

About this Paper

This paper is an extract from the report of the Global Online Stakeholder Consultation: Inputs to Ocean Action Panels Concept Papers, which summarizes inputs received from stakeholders to a global online stakeholder consultation organized by UN DESA in connection with the <u>2025 United Nations Ocean Conference</u> which will be held from 9 June to 13 June in Nice, France.

The main Report can be found <u>here</u>, including links to all responses and all inputs to the ten Ocean Action Panels, as well as detailed background information and a summary.

This paper presents summaries of key messages for Ocean Action Panel 2: Increasing ocean-related scientific cooperation, knowledge, capacity building, marine technology, and education to strengthen the science-policy interface for ocean health.







Under this topic, 186 contributions were received, and more detailed inputs are available here.

Main Challenges

Stakeholders from different sectors identified key challenges in strengthening the science-policy interface for ocean health, with a great focus on education, scientific networks, and streamlined and shared access to global oceanographic data.

One major concern is the **lack of ocean literacy** as an educational policy in schools worldwide. Stakeholders raised concerns as to its effectiveness in addressing the current and long-term challenges ocean health is facing in the educational system.

"To accelerate progress in increasing ocean-related scientific cooperation, knowledge, capacity building, marine technology, and education, a key focus should be on making ocean science more accessible and relatable, especially to younger generations." (Seaweed First)

Additionally, many respondents mentioned the challenges in gaining and retaining talent of young professionals wanting to pursue a career in ocean governance and policy as there is a lack of a global network to include those young professionals in.

Many stakeholders raised concerns about the lack of transparency and accessibility in ocean-related scientific knowledge and data.

According to respondents, it is a major challenge to find reliable data on ongoing and previous research, data, tools, and best practices.

Transformative Actions

One transformative action identified by stakeholders is the implementation of **Ocean Literacy as an educational policy in schools** to create a consistent and effective educational framework worldwide. Integrating climate and ocean education into school curricula will foster a generation of environmentally conscious citizens.

"Compulsory enforcement of climate and ocean education is crucial to address the urgent environmental challenges we face. Governments and education ministries worldwide must integrate comprehensive climate and ocean literacy into national education policies to ensure that all students gain the knowledge and skills needed to protect our planet." (Young Environmentalists Programme Trust)

Stakeholders also emphasized the creation of a global network for early-career professionals focused on ocean governance and management. Such a network would provide mentorship, training, and collaboration opportunities for early-career ocean policymakers, equipping them with the tools, knowledge, and connections necessary to influence ocean governance and drive innovation.

"By investing in the next generation of policy makers, this initiative would future proof the science-policy knowledge exchange and help address the current challenges in translating scientific research into effective ocean policies. It would empower young leaders to champion sustainable ocean management, ensuring that future policies are not only informed by cuttingedge science but also by the fresh perspectives and innovative ideas of early-career professionals." (European Marine Board Secretariat)

Stakeholders also highlighted the importance of creating open data platforms and knowledge sharing hubs as a transformative action. This would provide all actors with streamlined access to all available global oceanographic information real-time, facilitating collaboration accelerating progress on SDG 14. Building transdisciplinary research and data sharing between the private and public sectors can improve ocean understanding and enable better, evidence-based ocean management.

"It should be easier to find information about which projects or research organizations are working on which topics to enable greater knowledge sharing and avoid duplication of efforts. Centralized tracking of previous or ongoing research and data would allow greater collaboration and facilitate the sharing of lessons learned, best practices and tools, models and techniques." (Nestlé Purina Petcare Europe)

Several stakeholders highlighted the need for a collective global participatory science among stakeholders as a transformative action. Participatory science projects would enhance oceanrelated scientific cooperation, knowledge, capacity building, marine technology education, and strengthen the science-policy interface for ocean health.

"By engaging local communities in data collection and monitoring, these projects empower residents to manage their coastal environments, tailoring conservation to regional needs. Collaborative platforms connect citizens, policymakers, and NGOs, facilitating knowledge and resource sharing. Standardized data protocols support comprehensive databases for large-scale analysis. Educational components awareness, fostering public support and robust community engagement." (Objectif Sciences International)

According to stakeholders, such Participatory Science Network would involve partnerships between national agencies, research institutions, and international organizations, and would demonstrate effective collaboration in marine science with local communities.

Stakeholders emphasized that diversity, equity, and inclusion in ocean science transformative action at the national and international levels.



Partnership Spotlight

Being a global, multi-institutional partnership, the Global Ocean Accounts Partnership has demonstrated effectiveness in supporting the implementation of SDG 14. GOAP brings together governments, international organizations and research institutions to develop and implement ocean accounting practices. The partnership's activities provide data and analytical tools that support evidence-based decision-making across all SDG 14 targets. For example, ocean accounts can help track progress on conserving coastal areas (14.5), regulating fishing practices (14.4), and assessing the economic benefits of sustainable marine resource use (14.7). It also contributes to other SDGs, such as SDG 1 (No Poverty), SDG 8 (Decent Work and Economic Growth), and SDG 13 (Climate Action), by highlighting connections between ocean health and broader sustainable development objectives. (Submitted by the UNSW Centre for Sustainable Development Reform).



Figure 8: Keywords associated with Ocean Action Panel 2: "Increasing ocean-related scientific cooperation, knowledge, capacity building, marine technology and education to strengthen the science-policy interface for ocean health." according to stakeholders.

Source: UN DESA

Achieving diversity, equity and inclusion in ocean science will build a broader and more international base of capacity and expertise related to the oceans and contribute to more effective ocean science for policy efforts in all countries bordering the world's oceans.

"Past international science collaborations have often been led from the global north and inadequately included and supported local researchers. This leads to parachute science and the perpetuation of capacity gaps in less developed countries." (WWF)

Finally, stakeholders emphasized the need for increased investment in ocean technology and the creation of global ocean research and technology hubs to improve ocean monitoring and data collection. Powerful digital methods such as GeoAnalytics, Geo visualization, GeoDesign and Ocean Digital Twins were highlighted.

"Digital technologies like Digital Twins of the oceans should be funded generously to accelerate the pace of understanding of the oceans natural analogs and their impacts on biodiversity and ecosystems of the blue world." (Geo-Tech Consultancy Services)



Partnership Spotlight

The <u>Deep Ocean Stewardship Initiatives (DOSI)</u> is a network of interdisciplinary researchers from across the world, who collaborate on deep-ocean research and science-policy engagement, including through enabling the participation of scientists from across geographical locations, career stages, and backgrounds at key policy events, meetings, and knowledge-exchange initiatives. (Submitted by Geo-Tech Consultancy Services; Deep Sea Conservation Coalition; Deep-Ocean Stewardship Initiative - DOSI)