc_num.php?explnum_id=9827), 149.

<sup>45</sup> <https://www.isa.org.jm/deepdata>.

<sup>46</sup> [https://isa.org.jm/files/files/documents/DeepData\\_brief\\_Final.pdf](https://isa.org.jm/files/files/documents/DeepData_brief_Final.pdf)

<sup>47</sup> <https://www.isa.org.jm/training/endowment>

<sup>48</sup> <https://www.isa.org.jm/training/endowment>.

under the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal was established in 2019, while the fifth session of the United Nations Environment Assembly adopted a resolution to develop an international legally binding agreement to end plastic pollution, including in the marine environment, by 2024 and agreed on establishing a science-policy panel to support action on chemicals, waste and pollution.

39. The fifth edition of the Global Biodiversity Outlook indicated that, at the global level, none of the 20 Aichi Biodiversity Targets were fully achieved by 2020, meaning that the world is currently not on track to reverse trends in global biodiversity loss, including marine biodiversity loss. CBD Parties are currently developing the Post-2020 Global Biodiversity Framework which will be submitted for adoption at the 15<sup>th</sup> meeting of the CBD Conference of the Parties in 2022 and aims to provide the global guiding framework for action on biodiversity, including marine and coastal biodiversity. This provides a key opportunity to address the shortcomings in achieving the Aichi Targets and to put the world back on track to a sustainable future for the oceans.

40. Water management, including wastewater management and the condition of rivers, also has a significant impact on seas and the oceans. The International Decade for Action, “Water for Sustainable Development” will run from 2018 until 2028.<sup>49</sup> The Secretary-General’s Action Plan: Water Action Decade 2018-2028, prepared with the support of UN-Water, includes activities to improve international scientific cooperation in fresh and marine water research, resources management, education and capacity-building through enhanced access to knowledge.<sup>50</sup> The United Nations Conference on the Midterm Comprehensive Review of the Implementation of the Objectives of the International Decade for Action, “Water for Sustainable Development”, to be held in 2023 will shine the spotlight on commitments that create impact and set a clear agenda for the second half of the Decade and beyond.

41. There is general acknowledgement that achieving ocean-related climate change targets requires the effective implementation of international instruments, enhancing synergies in the implementation of climate and ocean legal instruments, cooperation amongst relevant institutional frameworks, and strengthening of inter-agency collaboration. Sea-level rise has increased awareness for many States, in particular SIDS and coastal and low-lying LDCs, of the importance of their maritime entitlements under UNCLOS and the exercise of rights and jurisdiction therein.<sup>51</sup> The relationship between delineation and delimitation of maritime zones and the conservation and sustainable use of oceans and their resources is also increasingly recognised. To enhance understanding of the implications of sea-level rise for international law, including the law of the sea, the International Law Commission is currently studying the topic.<sup>52</sup> Moreover, the twenty-first session of the ICP was dedicated to the theme “Sea-level rise and its impacts” and heard presentations, inter alia, on the legal dimensions. Appropriate policy and legal frameworks are also

<sup>49</sup> <https://wateractiondecade.org/>.

<sup>50</sup> [https://wateractiondecade.org/wp-content/uploads/2018/03/UN-SG-Action-Plan\\_Water-Action-Decade-web.pdf](https://wateractiondecade.org/wp-content/uploads/2018/03/UN-SG-Action-Plan_Water-Action-Decade-web.pdf).

<sup>51</sup> Certain States have made declarations in this respect: see <https://www.forumsec.org/2021/08/11/declaration-on-preserving-maritime-zones-in-the-face-of-climate-change-related-sea-level-rise/>

<sup>52</sup> [https://legal.un.org/ilc/guide/8\\_9.shtml](https://legal.un.org/ilc/guide/8_9.shtml)

important in adapting critical transport infrastructure and services to the impacts of climate variability and change and of enhancing their overall climate and disaster-risk resilience.<sup>53</sup>

42. The challenges noted above have been exacerbated by the COVID-19 pandemic. The full extent of its impact on the application of international law, rules, regulations and procedures related to MSR and the development and transfer of marine technology is not yet fully known. There is, however, evidence that the pandemic has impacted processes to implement and advance the legal framework, as meetings, workshops and conferences have been cancelled, postponed or have proceeded with limited stakeholder participation, including the United Nations Ocean Conference and several decision-making processes under UNCLOS. At the same time, the expansion of virtual communications has offered opportunities for enhanced cooperation, coordination and partnerships at all levels and across sectors.<sup>54</sup> The pandemic has also highlighted the importance of the conservation and sustainable use of the ocean and its resources to prevent the outbreak of zoonotic diseases and maintain our balance with nature.

#### **IV. Existing partnerships**

43. As understanding grows regarding the linkages between marine pollution, biodiversity loss and climate change, and the cumulative impact of human activities on oceans, resources, coordination and cooperation at all levels, including across sectors, it is essential to ensure the effective, coherent and integrated implementation of UNCLOS, its implementing agreements and supplementary instruments. With innovation and science playing a key role in informing monitoring, goal-setting and decision-making, multi-stakeholder ocean partnerships are critical to the development of multi-disciplinary and cross-sectoral marine science.

44. For the 2017 UN Ocean Conference, 326 voluntary commitments addressing target 14.c were registered by governments and other stakeholders, many involving multi-stakeholder partnerships. These voluntary commitments encompassed a broad range of activities critical to facilitating the implementation of international law to enhance the conservation and sustainable use of the oceans and their resources, including to raise awareness of the legal and policy framework for the oceans and promote effective implementation; to develop the capacity of States towards broader participation in, and effective implementation of, UNCLOS and related instruments; and to strengthen ocean governance.<sup>55</sup>

45. In particular, UN-Oceans, the inter-agency coordination mechanism on ocean and coastal issues within the UN system, made a voluntary commitment on “Raising awareness of relevant regulatory and policy frameworks and its members activities in support of their implementation, as a foundation for conserving and sustainably using the oceans, seas and their resources” and members hosted side events at several international meetings during 2018, 2019 and 2021, informing participants of current ocean-related regulatory and policy frameworks and members’ activities in support of implementation.<sup>56</sup> The key common implementation challenges identified

<sup>53</sup> [https://unctad.org/system/files/official-document/dtltlb2019d1\\_en.pdf](https://unctad.org/system/files/official-document/dtltlb2019d1_en.pdf).

<sup>54</sup> A/75/340, para. 13.

<sup>55</sup> [https://sustainabledevelopment.un.org/content/documents/22781UNCLOS\\_COA\\_interim\\_assessment.pdf](https://sustainabledevelopment.un.org/content/documents/22781UNCLOS_COA_interim_assessment.pdf), p. 3.

<sup>56</sup> <https://oceanconference.un.org/commitments/?id=16758>.



at these events were capacity issues, stakeholder engagement (including effective coordination and consultation costs), and the broader availability of sustainable funding and/or resources.<sup>57</sup>

46. Leading up to the 2022 UN Ocean Conference, several new voluntary commitments are being registered under target 14.c aimed at supporting the implementation of legal frameworks through scientific and technological innovation.<sup>58</sup> For example, Nepal and Mauritius will continue to implement voluntary commitments in support of target 14.c on “Implementation of relevant provision of UNCLOS” and “Review existing policies, legal and institutional framework for sustainable use and development of marine fisheries resources”.<sup>59</sup>

47. Examples of intergovernmental processes, programmes and projects that foster international cooperation and coordination in MSR include the Global Ocean Observing System (GOOS), and its various networks, which promote partnerships and collaboration in ocean observation, supporting various governmental and non-governmental stakeholders. The GOOS is developing a Deep-Ocean Observing System, which could promote international cooperation in advancing knowledge of biodiversity in areas beyond national jurisdiction. FAO’s EAF-Nansen Programme partners with research institutions in Africa, Asia and Latin America to provide the knowledge base for the sustainable management of fisheries.<sup>60</sup> Marine research is conducted with the participation of local scientists, including phase surveys involving detailed mapping and taking inventory of fish resources within the EEZs of beneficiary countries.

48. The Regular Process and its World Ocean Assessments play a powerful role in increasing scientific understanding of the oceans and the legal instruments governing it, including UNCLOS and its implementing agreements, through translating science for decision-makers and enabling ocean scientists and policymakers to build partnerships bridging the science-policy interface. The 2021 Second World Ocean Assessment calls for improved coordination and cooperation in managing human activities in the oceans, with emphasis on improving capacity development, innovations in marine technology, integration of multidisciplinary observation systems, implementation of integrated management and planning, and improved access to, and exchange of, ocean knowledge and technologies.

49. In the field of biodiversity, the Sustainable Ocean Initiative Global Dialogue with Regional Seas Organizations (RSOs) and Regional Fishery Bodies (RFBs), coordinated by the CBD Secretariat, the United Nations Environment Programme and FAO, serves as a global platform to facilitate dialogue and cooperation among RSOs and RFBs around the world. It focuses on facilitating the exchange of experiences and discussing specific tools and guidelines in order to enhance science-based, cross-sectoral and ecosystem-based approaches for addressing biodiversity and fisheries issues, and identifying options and opportunities to enhance cross-sectoral collaboration among RSOs and RFBs. A Virtual Intersessional Workshop held in 2021 focused on sharing experiences from the impacts of the COVID-19 pandemic and discussing the role of, and opportunities for, regional organizations and regional collaboration in the post-2020

<sup>57</sup> [https://sustainabledevelopment.un.org/content/documents/22781UNCLOS\\_COA\\_interim\\_assessment.pdf](https://sustainabledevelopment.un.org/content/documents/22781UNCLOS_COA_interim_assessment.pdf), p. 1.

<sup>58</sup> <https://sdgs.un.org/partnerships/action-networks/ocean-commitments>.

<sup>59</sup> <https://sdgs.un.org/partnerships/implementation-relevant-provision-unclos>;  
<https://sdgs.un.org/partnerships/review-existing-policies-legal-and-institutional-framework-sustainable-use-and>.

<sup>60</sup> <https://www.fao.org/in-action/eaf-nansen/background/history/en/>.

global biodiversity framework. The 3<sup>rd</sup> meeting of the SOI Global Dialogue with RSOs and RFBs will take place in the third quarter of 2022.

50. In the field of climate change, the 26<sup>th</sup> Conference of the Parties to the UNFCCC adopted the Glasgow Work Programme on Action for Climate Empowerment, which promotes long-term, strategic, operational, multi-level, stakeholder, intergenerational partnerships that bring together different expertise, resources and knowledge to accelerate its implementation.<sup>61</sup> The COP also mandated an annual ocean and climate change dialogue to allow Parties and other stakeholders to discuss how to strengthen action on the oceans and climate change related to mitigation and adaptation.<sup>62</sup>

51. The World Maritime University and the IMO's International Maritime Law Institute have also been supporting the practical advancement of the science-policy interface. In 2018, a dedicated ocean governance institute, WMU-Sasakawa Global Ocean Institute, was created, which aims to act as an independent focal point for the ocean science-policy-law-industry-society interface and to build transformative partnerships, including with non-traditional partners.

52. In 2018, the UN Economic and Social Commission for Asia and the Pacific initiated a project to strengthen the Member States' capacity to achieve SDG 14. The project enhances partnerships among international, regional and national stakeholders, focusing on an agreed framework for the standardization of ocean-related statistics and their application to sustainable ocean management, enhancing States' technical capacity to regularly produce coherent priority ocean statistics (ocean accounts), and to apply ocean accounts in policy analysis.

53. Partnerships are essential for LDCs, LLDCs and SIDS to overcome challenges in implementing international law. One example of a successful partnership among Pacific SIDS is the joint CLCS submission by the Federated States of Micronesia, Papua New Guinea and Solomon Islands in respect of the Ontong Java Plateau, with CLCS recommendations issued in 2017. Sustainable funding is needed to maintain and update data and technical capacities for these often-lengthy processes. Another example is the SIDS-Global Business Network (SIDS-GBN) to enhance private sector partnerships in the implementation of the SAMOA Pathway and the SDGs, which provides a bridge for developing closer private sector ties between the three SIDS regions and the wider international business community, for exchanging lessons learned and best practices, and for following up on partnerships and project announcements. The fourth SIDS GBN Forum was held in the margins of the 2022 Our Ocean Conference in Palau, focusing on creating partnerships for SIDS in ocean-related industries. ISA, in partnership with UN-OHRLLS, and over 20 member States, research institutions and contractors, is also implementing a series of activities to advance women's empowerment and leadership in deep-sea research, with a particular focus on women scientists from developing States including LDCs and SIDS.<sup>63</sup>

54. Supporting and ensuring more systematic, consistent, sustained, strategic and structured involvement of the ocean business and investment community could assist the development and implementation of international law. For example, the "SMART Ocean-SMART Industries" (SO-SI) Program of the World Ocean Council aims to scale up the use of commercial vessels and

<sup>61</sup> [https://unfccc.int/sites/default/files/resource/cop26\\_auv\\_3b\\_Glasgow\\_WP.pdf](https://unfccc.int/sites/default/files/resource/cop26_auv_3b_Glasgow_WP.pdf).

<sup>62</sup> [https://unfccc.int/sites/default/files/resource/cp2021\\_01\\_adv%20..pdf](https://unfccc.int/sites/default/files/resource/cp2021_01_adv%20..pdf)

<sup>63</sup> <https://www.isa.org.jm/vc/enhancing-role-women-msr>

platforms to host or deploy instruments and innovative technology to collect important ocean information in support of ocean governance and international law, including the implementation of UNCLOS.

## V. Possible areas for new partnerships

55. The General Assembly has recognized that realizing the benefits of UNCLOS could be enhanced by further partnerships and international cooperation, to facilitate technical assistance, advance scientific knowledge, generate funding, and promote capacity-building. It has called on States and international institutions to promote bilateral, regional and global cooperation programmes, technical partnerships and fellowships, and to strengthen capacity-building activities in developing countries, in particular LDCs and SIDS, to develop and implement maritime-related legal frameworks in accordance with international law.<sup>64</sup> There are possibilities for such new partnerships in different fields, and with different groups.

56. In ocean science, the Ocean Decade provides a historic opportunity to stimulate new partnerships and mobilise resources for transformative, locally-relevant science to inform policy and decision-making across the 2030 Agenda. The Decade's Implementation Plan recognises the need for data and resulting knowledge to be provided in an open access, shared, discoverable manner, in accordance with UNCLOS.<sup>65</sup> Planned 'Decade Collaborative Centres' are aimed at enhancing coordination of various thematic and geographic priorities for Decade Action in a decentralised manner and expected to, *inter alia*, identify opportunities for collaboration, and provide technical, logistical, and financial support for scientific coordination, planning and capacity-building efforts towards Decade Actions.<sup>66</sup>

57. The second Global Ocean Science Report also calls for the promotion of new multi-stakeholder partnerships in ocean science, in particular to operationalize UNCLOS provisions on capacity development and the transfer of marine technology.<sup>67</sup> The Report encourages South-South and North-South partnerships, and broad cross-sectoral cooperation, as vehicles to facilitate such technology transfer. With the SAMOA Pathway recognising the importance of "dedicated regional oceanographic centres" for developing SIDS' technological capacity to undertake MSR,<sup>68</sup> the development of national and regional marine scientific and technological centres, as envisaged by Part XIV of UNCLOS, could strengthen the implementation of UNCLOS in LDCs and SIDS, and foster new partnerships between ocean stakeholders.<sup>69</sup>

<sup>64</sup> A/RES/76/72, para. 19.

<sup>65</sup> <https://www.oceandecade.org/wp-content/uploads//2021/09/337521-Ocean%20Decade%20Implementation%20Plan:%20Summary>

<sup>66</sup> <https://www.oceandecade.org/news/decade-collaborative-centres-to-provide-focused-regional-and-thematic-support-for-decade-actions/>

<sup>67</sup> <https://unesdoc.unesco.org/ark:/48223/pf0000375147>

<sup>68</sup> A/RES/69/15, para. 58(f).

<sup>69</sup> <https://sustainabledevelopment.un.org/content/documents/5214236EGM%20Report%20on%20Oceans.pdf>, p. 13.



58. The Regular Process, now in its third cycle, is implementing in cooperation with IOC-UNESCO a dedicated capacity-building programme to assist developing States in producing integrated assessments of the marine environment for enhanced decision-making in managing ocean areas. The ISA-China Joint Training and Research Centre was launched in 2021, with the aim of providing training programmes in marine science and technology, and in techniques for MSR designed to facilitate developing States' full participation in activities in the Area.<sup>70</sup> Efforts to strengthen the international legal framework through the elaboration of new instruments, such as on BBNJ, may offer the potential for strengthening partnerships, and coordination and cooperation in and among bodies engaged in ocean management, including in the areas of capacity-building and the transfer of marine technology.

59. With ocean observing capacity at the regional level remaining uneven, opportunities for new partnerships exist at all levels in support of monitoring and reporting on international ocean-related agreements. Nationally, key challenges include increasing the number of countries and partners actively participating in ocean observing, and better integrating efforts into regional and global initiatives.<sup>71</sup> The GOOS 2030 Strategy, in combination with the Ocean Decade's Challenge 7 on ocean observing, can provide a framework for strengthening engagement with new partners, including emerging national ocean observing programmes.<sup>72</sup> The twenty-second ICP meeting on 'Ocean observing' will further consider these themes.

60. Opportunities for new partnerships have also been recognized in sustainable fisheries management, including through FAO and among fisheries management agencies, the private sector, and academia, to bridge resource and capacity gaps related to managing climate change impacts, and promoting efforts to support adaptation and resilience.<sup>73</sup> The updated zero draft of the Post-2020 Global Biodiversity Framework highlights that implementing the CBD framework will require partnerships to leverage sustainable activities and programmes at all levels.<sup>74</sup> There are also opportunities to improve the implementation of international law across the climate-ocean nexus, including, as recognised in the first UNFCCC dialogue on ocean and climate, by breaking down silos and cooperating to build capacity and deliver financing, integrating public and private finance, partnerships and innovative solutions.<sup>75</sup> National focal points across different international legal regimes could also have greater cross-cutting engagement, while data sharing and ocean literacy among stakeholders could be improved. Targeted capacity-building and the development of supportive policy and legal frameworks, guidance, best practices, checklists, methodologies and other tools in support of adaptation will be critical, especially for SIDS and other vulnerable coastal developing countries

61. More generally, increasing collaboration with civil society, underrepresented groups and communities such as women, indigenous peoples and local communities, offers the potential for new ocean science partnerships. There is a growing awareness of the importance of indigenous

<sup>70</sup> <https://www.isa.org.jm/node/19338>. See also <https://www.isa.org.jm/news/china-and-isa-sign-mou-establish-first-ever-joint-training-and-research-centre>.

<sup>71</sup> <https://www.ocean-ops.org/reportcard2018/>.

<sup>72</sup> <https://www.frontiersin.org/articles/10.3389/fmars.2019.00470/full>.

<sup>73</sup> <https://www.sciencedirect.com/science/article/pii/S0308597X20308988>.

<sup>74</sup> <https://www.cbd.int/doc/c/3064/749a/0f65ac7f9def86707f4eaeafa/post2020-prep-02-01-en.pdf>

<sup>75</sup> [https://unfccc.int/sites/default/files/resource/SBSTA\\_Ocean\\_Dialogue\\_SummaryReport.pdf](https://unfccc.int/sites/default/files/resource/SBSTA_Ocean_Dialogue_SummaryReport.pdf), para. 129.

and local ocean knowledge for enhancing the conservation and sustainable use of oceans and their resources.<sup>76</sup> To address their historical exclusion from ocean observation and data systems, indigenous peoples have called on the ocean observing community to “establish meaningful partnerships with indigenous communities, organizations, and Nations to learn and respect each other’s ways of knowing”.<sup>77</sup> In addition to calling for the full and effective participation of indigenous peoples and local communities, the updated zero draft of the Post-2020 Global Biodiversity Framework recognises the need for women’s empowerment, youth, and gender-responsive approaches.<sup>78</sup> Relevantly, ISA is leading the organization of a conference to celebrate the contribution of women, with a focus on women from LDCs, LLDCs and SIDS, to the progressive development of the law of the sea.<sup>79</sup>

62. Finally, partnerships with the private sector, including through citizen science, public-private partnerships and engaging philanthropists, offer opportunities for expanding ocean science in support of UNCLOS implementation and SDG target 14.c. Private sector involvement in the registration of voluntary commitments for target 14.c has, however, been limited.<sup>80</sup> It is, however, crucial in developing new and innovative ways of securing sustainable financing needed to enable developing countries to implement projects on a medium- to long-term basis. Furthermore, as the application of modern technologies for enhanced monitoring depends on new scientific insights and technological innovation, full involvement of all science sectors, public or private, is essential. The Ocean Decade provides an opportunity for enhancing such partnerships, including by promoting the involvement of industry and donors.

## VI. Conclusions and recommendations

63. International law, as reflected in UNCLOS, is critical to the conservation and sustainable use of our ocean and its resources. Its extensive legal framework governs the management of living and non-living resources, the protection and preservation of the marine environment, and the facilitation of MSR and the transfer of marine technology, as a crucial underpinning to our efforts to promote ocean health and resilience.

64. Despite improvements in recent years, challenges subsist in ensuring adherence to, and effective implementation of, various legal instruments in these fields. Participation is not universal and better implementation is essential. Capacity gaps are significant, particularly for developing countries, including LDCs, LLDCs and SIDS. Financing is insufficient. But there are a host of opportunities as well. Technology and science are improving at a remarkable speed, providing new possibilities for regulatory development, monitoring and enforcement. Capacity-building continues apace across sectors, offering opportunities for global coverage and consistency in the

<sup>76</sup> [https://www.frontiersin.org/articles/10.3389/fmars.2021.711538/full?utm\\_source=F-NTF&utm\\_medium=EMLX&utm\\_campaign=PRD\\_FEOPS\\_20170000\\_ARTICLE](https://www.frontiersin.org/articles/10.3389/fmars.2021.711538/full?utm_source=F-NTF&utm_medium=EMLX&utm_campaign=PRD_FEOPS_20170000_ARTICLE)

<sup>77</sup> [https://www.oceanobs19.net/wp-content/uploads/2019/09/Indigenous-Ocean-Obs19-Declaration\\_8.5x15\\_Final.pdf](https://www.oceanobs19.net/wp-content/uploads/2019/09/Indigenous-Ocean-Obs19-Declaration_8.5x15_Final.pdf).

<sup>78</sup> <https://www.cbd.int/doc/c/3064/749a/0f65ac7f9def86707f4eaefa/post2020-prep-02-01-en.pdf>

<sup>79</sup> <https://www.isa.org.jm/conference-women-law-sea-2022>

<sup>80</sup> [https://sustainabledevelopment.un.org/content/documents/17193OCVC\\_in\\_depth\\_analysis.pdf](https://sustainabledevelopment.un.org/content/documents/17193OCVC_in_depth_analysis.pdf).

implementation of regulatory frameworks. Partnerships are being developed between States, relevant organizations, and the private sector, in pursuit of our common goals.

65. The 2022 UN Ocean Conference offers a singular opportunity to further this work towards improved and more holistic management of human activities and their cumulative impacts in the oceans.

66. Identifying and leveraging synergies in the implementation of international law, including through the science-policy interface, is crucial. Reducing duplication and enhancing efficiency through collaboration and multisector engagement is a necessity. We must seize the opportunity that this Conference presents to identify the innovative and effective multi-stakeholder partnerships for truly effective implementation of international law for sustainable development.

## **VII. Guiding questions**

- How can the implementation of international law, as reflected in UNCLOS, contribute to the scaling up of ocean action based on ocean science and innovation?
- How can innovation, science and technology be better utilized to support implementation of international instruments, including but not limited to capacity development, knowledge exchange, and the transfer of marine technology, and how can the technology sector be better engaged in multilateral policy processes?
- How can UN system entities support Member States to harmonize their legislative and policy strategies with UNCLOS and their obligations under other international instruments relating to the oceans to enhance ocean science and innovation?
- How can activities by non-State actors, including the private sector, in the field of ocean science and innovation better support implementation of international law?
- What are the most pressing needs in terms of capacity-building and financial and technical assistance in the field of ocean science and innovation to support the implementation of international law, as reflected in UNCLOS, and what are the most effective channels for such support?
- How can we improve adherence to reporting obligations under various international instruments by building synergies across different processes, while mitigating reporting burdens on governments?
- How can new and innovative practices, partnerships and solutions that have been implemented or developed to address challenges arising from the pandemic continue to contribute to enhancing the implementation of international law as reflected in the Convention?