

Implementation of Policy  
European Union Hydrographic Offices  
towards  
EMODnet

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### EMODNET objectives

- > EU (DG MARE) : service contracts for creating pilot components of EMODNET
- > EMODNET : To migrate fragmented and inaccessible marine data into interoperable, continuous and publicly available data streams for complete maritime basins
- > Pilot components : To define processes, best technology and approximate costs of a final EMODNET
- > Hydrography portal : one of the portals developed as part of the preparatory actions

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### DG Mare Vision for 2020 (quoted 10 October 2012)

- A seamless multi-resolution digital seabed map of European waters by 2020.
  - highest resolution possible in areas that have been surveyed;
  - free of restrictions on use;
  - topography, geology, habitats and ecosystems;
  - accompanied by timely information on
    - physical, chemical and biological state of the overlying water column
    - oceanographic forecasts;
  - together with a process that helps Member States maximise the potential of their marine observation programmes

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### EMODNET/Bathymetry overview

- > EMODNET-Hydrography :
  - > 7 partners (1 HO) – 2 associated partners
  - > Mid-2009 to Mid-2012
  - > Budget : 975 k€
- > EMODNET-Seabed Mapping :
  - > 10 partners (1 HO) – 3 associated partners (1 HO)
  - > Mid-2010 to Mid-2013
  - > Budget : 1.2 M€
- > EMODNET-Bathymetry :
  - > 16 partners (5 HO) – 8 associated partners (3 HO)
  - > Mid-2013 to Mid-2016
  - > Budget : 2 M€

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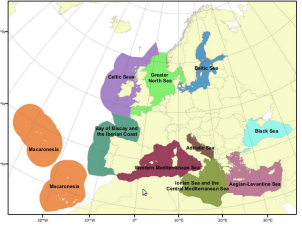
### EMODNET-Bathymetry : extra tasks

- > Extension of geographic coverage
- > Regional DTMs with resolution of 1/8 minute
- > Coastal DTMs with higher resolution where available

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### EMODNET-Bathymetry : partnership

- > 16 partners : MARIS (NL), IFREMER, SHOM (FR), NERC/NOCS (UK), GSI (IE), IHM (ES), IHPT, IPMA (PT), C ISMAR, OGS (IT), HCRM (GR), IO-BAS (BUL), BSH (GER), MI VH (BEL), UNEP-GRID Arend: (NO, int. Organization)
- > 8 associated partners including: GGSGC (NL), OceanWise (UK) HOs from Norway, Netherlands Denmark
- > 10 basins : +Black Sea +Norwegian Sea +Baltic Sea



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### IHB statement on IHO view on Emodnet

- 1/ The IHO considers the development of Emodnet as the best driver for Marine Knowledge 2020.
- 2/ The IHO is committed to support this programme in the long term
- 3/ The IHO will provide sustainable operational solutions with appropriate accuracy and updating mechanisms through current IHO regional structures and approaches
- 4/ The IHO strongly recommends the use of relevant international standards such as ISO, IHO and Inspire compatible standards within Emodnet



### draft budget 2014-2015 (quoted from DG Mare 19 February 2014)

	2014	2015
checkpoints (Atlantic, Arctic, Baltic, Black Sea)	€4,350,000	
coastal mapping	€1,330,000	
construction and distribution of high resolution digital terrain model		€15,000,000
Argo floats		€6,000,000
ingestion of data from research and private companies		€6,000,000
renewal of Secretariat		€520,000

- 2014 is almost fixed
- 2015 is still being negotiated



### DG Mare policy

EMODnet : flagship project in marine knowledge  
 -encourage Member States (HOs) to cooperate  
 -demonstrate that EMODnet gives better value for money than separate portals  
 Marine Knowledge 2020 Roadmap : SWD(2014) 149, 8 May 2014, quoted:

For the next phase of EMODnet, the aim will be to move from a low-resolution mapping to one where the resolution is as high as the underlying data allows. For instance multibeam surveys can deliver digital terrain models with a resolution of metres, compared to approximately 250 metres resolution for the current second phase of EMODnet

In order to maintain continuity, calls for tender should be issued in time for groups to start work in autumn 2016 on a third phase with the first multi-resolution demonstration digital map layers available in 2017. It will then be a question of maintenance and updating.



### Hydrographic Offices policy and assets

Which part of the process to be financed by EMODnet 3  
 Raw data – processed data – marine charts  
 -Digital Terrain Models

Restriction to free access

- royalties
- national safety
- depending on resolution

Valuable assets:

- experience in management of data from several ages and origins
- experience in quality control and quality assessment

Joint valuable assets:

- Regional Hydrographic Commissions
- joint planning of surveys



### Draft report from 31 North Sea HC, 25 June 2014

The Commission

acknowledges that EMODNET is an important element of the EU Commission as part of its Marine Knowledge 2020 strategy.

emphasizes the strategic importance for the national hydrographic service to stay not aloof from this development and led this task of bathymetric data management solely to commercial stakeholders.

confirms vital interest to respond to the announced tender as part of a consortium formed by the respective RHCs with assigned responsibilities to European waters.



### Draft report from of 31 North Sea HC, 25 June 2014

The Commission

proposes that the IHO-EU-Network-WG is approached to draft a concept for the composition of such Consortium.



### Draft report from of 31 North Sea HC, 25 June 2014

The Commission

suggests that such a Consortium should be formed on a sea basin approach,

assigns member states as regional coordinators within their region for the purpose of this Consortium,

is controlled by a roofing project management which coordinates procedural, financial and reporting matters, incorporates an experienced commercial project management provider – ideally familiarized with earlier EMODNET phases already.

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### Draft report from of 31 North Sea HC, 25 June 2014

The Commission

expects that the IHO-EU-Network-WG will succeed to designate a member state of one of the most active European RHCs as [Co-]leader of the Consortium to coordinate its establishment in cooperation with the commercial project management provider and to draft the response to the tender assisted by the regional coordinators if this necessity arises.

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### HOs roadmap to be designed

Study:

Sketch concept of operation (which roles to be played by IHO EU /RHC/Hos)

Resolution of DTM (data) to be released

Which part of the process (from data acquisition to DTM/marine charts to including in the "service contract")

...

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### Next step

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### 22nd Meeting of the Marine Observation and Data Expert Group (MODEG)

#### Day 1 - Start at 14:00 on Wednesday 1 October 2014

Perspectives on European marine data management from UNESCO's (IOC) and its International Oceanographic Data and Information Exchange (IODE) programme –  
The distribution of marine OpenData via distributed data networks and Web APIs. The example of ERDDAP, the message broker and data mediator from NOAA.  
Perspectives from the Dutch Dredging industry –

#### EMODnet Progress update phase II – Secretariat

Data needs to support Maritime Spatial Planning – TBD

Data needs for Quaternary/Prehistoric continental shelf underwater archaeology: setting objectives for the next steps

#### Day 2 - Start at 9:00 on Thursday 2 October 2014

Updates from the EMODnet-MSFD interactions – TBD

Overview of central EMODnet portal development and difficulties of retrieving data from thematic portals –

Feedback on EMODnet portals from user-survey –

Updates from the EMODnet sea-basin checkpoints, including outputs from oil spills forecast services

Updates from DG MARE

new EC marine data advisory group;

2014 calls for tenders – coastal mapping and new sea-basin checkpoints

Marine Knowledge 2020 – Roadmap

Date and venue of final MODEG Meeting (early 2015)

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