



Hydrographic Services and Standards Committee

Report of the Marine Spatial Data Infrastructure Working Group (MSDIWG)  
to HSSC 5

5-8 November 2013, Shanghai, China

Presented by Mr. Jens Peter Hartmann (MSDIWG Chair)

# Principal activities and achievements

## ✦ Engagement

- 25 Member states
- 6 organisations including commercial companies

## ✦ Meetings

- ✦ The 4th meeting of the IHO Marine Spatial Data Infrastructure Working Group (MSDIWG) took place on 31 January and 1 February 2013 in Copenhagen, Denmark.

## ✦ Next Planned Meeting

- ✦ The 5th meeting will take place in Silver Spring, Maryland, from Wednesday 5th-Friday 7th February



# Problems or outstanding issues

The following challenges IHO MS face were identified from the questionnaire results and from the collective input of MSDIWG4 attendees and the Open Forum:

- ✦ Supporting IHO MS to adapt to new ways of thinking and working through skills development and knowledge transfer, education, training and capacity building maximising the use of source data and developing best practice in managing and publishing data.
- ✦ Sharing knowledge and experience across the HO community of practitioners; outreach to other marine data providers in data management and publishing best practise; improving working practises to gain operational efficiencies and cost savings; data sharing and exchange; reducing the reliance on assessing data just for navigational safety through the wider use of hydrographic data in non-navigational applications; putting case studies together; and developing governance models for MSDI.



# Problems or outstanding issues

The following challenges IHO MS face were identified from the questionnaire results and from the collective input of MSDIWG4 attendees and the Open Forum:

- ✦ Putting technology at the heart of operations by adopting data centric operations, use of open standards and software, data harmonisation and integration across HO borders and the land-sea interface.
- ✦ Intellectual Property, reliability of data, copyright and rights management initiatives making access to all data easier; the role of free and open data, e-navigation and MSDI Business case development including cost benefit analysis, developing the road map to successful engagement, participation and implementation of MSDI. Focus will not only be on distribution of data, but on the whole value chain.



# Problems or outstanding issues

The following challenges IHO MS face were identified from the questionnaire results and from the collective input of MSDIWG4 attendees and the Open Forum:

- ✦ Putting technology at the heart of operations by adopting data centric operations, use of open standards and software, data harmonisation and integration across HO borders and the land-sea interface.
- ✦ Intellectual Property, reliability of data, copyright and rights management initiatives making access to all data easier; the role of free and open data, e-navigation and MSDI Business case development including cost benefit analysis, developing the road map to successful engagement, participation and implementation of MSDI. Focus will not only be on distribution of data, but on the whole value chain.





# Problems or outstanding issues

The MSDI WG considered the need to propose changes to the MSDIWG Terms of Reference which were subsequently discussed and agreed.

They now include a vision “to place hydrography, and its value to social and economic development, at the heart of Spatial Data Infrastructures (SDI’s) across the World” as well as an objective “to enable IHO Member States to develop their capability to engage and participate in regional and / or national MSDIs, and implement SDI principles and the benefits they bring”.

A proposal for draft revised Terms of Reference for the MSDIWG is attached as Annex C.



# Problems or outstanding issues

## Resources

There are increasing demands being placed on a very few members of MSDIWG to attend IHO sponsored events such as Regional Hydrographic Commissions and MSDI meetings, organizing and delivering MSDIWG meetings annually; attending meetings with FIG, EC and other regional bodies as well as invitations to speak at industry seminars and meetings on the subject of MSDI.

This is being stimulated by the wider maritime community seeking to gain a greater understanding and perspective of MSDI, the importance of MSDI globally and how this will impact on them. In addition there is an appetite to gain a greater understanding of the workings of the WG and what it will deliver over time. In order to mitigate the risk of the limited resources provided by HO's

The MSDIWG management team is respectfully seeking approval from HSSC to set aside funds, potentially through CBSC, to allow for more effective governance, administration and outreach of the WG. This approach should take account of the life-span of the current 5 year work plan.



# Future work programme

The MSDIWG4 meeting reviewed the existing work plan, set at HSSC1 in November 2009 and agreed that changes were necessary to reflect the phase of development reached by MS in their approach to MSDI:

The main topics and ideas in establishing a new work plan has been:

- ✦ Prepare a paper to be submitted to HSSC5 to reinforce the need for a more proactive approach to MSDI for inclusion on the IRCC and RHC agenda.
- ✦ Liaise with other IHO bodies (like TSMAD, SNPWG, RHCs, IRCC) and agree/coordinate a common approach to further the ambitions of IHO MS in the role MSDI will play in the future.
- ✦ Set up an INSPIRE Task Group working with IHO and EC-JRC (under existing MoU) to resolve technical problems impacting on the implementation of MSDI and compliance with INSPIRE.
- ✦ Set up a Working Group to further develop syllabi for MSDI and associated learning subjects.





# Future work programme

The MSDIWG has, focused on establishing a new work programme for the period 2013 to 2018. The work programme is divided in 4 initiatives. Additional tasks have been established for every initiative as stated below:

- ✦ Initiative 1: MSDI - Review of progress across the Marine Sector; 10 tasks
- ✦ Initiative 2: MSDI and Member States – Review and Status report; 4 tasks
- ✦ Initiative 3: What needs to be done – A practical approach to MSDI implementation; 7 tasks
- ✦ Initiative 4: Supporting MSDI Implementation - Training and Communications: 7 tasks

A draft work plan is attached as Annex B.



# Future work programme

## IHO-EC meeting

There have been some preliminary meetings between EU/EEA, Hydrographic Offices and IHB. There has been some consideration to task the MSDIWG regarding INSPIRE and other EU related matters, including a MSDI study on relevant marine data features and geospatial standards adequate for supporting the implementation of a proposed directive on Marine Spatial Planning and ICM.

- ✦ Liaison with other organisations to identify new uses for data and value of HO data to economic development (e.g. EC)
- ✦ Identify and recommend possible solutions to significant technical issues related to interoperability
- ✦ Provide updated information on all European Marine/Maritime initiatives (e.g. INSPIRE, EMODnet, SeaDataNet)
- ✦ Liaise with TSMAD regarding level of S-100 understanding and use in support of SDI activities (e.g. INSPIRE)
- ✦ Determine hydrographic data set(s) that should be included in MSDI (e.g. identify data layers for usefulness to non-navigational sectors, identify core reference datasets for MSDI, define publishing mechanism for sharing data)



# Future work programme

## 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 point is included in future work of the MSDIWG as stated in the draft work plan under Initiative 4: Supporting MSDI Implementation - Training and Communications. Especially with a focus on the tasks:

- 4.1 Identify the need for education and training among the Member States and report to WG Chair.
- 4.2 Establish a MSDI training syllabus for use across IHO community.
- 4.5 Provide MSDI educational content to IHO Web site.



# Action requested of HSSC

## Conclusions and Recommended Actions

- ✦ The work in the MSDIWG is well underway and a new work plan has been established.
- ✦ The new work plan will establish the framework for the WG, in order to cope with the challenges in a forward-looking perspective.
- ✦ HSSC5 is recommended to endorse the continued activity of MSDIWG.



# Action requested of HSSC

- ✦ The HSSC is invited to:
  - a) consider the suggestions made in the MSDIWG report;
  - b) endorse the MSDIWG report;
  - c) consider the suggested changes to the MSDIWG Terms of Reference;
  - d) approve the suggested changes to the MSDIWG Terms of Reference;
  - e) approve the MSDIWG work plan.

