

BSHC 18th meeting

**Agenda item C4
September 16 -18, 2013
Tallinn, Estonia**

BSHC Marine Spatial Data Infrastructure Working Group (MSDIWG)

Establishing a framework for maritime spatial planning and integrated coastal management and Marine Spatial Data Infrastructure



Brussels, 12.3.2013
SWD(2013) 65 final

COMMISSION STAFF WORKING DOCUMENT

IMPACT ASSESSMENT

Accompanying the document

**PROPOSAL FOR A DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF
THE COUNCIL**

**establishing a framework for maritime spatial planning and integrated coastal
management**

{COM(2013) 133 final}
{SWD(2013) 64 final}

Establishing a framework for maritime spatial planning and integrated coastal management and Marine Spatial Data Infrastructure

Article 5

Objectives of maritime spatial plans and integrated coastal management strategies

Maritime spatial plans and integrated coastal management strategies shall apply an ecosystem-based approach to facilitate the co-existence and prevent conflicts between competing sector activities in marine waters and coastal zones, and shall aim to contribute to:

- (a) Securing the energy supply of the Union by promoting the development of marine energy sources, the development of new and renewable forms of energy, the interconnection of energy networks, and energy efficiency;
- (b) Promoting the development of maritime transport and providing efficient and costeffective shipping routes across Europe, including port accessibility and transport safety;



Danish Ministry
of the Environment
Danish Geodata Agency

Establishing a framework for maritime spatial planning and integrated coastal management and Marine Spatial Data Infrastructure

Article 5 (continued)

Objectives of maritime spatial plans and integrated coastal management strategies

- (c) Fostering the sustainable development and growth of the fisheries and aquaculture sector, including employment in fisheries and connected sectors;
- (d) Ensuring the preservation, protection and improvement as well as the prudent and rational use of natural resources, notably in order to achieve good environmental status, halt the loss of biodiversity and degradation of ecosystem services and reduce marine pollution risks;
- (e) Ensuring climate resilient coastal and marine areas.



Danish Ministry
of the Environment
Danish Geodata Agency

Establishing a framework for maritime spatial planning and integrated coastal management and Marine Spatial Data Infrastructure

Article 7

Specific minimum requirements for maritime spatial plans

1. Maritime spatial plans shall contain at least a mapping of marine waters which identifies the actual and potential and temporal distribution of all relevant maritime activities in order to achieve the objectives as set out in Article 5.
2. When establishing maritime spatial plans Member States shall take into consideration, at least, the following activities:
 - a. installations for the extraction of energy and the production of renewable energy;
 - b. oil and gas extraction sites and infrastructures;
 - c. maritime transport routes;
 - d. submarine cable and pipeline routes;
 - e. fishing areas;
 - f. sea farming sites;
 - g. nature conservation sites.



Danish Ministry
of the Environment
Danish Geodata Agency

Establishing a framework for maritime spatial planning and integrated coastal management and Marine Spatial Data Infrastructure

Article 8

Specific minimum requirements for integrated coastal management strategies

1. *Integrated coastal management strategies shall contain at least, an inventory of existing measures applied in coastal zones and an analysis of the need for additional actions in order to achieve the objectives set out in Article 5. The strategies shall provide for integrated and cross-sectorial policy implementation and consider interactions between terrestrial and maritime activities.*
2. *When establishing integrated coastal management strategies, Member States shall take into consideration, at least, the following activities:*



Danish Ministry
of the Environment
Danish Geodata Agency

Establishing a framework for maritime spatial planning and integrated coastal management and Marine Spatial Data Infrastructure

Article 8 (continued)

Specific minimum requirements for integrated coastal management strategies

1. *utilisation of specific natural resources including installations for the extraction of energy and the production of renewable energy;*
2. *development of infrastructure, energy facilities, transport, ports, maritime works and other structures including green infrastructure;*
3. *agriculture and industry;*
4. *fishing and aquaculture;*
5. *conservation, restoration and management of coastal ecosystems, ecosystem services and nature, coastal landscapes and islands;*
6. *mitigation and adaptation to climate change.*



Danish Ministry
of the Environment
Danish Geodata Agency

Establishing a framework for maritime spatial planning and integrated coastal management and Marine Spatial Data Infrastructure

Article 10

Data collection and exchange of information

1. Member States shall organise the collection of the best available data and the exchange of information necessary for maritime spatial plans and integrated coastal management strategies.
2. The data referred to in paragraph 1 shall include:
 - a. Environmental, social and economic data collected according to the provisions of Union legislation pertaining to the activities referred to in Articles 7 and 8;
 - b. Marine physical data in marine waters and geomorphological data in coastal zones.
3. When organising the collection and exchange of the data referred to in paragraph 1, Member States shall make use, as far as possible, of instruments and tools developed under the Integrated Maritime Policy.



Danish Ministry
of the Environment
Danish Geodata Agency

Establishing a framework for maritime spatial planning and integrated coastal management and Marine Spatial Data Infrastructure

Article 12

Cooperation with other Member States

1. Each Member State bordering a coastal zone or maritime area of another Member State shall cooperate to ensure that maritime spatial plans and integrated coastal management strategies are coherent and coordinated across the coastal zone or marine region and/or sub-region concerned. Such cooperation shall in particular take into account issues of a transnational nature, such as cross-border infrastructure.
2. The cooperation referred to in paragraph 1 shall be pursued through regional institutional cooperation structures covering the coastal zone or the marine region or sub-region concerned, or a dedicated network of Member States' competent authorities covering the marine region and/or sub-region concerned.

Article 13

Cooperation with third countries

Member States bordering a coastal zone or maritime area of a third country shall make every effort to coordinate their maritime spatial plans and integrated coastal management strategies with that third country in the marine region or sub-region and the related coastal zone concerned.



Danish Ministry
of the Environment
Danish Geodata Agency



International Hydrographic Organization

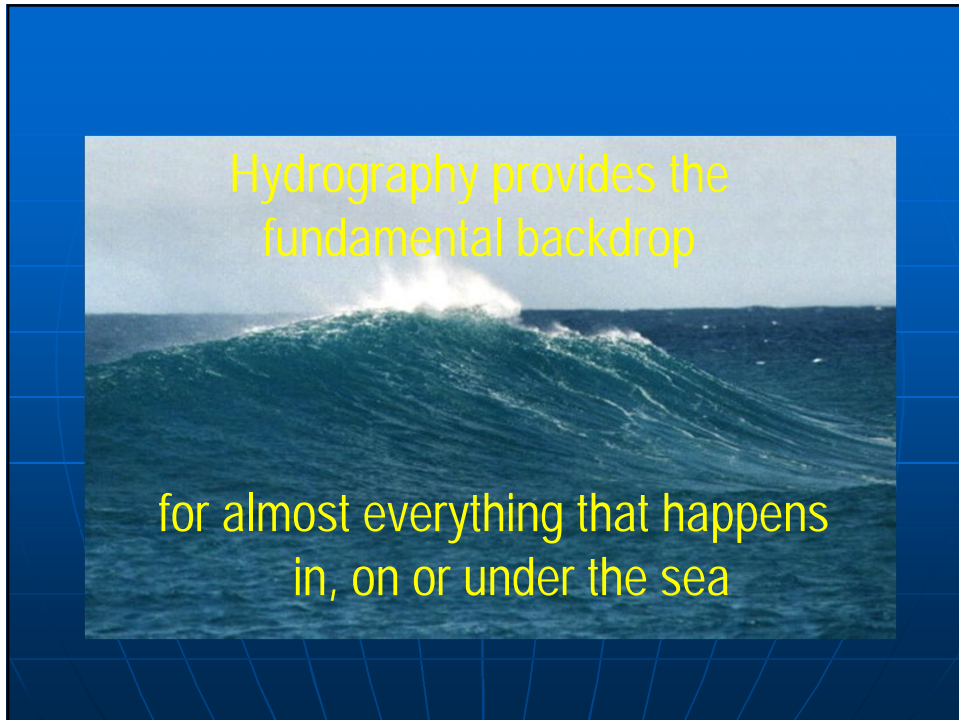
MEETING BETWEEN IHO AND EUROPEAN COMMISSION

Brussels, 5 April 2013

Review of the MSDI work programme in relation
with EC - IHO cooperation

Ellen Vos

Vice Chair MSDIWG

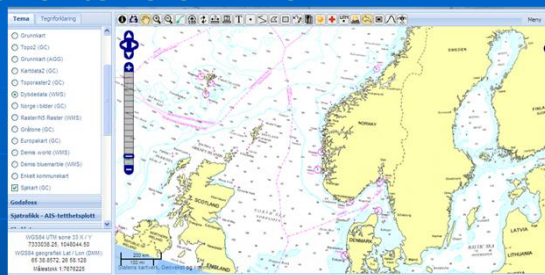


Hydrography supports :

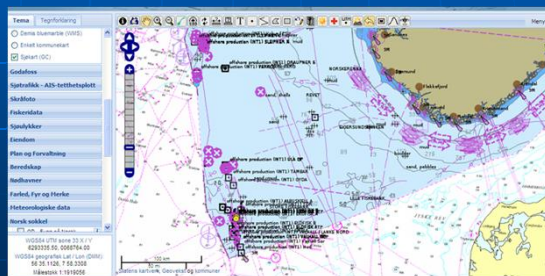
- Safety of navigation
- Protection of the marine environment
- National infrastructure development
- Coastal zone management
- Marine exploration
- Resource exploitation – minerals, fishing, energy
- Maritime boundary delimitation (UNCLOS, others)
- Maritime defence and security
- Disaster prevention and response

Hydrographic data and its role in MSDI

- Raster charts as background map



- ENC - S57 data as additional layer



- Hydrographic data sets

Maritime Spatial Data Infrastructure (MSDI)

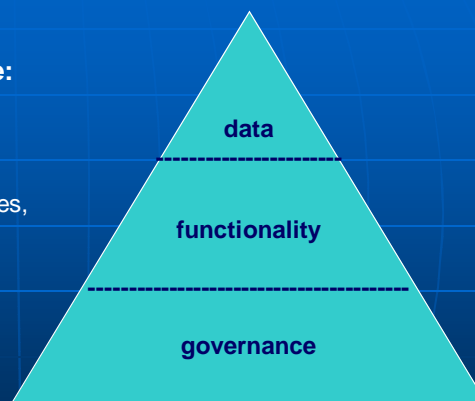
Geo Data of the Sea

Components of an infrastructure:

DATA - metadata, datasets

FUNCTIONALITY - spatial data services, web services and other technology

GOVERNANCE - Agreements and Organisation – rights and access



The value chain

A value chain describes the activities that adds value to the products produced by an organisation

An example of a value chain - based on the definition of a spatial data infrastructure – can be defined by the following activities:



IHO - MARINE SPATIAL DATA INFRASTRUCTURE WORKING GROUP (MSDIWG)

Objectives of the IHO MSDIWG:

Identify the Hydrographic Community inputs to National Spatial Data Infrastructures (NSDI).

- Monitor national and international SDI activities
- Promote the use of IHO standards and member state marine data in SDI activities.
- Liaise, as appropriate, with other relevant technical bodies
- Propose any Technical and/or Administrative Resolutions that may be required to reflect IHO involvement in the support of SDI.
- Identify actions and procedures that the IHO might take to contribute to the development of Spatial Data Infrastructure (SDI) and / or MSDI in support of Member States.

The screenshot shows the IHO website interface for the MSDIWG. It includes a navigation menu at the top with options like Home, Letters & Documents, Standards & Publications, Committees & WGs, Capacity Building, IHO & IHOs, Meetings, External Stakeholder Liaison, and IHO Site. The main content area is titled 'MARINE SPATIAL DATA INFRASTRUCTURE WORKING GROUP (MSDIWG)' and provides information in both English and French. Key details include the Chair (Mr. Jens Peter HANSEN, Denmark), Vice-Chair (vacant), and Secretary (vacant). The objectives are listed in both languages, focusing on identifying hydrographic community inputs to NSDIs and promoting IHO standards. The meeting schedule is also provided, indicating that the group meets by correspondence and aims to meet at least once every two years.

The IHO MSDIWG Work plan 2013 - 2018:

Initiative 1:

MSDI - Review of progress across 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

Terms of Reference for the Baltic Sea Marine Spatial Data Infrastructure (MSDI) Working Group (BSMSDIWG)

(Approved by the BSHC 15th Conference 21 - 23 September 2010)

With referencing to:

- *IHO Resolution 5 - 2009 on MSDI policy, adopted by the 4th Extraordinary International Hydrographic Conference in June 2009*
- *1st HSSC Meeting (Singapore, October 2009)*
- *Marine Spatial Data Infrastructure Working Group (MSDIWG)*
- *Guidance for Hydrographic Offices IHO Publication C-17 - Edition 1.0*
- *EU INSPIRE Directive and respective national contributions of the MS*

The BSHC at its 15th Conference recognised the need to initiate a study of MSDI in the Baltic Sea in order to identify areas where maritime SDI implementation is underway and where problems can be foreseen and how the Baltic member states see the future development of MSDI in the region.

Therefore the BSHC 15th Conference established the BSMSDIWG with the task to study MSDI in the Baltic Sea.

What to be done by the BSMSDIWG?

- Identify and analyse the current status of individual countries' MSDI implementation
- Consider MSDI policies, e.g. e-navigation, ICZM, INSPIRE, EU Integrated Maritime Strategy, the Marine Strategy Framework and EU Strategy for the Baltic Sea Region
- Analyse how maritime authorities can contribute their spatial information and the necessary updates, so information can easily be collated with other information to generate a current overview of the region.
- Address how BSHC can benefit from a regional approach to MSDI in the future.
- Monitoring MSDI and marine-related initiatives, as well as more general geospatial developments with relevance for the Baltic Sea.
- To present an annual report to the BSHC. This report should include a description of the current status, recommendations on how to proceed with MSDI implementation and, if deemed necessary, an action plan with specified time schedule for future BSHC MSDI actions.



Danish Ministry
of the Environment
Danish Geodata Agency

BSMSDIWG workshop in Copenhagen

Invitation letter send to all BSHC Members June 22, 2013

Appendix A: Workshop schedule

Appendix B: List of participants for the BSMSDIWG

Appendix C:

A questionnaire about national use of data that is hoped to be filled by the participating countries prior to the workshop

Appendix D:

Terms Of Reference for the BSMSDIWG


Appendix E:

The proposal for a directive of the European Parliament and of the Council establishing a framework for maritime spatial planning and integrated coastal management




Danish Ministry
of the Environment
Danish Geodata Agency

Draft Workshop Schedule day one BSHC MSDIWG2			
Day One: September 24, 2013			
Theme	Time	Subject	Responsible
Welcome	1100 - 1110	Welcome, introduction of participants and practical information	Host/Chair
Status	1110 - 1125	Introductions to the MSDI Workshop 2 – what is the aim of the workshop and the meeting, and what do we want to achieve? (Draft to be forwarded before the workshop)	GST
	1125 - 1200	The MSDI work of IHO (IHO MSDIWG - Status, review of the work plan circulated and responses to it)	Chair
Lunch	1230 - 1315		
Presentations	1315 - 1415	National presentation from members on status on SDI, MSDI and INSPIRE (Key successes and challenges on a country by country basis)	All
Break	1445 - 1500		
Presentations	1500 - 1530	Summing up with a GAP analysis approach, This should provide the starting point for Day 2 discussions	GST/all
	1530 - 1630	Presentation of the proposal for a directive of the European Parliament and of the Council establishing a framework for maritime spatial planning and integrated coastal management, this should also be discussed in relation to the other big EC drivers e.g. MSFD and Maritime strategy.	GST
	1630 - 1645	Discussion about the proposal from a Baltic perspective	All
Status and how to proceed	1645 - 1655	Summing up the challenges for the future	GST
	1655 - 1700	Evaluation and preparations for the second day	Chair
Dinner	1900 - 2200	Dinner	GST

 Danish Ministry of the Environment
Danish Geodata Agency

Draft Workshop Schedule Day Two BSHC MSDIWG2			
Day Two: September 25, 2013			
Theme	Time	Subject	Responsible
Welcome	0900 - 0910	Welcome and the conclusions from Day One	Host/chair
Status	0920 - 1020	Terms of reference for the BSHC MSDI WG (see below)	Chair
		Setting goals for this meeting's results	Chair/All
Break	1020 - 1035		
Presentations	1035 - 1230	National presentation from members on national use of datasets	All
		Summing up on the use of datasets	GST
Lunch	1230 - 1315		
Status and how to proceed	1315 - 1500	Identifying the Baltic region's challenges for the future related to national and regional MSDI including the proposal for a directive of the European Parliament and of the Council establishing a framework for maritime spatial planning and integrated coastal management.	All
		How to proceed and creation of work plan	All
		Status report to BSHC	Chair
Break	1500 - 1515		
Next meeting	1515 - 1555	Next meeting	All
		Evaluation	All
		Any other business	All
Closing	1600	Closing of the workshop	Chair

 Danish Ministry of the Environment
Danish Geodata Agency

Conclusions and Recommended Actions

- 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.
- A MSDI ensures that relevant maritime authorities can contribute their spatial information and related updates, and that this information can easily be collated with other information to generate a current, overall picture.
- As coordinated maritime spatial planning also gains increased focus at the EU level, not least through the Integrated Maritime Strategy and the Marine Strategy Framework, the needs for better integration of maritime data are becoming increasingly evident.

BSHCMSDIWG work items:

- Identifying relevant data that could be integrated into MSDI
- Creating a conceptual model and definition of MSDI for the region
- Investigating the possibility for establishing a BSHC metadata database based on open-source, INSPIRE-compliant and ISO-compliant technology
- Reviewing existing metadata catalogues and possibly adjusting to marine-related requirements

As seen from a HO perspective, the MS now have a direct possibility to actively participate in the development of a well functioning MSDI within the hydrographic domain and its surroundings with the possibility to benefit from a national and a regional approach.

The IHO MSDIWG and the Baltic MSDIWG are, in this perspective, seen as vital WG. Together with the RHC the MSDIWG can function as a discussion forum where practical solutions can be tested and pilot projects can be initiated.

The BSHC 18th Conference is invited to discuss the implication of MSDI from a HO perspective and how MS can benefit from a regional approach.

The issues and conclusions from the discussion are intended to be used as background material at the forthcoming Baltic MSDI meeting.

Actions required from the BSHC 18th Conference:

The BSHC 18th Conference is requested to consider this report and to take appropriate actions.

The MS of the BSHC 18th Conference is invited to indicate if they intend to participate the BSHC MSDIWG work shop.