

Report of IHO Marine Spatial Data Information Working Group (MSDIWG)

Introduction / Background

The 18th International Hydrographic Conference confirmed the importance of marine spatial data infrastructure (MSDI) activities for the IHO and its Member States.

MSDI delivers the instruments for the enhanced scope of hydrographic information users. MSDI can create the framework for future provision of this information beyond the classic field of surface navigation. From an HO perspective, it is important that the IHO takes the lead in addressing MSDI matters for the maritime sphere through its MS; the MSDIWG is seen as an appropriate WG to deal with these opportunities.

IHO MSDIWG meetings Held During Reporting Period

The 5th meeting of the IHO Marine Spatial Data Infrastructure Working Group (MSDIWG) took place on 5 -7 February 2014 at Veterans Plaza, Silver Spring, Maryland USA. It was preceded on 4 February by an MSDI Open Forum. The aim was to reactivate IHO consideration of MSDI, to propose ways to facilitate MSDI in IHO and its Member States and to review the new draft work plan.

MSDI addresses, for the maritime domain, “the technology, policies, standards, and human resources necessary to acquire, process, store, distribute, and improve utilization of geospatial data”. The key interest for the IHO is that MSDI provides a framework for the provision of hydrographic information beyond the traditional field of surface navigation.

Next meetings planned by IHO Marine Spatial Data Infrastructure Working Group (MSDIWG)

February 2015: MSDIWG Open Forum and MSDIWG 6th Meeting

Both events will be held in London UK. The WG meeting will include WG Work Plan task group break-out sessions.

All documents referred to above, including a revised draft agenda for MSDIWG-5 and a new Work Plan 2014-15 for the WG, have been posted on the IHO website. See http://www.iho.int/mtg_docs/com_wg/MSDIWG/MSDIWG5/MSDIWG5.htm.

MSDIWG Work Programme

At the 5th HSSC MEETING in Shanghai 5-8 November 2013, the report of the Marine Spatial Data Infrastructure Working Group was presented. HSSC-5 approved the adjusted Terms of Reference and the MSDI Work Plan. 7 MSDIWG Tasks are now established. The work program is attached as annex 1.

MSDIWG WORK PLAN 2014–15

MSDIWG Tasks:

A	Identify and promote national and regional best practices: - for land-sea integration - for cross-border integration
B	Review the appropriateness of existing standards for the provision of the maritime components of spatial data infrastructures
C	Develop content for an MSDI training course
D	Maintain MSDI reference documentation on the IHO website
E	Maintain and extend Publication IHO MSDI C-17 (IHO Task 2.9.2 refers)
F	Conduct annual meetings of MSDIWG, arranged back to back with 1-day MSDI Open Forum (IHO Task 2.9.1 refers)
G	Ensure that MSDI is a standing agenda item for RHCs' meetings (IHO Res 2/1997, as amended, refers)

BSMSDIWG meetings held during reporting period

The 2nd meeting of the Baltic Sea Marine Spatial Data Infrastructure Working Group (BSMSDIWG) took place in Copenhagen at the Danish Geodata Agency's premises.

The overall aim of the workshop was to create a common MSDI framework for the Baltic in order to establish a BSHC MSDI work plan for the Baltic Sea which should focus on how the BSHC can benefit from a regional approach to MSDI.

The workshop was divided in two parts in order to address how the BSHC can benefit from a regional approach to MSDI in the future. The first part contained a general presentation from IHO MSDIWG, national presentation from members on status on SDI, MSDI and INSPIRE and a presentation of the proposal for a directive of the European Parliament and of the Council on establishing a framework for maritime spatial planning and integrated coastal management. The second part focused on a questionnaire about national use of data, the response from MSHC18 about MSDI and the creation of a draft work plan.

Next meetings planned

The next meeting of the BSMSDIWG is planned to take place in the second half of 2014 in Germany.

BSMSDI Draft Work Programme

At the 2nd meeting of the Baltic Sea Marine Spatial Data Infrastructure Working Group, the work group established a draft work program. The work plan is divided in 7 work items and there are relevant milestones and coordinators for each item. The draft work program focuses on tasks that are foreseen to be important and challenging from a regional and a national perspective.

Draft BSMSDIWG work program:

Task	Work item	Milestones	Coordinator	Status
1	Hydrographic data and legal aspects	<ul style="list-style-type: none"> - Study and definition on hydrographic data under the respect of INSPIRE and MSP. - Definition of HO role in MSDI - Paper on BSHC MS contribute with relation to MSDI - Study on different laws with relevance to MSDI in the Baltic countries 	Latvia Denmark	
2	Liaison with external projects	<ul style="list-style-type: none"> - Establish a list of MSDI relevant projects - Scanning of projects relevant for BSMSDI - Establishing a matrix with relevant projects 	Germany	
3	S 100	<ul style="list-style-type: none"> - Conduct a study on S 100 - Evaluate on how to promote S 100 in the Baltic - Prepare paper to HSSC through BSHC - Evaluate the need for a pilot project 	Germany Latvia	
4	INSPIRE	<ul style="list-style-type: none"> - Study on IHO standard S 57 in relation to INSPIRE - Study on legal binding compared to INSPIRE - The difference between S 57 and S 100 	Estonia	
5	MSP and IZM	<ul style="list-style-type: none"> - Conduct a study on national approach to MSP - Prepare paper to HSSC through BSHC if needed - Evaluate the need for a pilot project 	Denmark Latvia	
6	Common understanding	<ul style="list-style-type: none"> - Establish a framework for common understanding of MSDI 	Latvia	
7	Technical solutions in the Baltic	<ul style="list-style-type: none"> - Study on the possibility to establish a BSHC metadata base - Study on MSDI impact on E-navigation and how MSDI can contribute to the implementation of E-navigation - Establishing use cases e.g. MSP, SAR, Environmental protection - Evaluate the need for updating BS MSDIWG ToR 	Denmark Estonia Denmark	

Analysis/Discussion

The IHO's MSDIWG has published *C-17 - Spatial Data Infrastructures: The Marine Dimension - Guidance for Hydrographic Offices*, which outlines the benefits of developing spatial data infrastructures (SDIs) to reinforce coordination among maritime authorities.

At a time when SDIs are being developed worldwide at the national, regional and local levels, this approach to coordinated access to, and management of, geographic information has become a standard on land. However, as C-17 identifies, the integration of maritime data in SDIs has been limited at best, though there can be as many benefits to be gained by coordinated access to maritime information as to terrestrial data.

Progress on HSSC Action Items

Action HSSC4/32 is for MSDIWG4" to consider, within its work plan, the development of content for an "introduction to MSDI" training course".

This action is included in future work of the MSDIWG as stated in the work plan.

Conclusions

There are growing needs for better coordination of individual authorities' management of maritime information. While a national single window can aid in the reporting process among maritime stakeholders, information flow among the authorities is also a critical factor for ensuring the effective and efficient coordination of their work.

An MSDI ensures that relevant maritime authorities can contribute their spatial information and related updates, and that this information can easily be collected with other information to generate a current, overall picture. As a result, MSDI can support such varied activities as coastal zone management planning of energy production at sea, fishing, marine environmental protection and nature conservation, planning charts, navigation, civil and military preparedness, tourism, and maritime spatial planning.

From a more practical approach there is a need to focus on and strengthen the maritime approach to MSDI and to insure that maritime information is included.

Actions required from the NSHC 31st Conference:

- The NSHC 31st Conference is invited to discuss the implication of MSDI from a HO perspective and how MS can benefit from a regional approach.
- The NSHC 31st Conference is requested to consider this report and to take appropriate actions.