

**5TH MEETING OF THE HYDROGRAPHIC SERVICES AND STANDARDS COMMITTEE
Shanghai, China, 5-8 November 2013**

Paper for Consideration by HSSC

**IHO Participation in the United Nations Committee of Experts on
Global Geospatial Information Management (UN-GGIM)**

Submitted by:	IHB
Executive Summary:	This paper reports on the progress of the United Nations initiative related to global geospatial information management and considers the impact on the activities of HSSC/MSDIWG.
Related Documents:	HSSC3-INF3 - <i>World Forum on Global Geospatial Information Management</i> HSSC3-INF3 Add1 - <i>IHO Participation in the UN Committee of Experts on Global Geospatial Information Management and Relationships with Geospatial Organisations and Corporations</i> HSSC4-INF2 - <i>IHO Participation in the UN Committee of Experts on Global Geospatial Information Management</i> CL 48/2013 dated 1 st August - <i>3rd Session of the UN Committee of Experts on Global Geospatial Information Management - Report</i>
Related Projects:	MSDIWG Work Plan.

Background

1. The purpose of the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM) is to advance international cooperation in geospatial information management by making accurate and authoritative geospatial information readily available, particularly in support of advancing sustainable development. The UN-GGIM reports to the UN Assembly via the UN Economic and Social Council (ECOSOC). ECOSOC has instructed UN-GGIM to work according to a five-year programme and to provide its first report in 2016.
2. The Committee comprises experts from all UN Member States, as well as experts from international organizations, including the IHO, represented by the IHB, as observers.
3. The work of UN-GGIM is based on a list of key issues. These are:
 - Developing a global strategic framework for geospatial information,
 - Establishing institutional arrangements, legal and common frameworks,
 - Building capability and capacity, especially in developing countries,
 - Assuring the quality of geospatial information,
 - Promoting data sharing, accessibility and dissemination,
 - Embracing trends in information technology,
 - Promoting geospatial advocacy and awareness,
 - Partnering with civil society and the private sector.

4. Participation in UN-GGIM offers significant opportunities to the IHO and its Member State organizations by raising awareness and encouraging top-down government interest and support for national hydrographic programmes. As reported to IHO Member States and to previous HSSC meetings (HSSC3 and HSSC4), UN-GGIM has met annually since its establishment in 2011. The IHO has been directly involved in agenda items related to the status of geospatial standards, the status of hydrography and nautical charting and the maritime component of global geospatial infrastructures.

Analysis

5. The IHB has represented the IHO at two UN-GGIM events since HSSC4:
- the Second High Level Forum on Global Geospatial Information Management held in Doha, Qatar, from 4 to 6 February 2013;
 - the third UN-GGIM session (UN-GGIM 3) which took place in Cambridge, UK, from 24 to 26 July 2013.

IHO involvement has been focused on two items of the agenda of UN-GGIM 3:

- item 8: Establishment and implementation of standards for the global geospatial information community;
- item 10: Critical issues relating to the integration of land and marine geospatial information.

6. UN-GGIM 3 reviewed a comprehensive report on the state of global geospatial information standards. The report was compiled by the International Organization for Standardization (ISO) in collaboration with the IHO and the Open Geospatial Consortium (OGC). The report noted that while the IHO's hydrographic standards have been universally adopted, the international standards for land-based data were much less well adopted. It highlighted the role that the IHO is playing in the setting of global geospatial standards and that the level of harmonization and interoperability of hydrographic and nautical chart services on a world-wide basis can be considered as satisfactory. It emphasized the critical need to improve hydrographic services and the production of nautical charts and to coordinate the activities of coastal States within the framework of the IHO. The final report is posted on the IHO website (Home > External Liaisons > Int Organizations' Documents related to the IHO > United Nations initiative on Global Geospatial Information Management (UN-GGIM) - Relevant UN-GGIM documents).

7. The discussion on integrating land and marine geospatial information was led by a paper presented by the President of the IHB Directing Committee. The paper was based on separate submissions from the IHO (*Status Report on Hydrography and Mapping of the World's Seas, Oceans and Coastal Waters*) and the International Federation of Surveyors (FIG). The paper highlighted the fact that comprehensive international standards exist for geospatial information covering the land and the sea and that work was continuing to enable the underlying data to be interoperable, through such operations as the transformation of datums, particularly vertical datums. The President laid particular emphasis on the fact that for many parts of the world's seas, oceans and coastal waters, there is little or no underlying geospatial information. This fact appeared to be previously unknown by most of the delegates.

8. The Committee agreed that, in the future, reports on the status of mapping should cover both the world's land mass and the seas, oceans, coastal waters and navigable inland waterways.

9. A report, compiled by a small working group established at the second session of UN-GGIM, covering future trends in national institutional arrangements for geospatial information management was reviewed at UN-GGIM-3. The report entitled "*Future trends in geospatial information management: the five to ten year vision*" has been reproduced as a

booklet by the UK delegation. The report covered five broad themes: trends in technology and the future direction of data creation, maintenance and management; legal and policy developments; skills requirements and training mechanisms; the role of the private and non-government sectors; and the future role of governments in geospatial data provision and management. The report provides food for thought for the strategic thinking of both the IHO and national HOs. The report is posted on the IHO website and can be accessed from the [MSDIWG page](#) and from the [UN-GGIM documents page](#).

10. The continuing involvement of the IHO in the UN-GGIM initiative has significantly raised the level of acknowledgement and awareness of the relevance and the potential contribution of hydrographic information in the context of global geospatial data infrastructures. This places even greater relevance on the continuing work of the IHO MSDIWG and its task in assisting Member States in their role as custodians of national hydrographic data sets as well as their obvious part in national and global spatial data infrastructures. It also emphasises the importance of the IHO-IOC GEBCO project as a fundamental part of the global geospatial information infrastructure.

Recommendations

11. The IHB will continue to contribute, on behalf of the IHO, to the UN-GGIM initiative. In addition, it is recommended that HSSC tasks the MSDIWG to consider the impact of the UN-GGIM initiative on its work plan, in particular in relation to:

- 11.1. Encouraging the involvement of Hydrographic Offices (HOs) in the development of national/regional/global spatial data infrastructures (SDI)
- 11.2. Providing guidance to Member States/HOs to assist them in:
 - raising awareness of the importance of the maritime component in national/regional/global (SDI);
 - taking advantage of opportunities associated with the development of national/regional/global SDI;
 - establishing win-win partnerships with other governmental agencies, academia and industry;
- 11.3. Monitoring and publicizing best practices and use cases in the development of land-sea interoperability and integration and the provision of related products and services;
- 11.4. Coordinating the development of MSDI at the regional and global level, in liaison with the Regional Hydrographic Commissions (RHC) and IRCC;
- 11.5. Assessing capacity-building requirements at the national and regional levels in liaison with RHCs and IRCC.

Action required of HSSC

12. The HSSC is invited to:
 - a. **note** this report;
 - b. **endorse** the recommendations in paragraph 11, and
 - c. **take** any other action as appropriate.