

11TH MEETING OF THE MARINE SPATIAL DATA INFRASTRUCTURES WORKING GROUP (MSDIWG), 24-25 FEBRUARY

OGC MARINE DOMAIN WORKING GROUP MEETING, 26 FEBRUARY

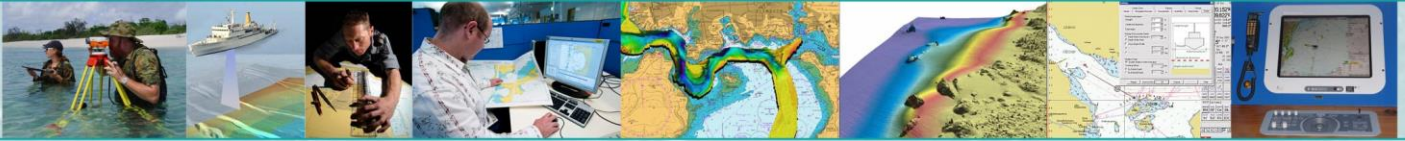
UN-GGIM WORKING GROUP ON MARINE GEOSPATIAL INFORMATION, 26-28 MARCH

Rostock-Warnemünde, Germany

Contribution to the IHO Work Programme 2020	
Task 3.7.1	Organize, prepare and report annual meetings of the Marine Spatial Data Infrastructures Working Group (MSDIWG).
Task 3.7.4	Coordinate relevant activities with the Open Geospatial Consortium (OGC) Marine Domain Working Group (Marine DWG)
Task 1.1.12.1	Maintain relationship with the United Nations (UN) organizations including the Committee of Experts on Global Geospatial Information Management (UN-GGIM) and the WG on Marine Geospatial Information (WG-MGI)

The 11th meeting of the Marine Spatial Data Infrastructures Working Group (MSDIWG11) took place in Rostock-Warnemünde, Germany, hosted by the German Hydrographic Service (BSH), on 24 and 25 February 2020. The meeting was chaired by Mr Jens Peter Weiss Hartmann (Denmark). 29 delegates from 19 Member States (Australia, Brazil, Canada, Croatia, Denmark, Germany, Italy, Jamaica, Japan, Mexico, Netherlands, New Zealand, Norway, Portugal, Republic of Korea, Romania, Singapore, United Kingdom and United States) and 12 representatives of observer organizations and industry members attended the meeting, a total of 41 participants. Assistant Director Alberto Costa Neves represented the IHO Secretariat.

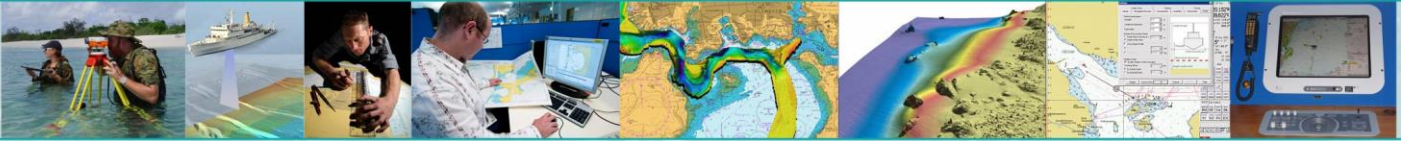
The meeting was opened by Mr Stefan GRAMMANN, from the German Federal Waterway and Shipping Administration (WSV), who welcomed the participants and highlighted the importance of the international cooperation and the relevance of Marine Spatial Data Infrastructures (MSDI) for the sustainable development and use of the oceans, seas and inland waters in line with the United Nations Sustainable Development Goals. The meeting was followed by a half-day OGC Marine Domain Working Group (Marine DWG) meeting on 26 February and by the 2nd Meeting of the Working Group on Marine Geospatial Information (WG-MGI) of the UN Committee of Experts on Global Geospatial Information Management (UN-GGIM).



Participants of the MSDIWG11

The meeting reviewed the content of the MSDI online training material funded by Denmark and developed by IIC Technologies. The course is structured in two levels, the orientation level is aimed at decision makers possibly at a senior level, not necessarily from a hydrographic background, who are engaged with marine geospatial data. The second level is aimed at students who are marine geospatial professionals but who have little experience on MSDI. It is designed as an introductory one-day course in the fundamentals of MSDI concepts, theory and practice and can be led or self-taught. Next steps include a revision of the training material based on the feedback received and the translation into French, Spanish and other languages as resources are made available. Links to the English language material (texts and videos) are available from the IHO website at: <https://iho.int/en/body-of-knowledge>

Training material developed with the in-kind contribution from the Danish Geodata Agency



A video produced by the Korean Hydrographic and Oceanographic Agency (KHOA) explaining MSDI and its importance was finalized and presented to the participants in English. Versions in French and Spanish were created in cooperation with the hydrographic services of France and Spain. Participants demonstrated interest in translating into other languages. A dedicated space is being created on the IHO website with links to the videos. The 4-minute long video constitutes a tool for creating awareness of the importance of MSDI.

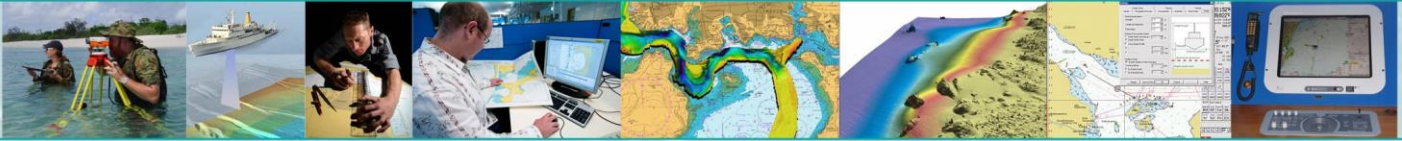
The outcome of the questionnaire to assess the status of maturity of MSDI and of Marine Spatial Planning (MSP) was considered by the participants, 41 responses received from Member States and Lebanon. The meeting agreed to work on an online publication on MSDI, permanently updated by Member States via the IHO Online Form System, similar to the IHO Publication C-55 *Status of Hydrographic Surveying and Charting Worldwide*. Participants considered the impact of the draft revised IHO Strategic Plan 2021-2026 and the implementation of the relevant Strategic Performance Indicators via a portal, in liaison with the IRCC Shared Guiding Principles Project Team (PPT).

The meeting also considered the outcome of the IHO-OGC MSDI Concept Development Study (CDS), funded by the USA/NGA. The goal of the CDS was to demonstrate to stakeholders the diversity, richness and value of a Marine SDI, specifically data, analysis, interoperability and associated IT services - including web services - in addressing needs of the marine domain. The study is also available at <https://iho.int/en/body-of-knowledge> and may lead to a Pilot Project for a use case of MSDI.

The review and update of the IHO Publication C-17 *Spatial Data Infrastructures: "The Marine Dimension" - Guidance for Hydrographic Offices* was also considered, in light of the S-100 roadmap and showcase, the content of the UN-GGIM Integrated Geospatial Information Framework (IGIF) and the identification of use cases. The meeting also identified the need to further progress the definition of aspects of data quality and data integrity related to MSDI and how this will be progressed with IRCC and HSSC in line with the S-100 data protection scheme.

Participants further worked on Crowdsourced Bathymetry (CSB) and the benefits of improved maps and on the impact of the draft WENS principles for services and its impact on MSDIWG. National reports were presented with the status of MSDI and MSP, lessons learned, challenges and achievements. Presentations were delivered by Academia and Industry on use cases of MSDI and MSP, policy aspects of MSDI and the importance of a MSDI in relation to the GEBCO Seabed 2030 goals.

Among the use cases, of particular interest were the MSP for the high-seas with respect to the Law of the Sea, management for inland waters in Africa, optimization of sea routes for the shipping industry, responses to disasters using integrated Artificial Intelligence (AI) and Marine Layers (ML), potential for offshore wind generation, offshore engineering supply chain and the development of a global MSDI for the UN System.



These use cases were also carried out with the goal to strengthen the cooperation with the UN-GGIM/WG-MGI.

Next meeting

The 12th meeting of the MSDIWG will be held in Singapore, from 12 to 16 April 2021, preceding the Singapore Maritime Week (SMW). A joint technical session with the OGC Marine DWG and a MSDI Open Forum are planned.

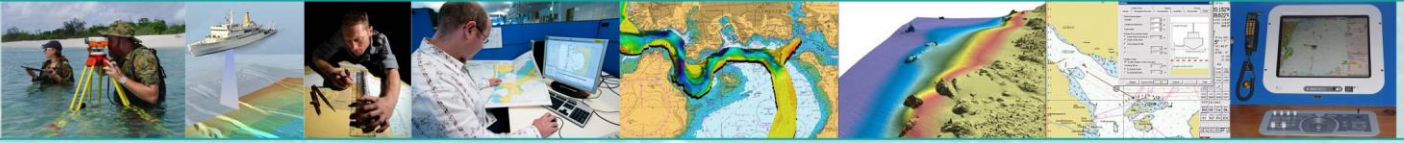
OGC Marine Domain Working Group

MSDIWG11 was followed by a joint meeting with the OGC Marine Domain Working Group (DWG). The meeting was Co-Chaired by Mr Sebastian Carisio (USA and Vice-Chair of the IHO MSDIWG) and Mr Jonathan Pritchard (UK). Participants reviewed the development of a Wiki page for the Marine DWG, the way ahead with the IHO-OGC CDS, the development of a Guide on Standards for the Common People, the progress achieved with the Marine Limits and Boundaries Project, the impact of the ISO Marine Georegulation, among others.

UN-GGIM Working Group on Marine Geospatial Information (WG-MGI2)

The 2nd Meeting of the UN-GGIM WG-MGI was composed mostly of representatives from IHO Member States' Hydrographic Offices. The WG aims to play a leading role in marine geospatial information policies at the global level to support the wellbeing of billions of inhabitants reliant on sustainable inland water bodies and waterways, coastal zones, seas and oceans. The WG provides a forum for dialogue and coordination among Member States, and between Member States and the International Hydrographic Organization, United Nations system and relevant international organizations to enhance global cooperation and improve the availability and accessibility of marine geospatial information.

The Co-Chairs from USA and Burkina Faso reported on the progress made since the last meeting and highlighted the importance of the support received from the IHO. The meeting received reports on MSDI, the IHO-led Crowdsourced Bathymetry initiative, IHO Data Center for Digital Bathymetry, Seabed 2030, S-100 framework and related IHO activities. The meeting reviewed the outcomes and findings of the use case exercise, with breakout activities towards understanding the challenges, opportunities and feasible solutions in making available and accessible marine geospatial information for a multiplicity of applications.



Participants of the 2nd meeting of the UN-GGIM Working Group on Marine Geospatial Information