Integrated marine geospatial information

Note by the Secretariat

The Secretariat has the honour to bring to the attention of the Committee of Experts on Global Geospatial Information Management the report prepared by the working group on marine geospatial information, which will be available in the language of submission only from the relevant web page of the Committee (https://ggim.un.org/meetings/GGIM-committee/14th-session). The Committee is invited to take note of the report and to express its views on the progress of the working group in providing guidance, raising awareness and promoting the implementation of the Operational Framework for Integrated Marine Geospatial Information Management at the country level.

Summary of the report

At its thirteenth session, held from 2 to 4 August 2023, the Committee of Experts adopted decision 13/111, in which it welcomed the report of the working group and the productive efforts and leadership in continuing to raise awareness, provide guidance and encourage the availability, accessibility and integration of marine geospatial information for the benefit of society, the environment and the economy. The Committee adopted the two parts of the Operational Framework for Integrated Marine Geospatial Information Management, comprising Part One – The Strategic Overview, and Part Two – The Strategic Pathways, and encouraged the working group to provide practical support for countries to extend the nine strategic pathways of the Framework into the hydro domain and the integration of marine geospatial information into the broader national geospatial information ecosystem.

The Committee of Experts emphasized that it was strategically crucial for any national hydro, hydrographic or marine programmes to increase their value and recognition within the broader national geospatial information management programmes that supported national development priorities, including the ability to address climate-related challenges and improve resilience, the land-sea interface,
coastal zones and the pressing need to monitor sea level rise, recognizing their importance in mainstreaming the blue economy and achieving sustainable coastal resilience and development. The Committee further welcomed the updated workplan for the period 2023–2024, and encouraged the working group to raise awareness and promote the implementation of the Operational Framework for Integrated Marine Geospatial Information Management at the country level and ensure that the Framework remained relevant through regular review and updates, as necessary.


In the report, the working group provides information on its progress, including a review of its workplan and activities. It discusses the focus areas of its updated workplan for the period 2023–2024 and efforts to continue raising awareness, providing guidance and encouraging the availability, accessibility and integration of marine geospatial information for the benefit of society, the environment and the economy. The working group reports that it is advancing the integrated marine geospatial information agenda through its workplan and fostering robust collaboration with partners, including the International Hydrographic Organization, technical committee 211 of the International Organization for Standardization, the Open Geospatial Consortium and the United Nations Global Geodetic Centre of Excellence.

The report details to the Committee of Experts three priority areas of the working group: (a) understanding the impact of the Agreement under the United Nations Convention on the Law of the Sea on the Conservation and Sustainable Use of Marine Biological Diversity of Areas beyond National Jurisdiction; (b) implementation of the Operational Framework for Integrated Marine Geospatial Information Management at the country level; and (c) the integration of terrestrial, maritime, built and cadastral domains. Recognizing the profound implications of the Agreement under the United Nations Convention on the Law of the Sea on the Conservation and Sustainable Use of Marine Biological Diversity of Areas beyond National Jurisdiction, the working group highlights its efforts to clarify the consequential impact of the Agreement with a focus on informing integrated marine geospatial information management strategies. The working group also highlights the use of artificial intelligence to facilitate implementation of the Operational Framework for Integrated Marine Geospatial Information Management, in alignment with General Assembly resolution 78/265 on seizing the opportunities of safe, secure and trustworthy artificial intelligence systems for sustainable development. It further discusses efforts towards integration across diverse domains and developing a comprehensive guidance document aligned with the strategic pathways of the United Nations Integrated Geospatial Information Framework in collaboration with the expert group on land administration and management and leveraging the International Hydrographic Organization-Singapore Innovation and Technology Laboratory as a crucible for experimentation.

The report provides the Committee of Experts with an account of the sixth expert meeting of the working group, held in March 2024 together with an international seminar on United Nation global geospatial information management with the theme “Effective and integrated marine geospatial information management”. The keynote presentation at the international seminar illuminated critical areas, including underwater sea space utilization and the designation of marine protected areas in the Agreement under the United Nations Convention on the
Law of the Sea on the Conservation and Sustainable Use of Marine Biological Diversity of Areas beyond National Jurisdiction. The international seminar underscored the importance of integrated marine geospatial information for marine protection, and for enhancing the availability and accessibility of marine geospatial information through the implementation of the Operational Framework for Integrated Marine Geospatial Information Management at the country level for the sustainable utilization of the marine resources vital for addressing climate-related challenges and improving resilience, which is particularly relevant to small island developing States.

The report includes several suggestions for enhancing collaboration, which are intended for the consideration of the Committee of Experts, with the aim of progressing the three priority areas of work. The working group is committed to promoting the implementation of the Operational Framework for Integrated Marine Geospatial Information Management in conjunction with the United Nations Integrated Geospatial Information Framework, and to promoting the advancement of integrated marine geospatial information management. This is in recognition of the necessity for coordinated efforts to achieve sustainable and integrated solutions, which are crucial for addressing climate impacts and for the benefit of society, the environment and the economy.