NHC 57th meeting

Agenda item 12.1

April 15-17, 2013

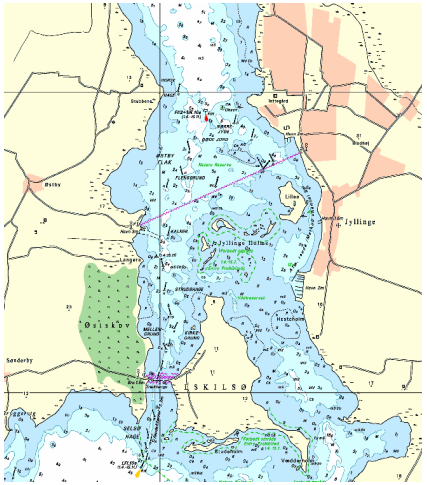
Sweden

IHO Marine Spatial Data Infrastructure Working Group (MSDIWG)

Danish Ministry
of the Environment
Danish Geodata Agency

Traditional approach to Hydrographic data

- One primary user, the mariner
- The primary products:
  - Paper chart
  - ENC - S57 data
  - Publications
  - Updates of products
- SOLAS (ECDIS - ENC)
- IHO:
  - standardisation
  - harmonisation
  - recommendations



SOLAS:

Chapter V regulation 19 2.1.4

Nautical charts and nautical publications to plan and display the ship's route for the intended voyage and to plot and monitor positions throughout the voyage; an Electronic Chart Display and Information System (ECDIS) may be accepted as meeting the chart carriage requirements of this subparagraph;

Chapter V regulation 27

Nautical charts and nautical publications, such as sailing directions, *lists of lights*, notices to mariners, *tide tables* and all other nautical publications necessary for the intended voyage, shall be adequate and up to date.

Expectations for development within the marine/maritime field:

- Increased activity with multiple uses
- Multiple stakeholders and users with demands for the same area
- Major external impact from “new” organisations e.g. EU:
  - INSPIRE Directive
  - Marine Strategy
  - Maritime Spatial Planning
- Greater user involvement, including the possibility for citizens to track their “case”

- Increased demands for coordination and planning within the maritime area
- Increased demands for coordination of activities on land
- Increased demands for coordination with neighbouring countries

- **Not doing anything will not be an option**

MSDI

Geo Data of the Sea

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

EUROPEAN
COMMISSION

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}

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: Environmental, social and economic data collected according to the provisions of Union legislation pertaining to the activities referred to in Articles 7 and 8;
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.

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-sectoral 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:*

    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.*

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.

International Hydrographic Organization

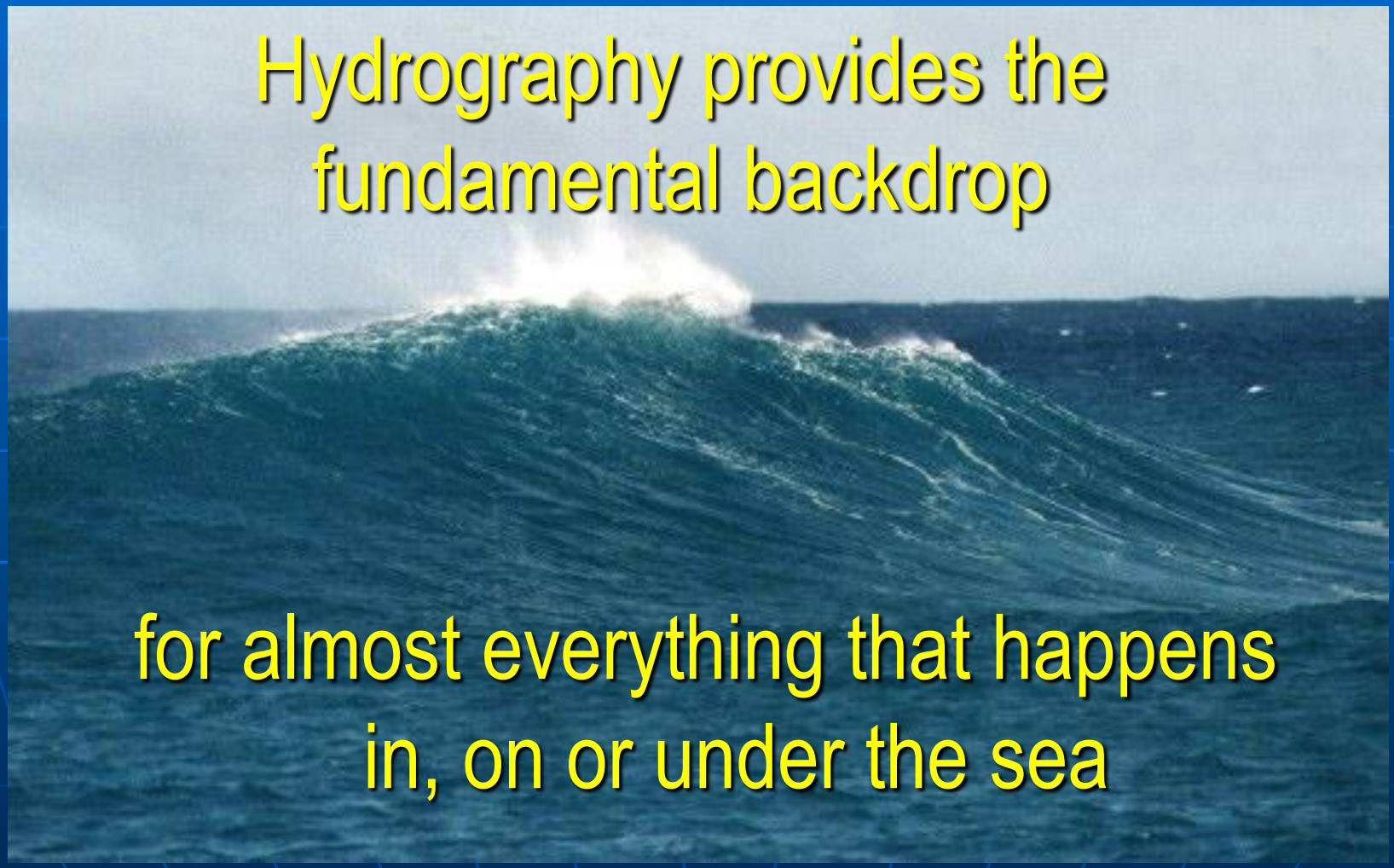
MEETING BETWEEN IHO AND EUROPEAN COMMISSION

Brussels, 5 April 2013

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

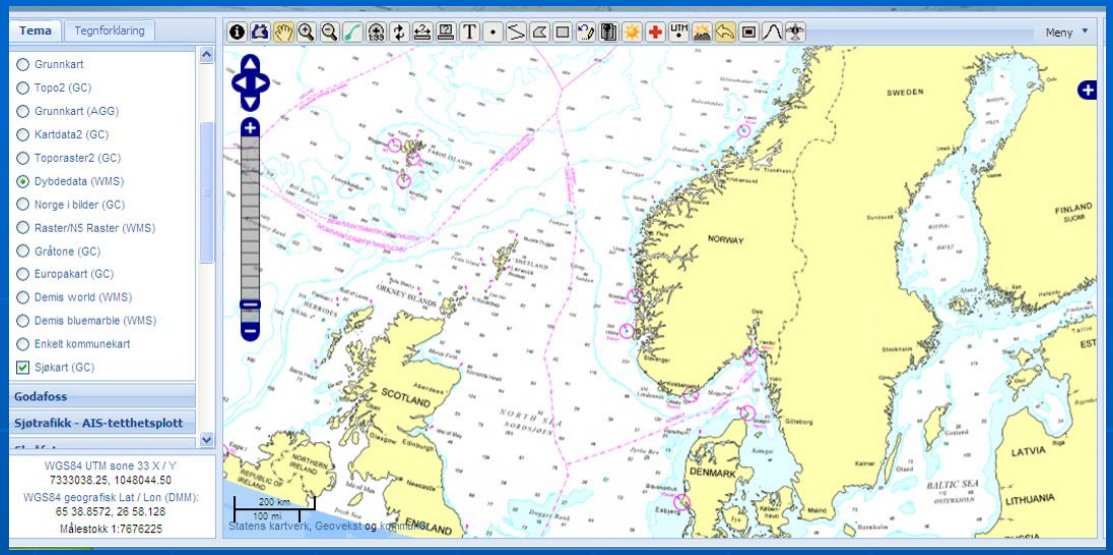
Ellen Vos

Vice Chair MSDIWG

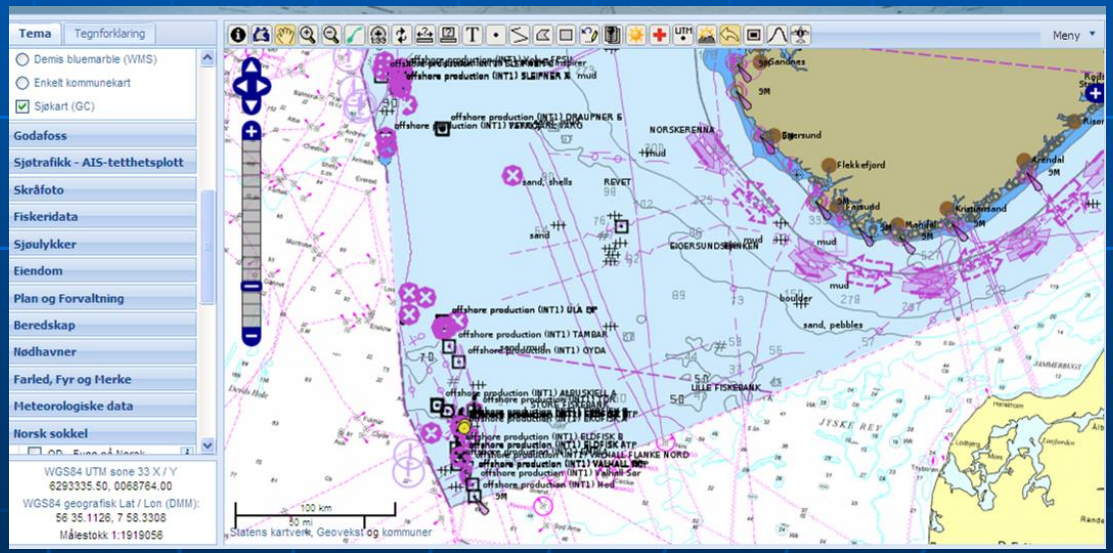

Hydrography provides the fundamental backdrop
for almost everything that happens in, on or under the sea

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)

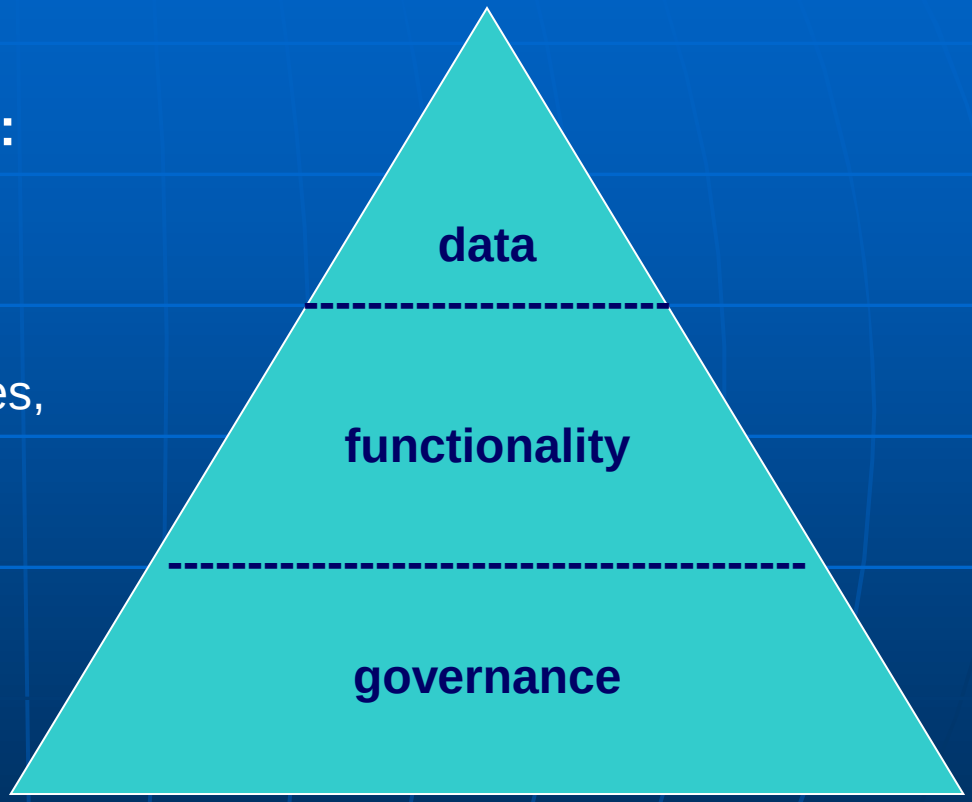
Geo Data of the Sea

Components of an infrastructure:

DATA - metadata, datasets

FUNCTIONALITY - spatial data services, web services and other technology

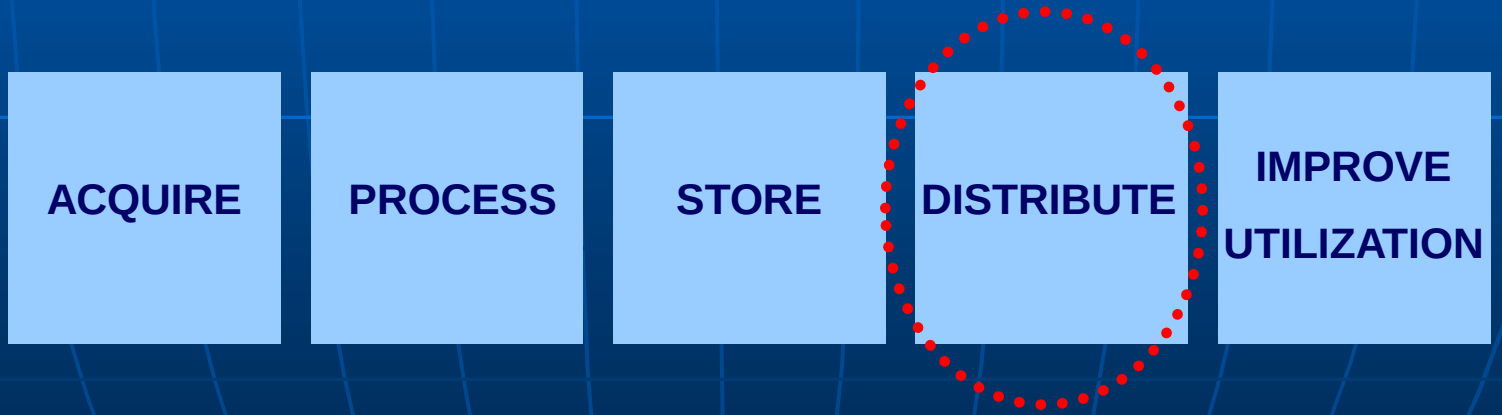
GOVERNANCE - Agreements and Organisation – rights and access



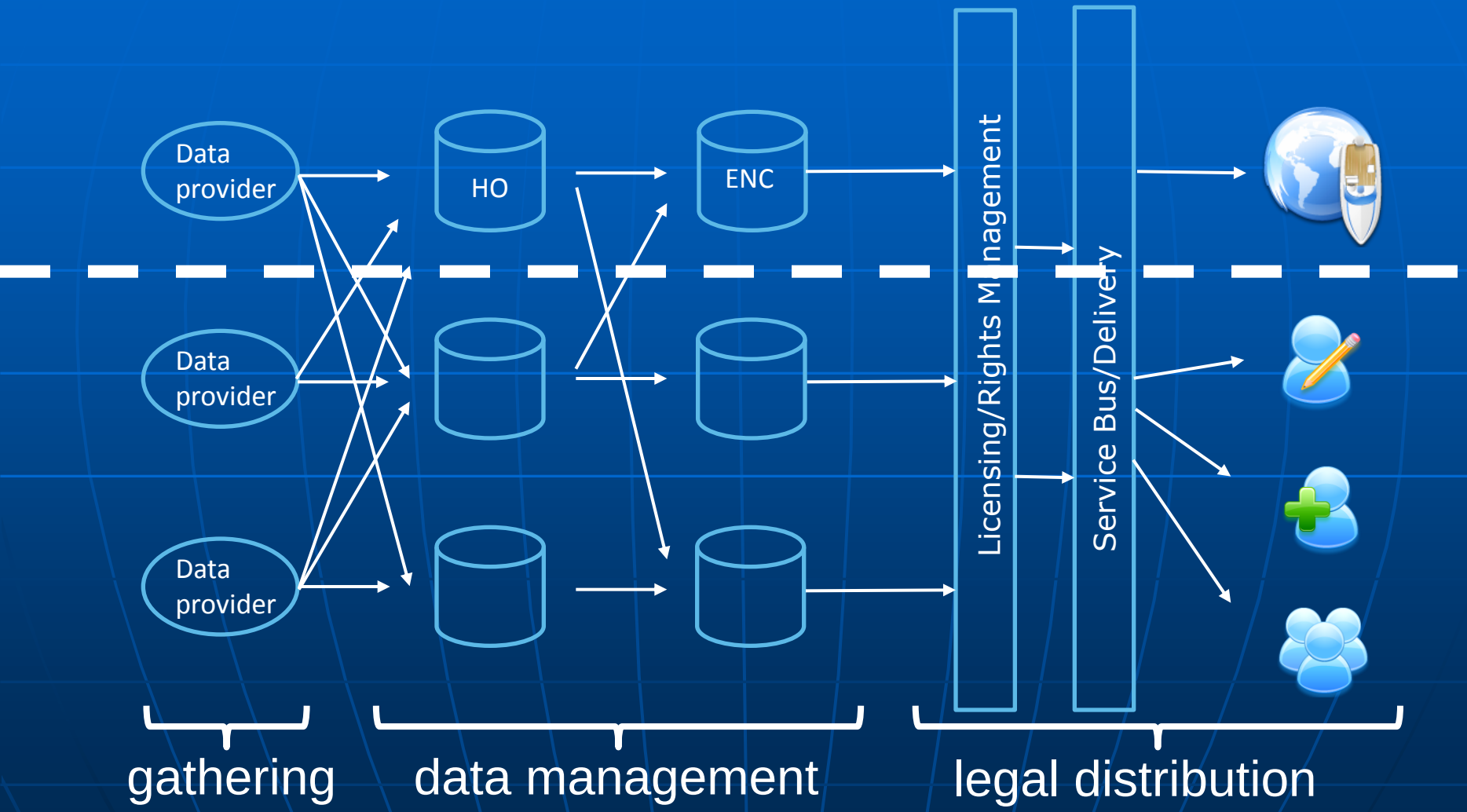
The value chain

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

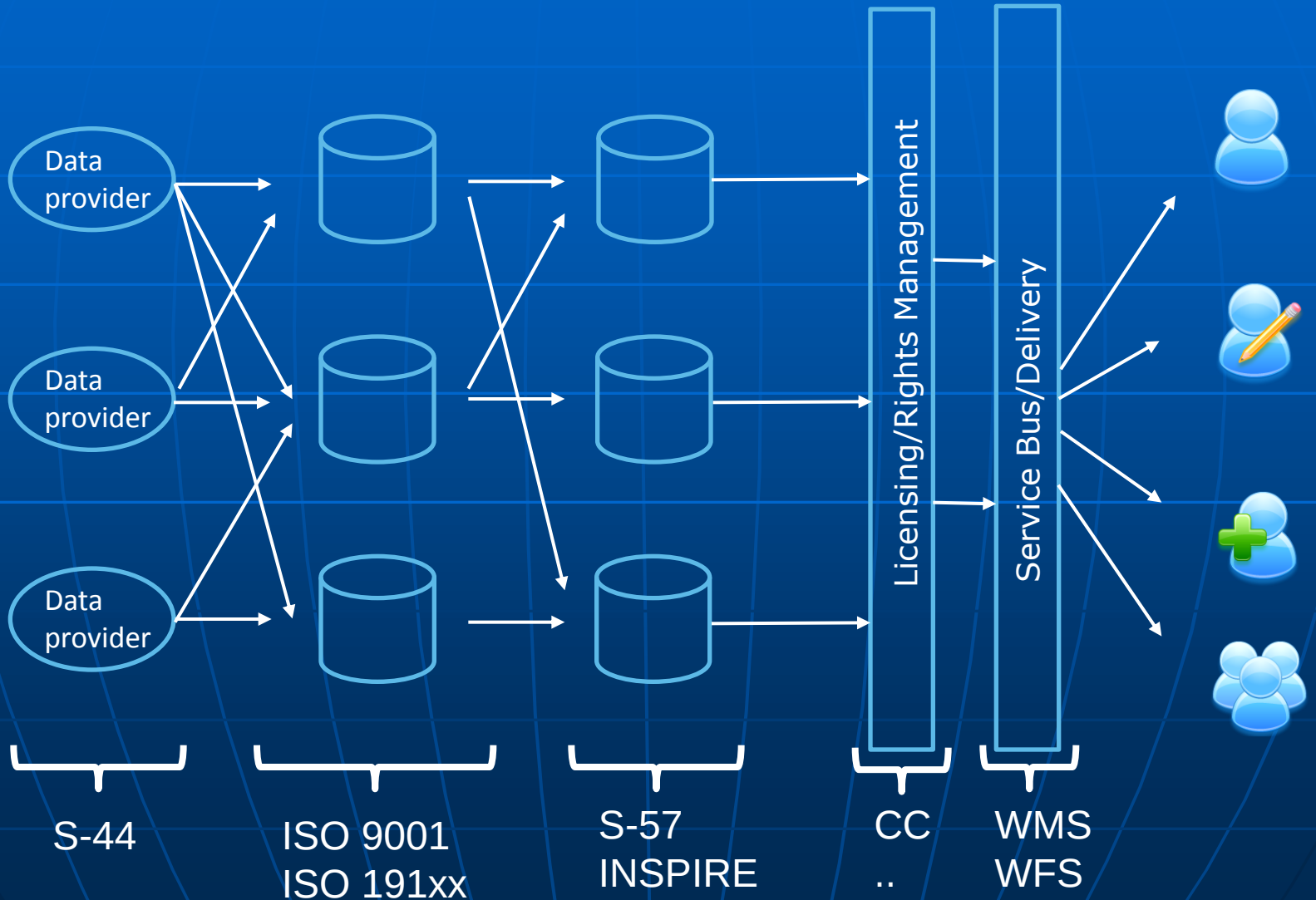
An example of a value chain - based on the definition of a spatial data infrastructure – can be defined by the following activities:



HO today: Safety of Navigation *and other use*



MSDI – Standards



IHO - MARINE SPATIAL DATA INFRASTRUCTURE WORKING GROUP (MSDIWG)

Objectives of the IHO MSDIWG:

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

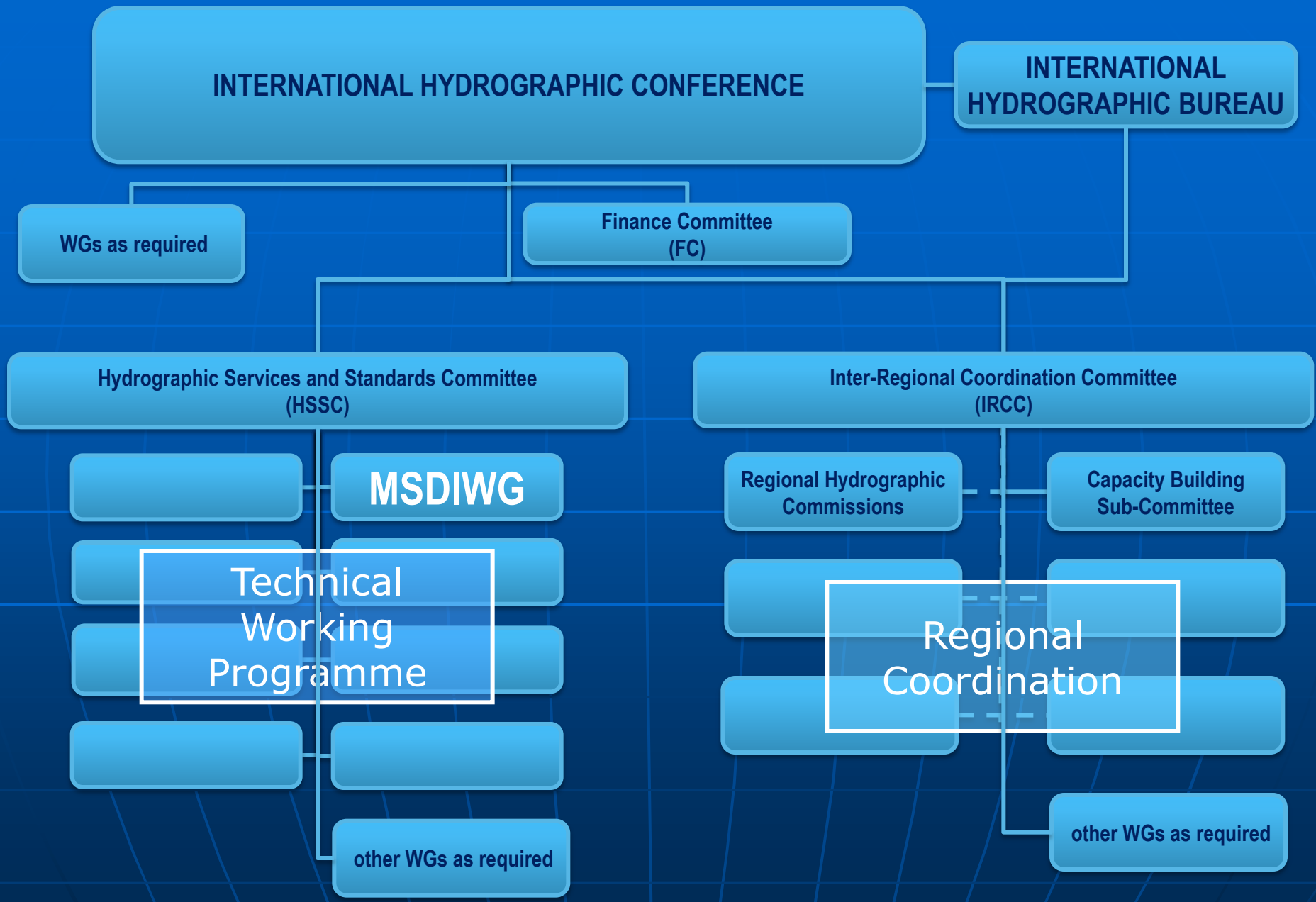
- Monitor national and international SDI activities

- 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.


INTERNATIONAL HYDROGRAPHIC CONFERENCE
INTERNATIONAL HYDROGRAPHIC BUREAU
WGs as required
Finance Committee (FC)
Hydrographic Services and Standards Committee (HSSC)
Inter-Regional Coordination Committee (IRCC)
MSDIWG
Technical Working Programme
Regional Hydrographic Commissions
Capacity Building Sub-Committee
Regional Coordination
other WGs as required
other WGs as required

European dimension of MSDI (in blue)

EU Members	NHC	BSHC	NSHC	MBSHC	EAtHC	ARHC
Austria						
Belgium			XXX			
Bulgaria						
Cyprus				XXX		
Czech Republic						
Denmark	XXX	XXX	XXX			XXX
Estonia		XXX				
Finland	XXX	XXX				X
France			XXX	XXX	XXX	
Germany		XXX	XXX			
Greece				XXX		
Hungary						
Ireland			XXX			
Italy				XXX		
Latvia		XXX				
Lithuania		XX				
Luxembourg						
Malta				XX		
Netherlands			XXX			
Poland		XXX				
Portugal					XXX	
Romania				XXX		
Slovakia						
Slovenia				XXX		
Spain				XXX	XXX	
Sweden	XXX	XXX	XXX			
United Kingdom			XXX	XX	X	
Iceland	XXX		XXX			X
Liechtenstein						
Norway	XXX		XXX			XXX

XXX: Full member
XX: Associate member
X: Observer

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.

Conclusions and Recommended Actions

• 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 is, in this perspective, seen as a vital WG. Together with RHC the MSDIWG can function as a discussion forum where practical solutions can be tested and pilot projected can be initiated.

• The NHC 57th Conference is invited to discuss the implication of the EU proposal for a directive of the European Parliament and of the Council dealing with establishing a framework for maritime spatial planning and integrated coastal management from a HO perspective and how MS can benefit from a regional approach to the proposal including a national and regional approach to MSDI.

• The MS that are not participating in the IHO MSDIWG are encouraged to consider participation in the planned MSDIWG5 that is planned to take place in the beginning of 2014 as a back-to-back arrangement with an MSDI conference.

Actions required from the NHC 57th Conference:

The NHC 57th Conference is requested to consider this report and to take appropriate actions.