

**11<sup>TH</sup> MEETING OF THE IHO-INTER REGIONAL COORDINATION COMMITTEE  
IHO IRCC11**

**GENOA, ITALY, 3-5 JUNE 2019**

**Update on Data Gathering and Management, Maximizing the use of Hydrographic Data**

<b>Submitted by:</b>	IHO Secretariat
<b>Executive Summary:</b>	The document provides an update on progress towards improving access to hydrographic data, data gathering and management, maximizing the use of hydrographic data.
<b>Related Documents:</b>	CSBWG Report, GEBCO Report, DCDB Report
<b>Related Projects:</b>	GEBCO, Seabed 2030

### **Introduction / Background**

1. The IRCC established a Crowdsourced Bathymetry Working Group (CSBWG). The CSBWG developed a draft guidance document on Crowdsourced Bathymetry in 2018 that set out the key issues to be taken into account by those considering CSB – both from a collector's and a user's perspective. Member States approved the adoption of Edition 2.0.0, B-12. A follow-up IHO CL is being prepared with the full details, including responses to the comments provided. Additional details available in document IRCC11-07G.

2. The IHO Resolution was endorsed at the First Session of the IHO Assembly: *Improving the Availability of Bathymetric Data Worldwide* (see *Doc IRCC9-08A*). In accordance with this IHO Resolution, Member States resolve that, in addition to fulfilling their international obligations to provide hydrographic information in support of safety of navigation, they should also consider implementing mechanisms that encourage the widest possible availability of all hydrographic and particularly bathymetric data, so as to support the sustainable development, management and governance of the marine environment.

3. The IRCC agreed that the development of the GEBCO Data Store should be coordinated with the current upgrade of the IHO DCDB that is intended to improve support for CSB and ocean mapping data discovery. The IRCC also agreed mechanisms should be developed to promote the collection of bathymetric data from scientific and crowdsourced cruises and to ensure that the data is made available to GEBCO, accompanied by appropriate metadata, through the IHO DCDB.

Details of these activities are contained in documents IRCC11-07I (report of the GEBCO Project to IRCC11) and IRCC11-07J (report of the DCDB to IRCC11).

4. The web-based interface portal to the IHO Data Center for Digital Bathymetry, hosted by the USA in Boulder, Colorado, as part of its commitment to the system of World Data Centres, is being upgraded to be compatible with the crowdsourced bathymetry concept. This will enable an IHO-led CSB infrastructure to be established and promoted in the IMO and across the wider maritime community. The status report and some proposals regarding to improve the DCDB is available at document IRCC11-07J.

### **Analysis/Discussion**

5. The IHO is committed to the collection and management of global reference bathymetry data sets. It has established the IHO Data Center for Digital Bathymetry (DCDB) and operates together with the Intergovernmental Oceanographic Commission of UNESCO, the GEBCO project, the General Bathymetric Chart of the Oceans. GEBCO's aim is to provide the most authoritative publicly-available bathymetry of the world's oceans. The GEBCO products include global gridded bathymetric data sets, a global set of digital bathymetric contours and a reference manual on how to build bathymetric grids. The continuing improvement of these products relies on close collaboration with regional mapping programmes such as *EMODnet*.

6. Seabed 2030 is a new global project within the IHO-IOC GEBCO framework with the focused goal of producing the definitive, high-resolution bathymetric map of the entire World Ocean by the year 2030. The Nippon Foundation (NF)-GEBCO Seabed 2030 project builds on more than 100 years of GEBCO history; the project has established regional connections to all corners of the World and benefits from the human network of ocean mapping capacity built over 15 years through The Nippon Foundation – University of New Hampshire (UNH) training project. Through Seabed 2030, GEBCO's role will be recognized and reinforced as the authoritative international initiative for mapping the World Ocean, from the coasts to the deepest trenches. The project will champion, develop and nurture the technical and human capacity to complete this task by 2030.

7. Seabed 2030 has established a network of 4 regional centres. Each centre focuses on discovering, gathering and assembling all available bathymetric data from their region to produce regional datasets and resulting products. The Atlantic and Indian Oceans are covered by the center located at the Lamont Doherty Earth Observatory (LDEO). A global centre will merge the regional datasets to generate the production of the annual GEBCO grid as well as other products. Within this structure, the IHO-DCDB will remain the central GEBCO repository for all raw bathymetric data and all Seabed 2030 project data will be data based there.

Regional Hydrographic Commissions are encouraged to support the Seabed-2030 Project.

#### **Additional Engagements and Activities on data gathering and maximizing:**

8. The Secretary-General represented the IHO at the eighth Session of the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM) took place at the UN Headquarters in New York, USA from 30 July to 3 August 2018. The Committee reviewed the progress being made by its working group (WG) on global fundamental geospatial data themes. Several items on the agenda of UN-GGIM8 were of direct relevance to IHO Member States, particularly in relation to the contribution of hydrographic data and services to national and regional spatial data infrastructures.

9. The Working Group on Marine Geospatial Information under the leadership of John Nyberg (USA) was established by UN-GGIM 7 in 2017 in recognition that geospatial information on inland water bodies and waterways, coastal zones and seas and oceans. The Committee welcomed the report on the implementation and adoption of standards for the global geospatial information community and expressed its appreciation to ISO, IHO and OGC for their continuing support and valuable work to support the international standard on land administration; its focus on developing the S-100 suite of standards; and appreciation was expressed for the reported revision to the "Guide to the Role of Standards in GIM" and The Committee encouraged the Regional Commissions and thematic groups of UN-GGIM to continue raising awareness, engagement and the promotion of internationally agreed standards.

10. IHO Director Mustafa Iptes represented the IHO at the 5<sup>th</sup> Edition of Our Ocean Conference (OOC2018) hosted by the Government of Indonesia and took place in Bali, Indonesia on 29 and 30 October 2018. The theme of the Our Ocean Conference was; "Our Ocean, Our Legacy". The conference was combined with an exhibition illustrating contributions to ocean related activities from coastal States, International Organizations, non-governmental organizations and industry. High level representatives including Presidents, Vice-Presidents, Prime Ministers and Ministers from over 100 countries and approximately 3000 participants attended the conference. Director Iptes, on behalf of the IHO and IOC of UNESCO, made a Floor Announcement at the OOC2018 on the importance of Seabed 2030 Project.

#### **Action Required of IRCC**

11. The IRCC is invited to:
- a. note the contents of this document; and
  - b. take any other action appropriate.