Preparatory Actions for European Marine Observation and Data Network

FIRST PROGRESS REPORT FOR THE PERIOD JUNE-JULY 2009

Service Contract No. "MARE/2008/03 - Lot 1 Hydrography – SI2.531515"

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1.   INTRODUCTION

EMODNET (European Marine Observation and Data Network) is a contribution to the EU Integrated Maritime Policy. Currently there are 5 Lots (pilots) under development. This report gives an overview of the activities undertaken for the Hydrography Lot during the first two months of the project (29th of May – 1st of August 2009). This period was mainly devoted to the project start-up.

The EMODNET Hydrography pilot has officially started 29th May 2009, so the first important contractual milestone will be 29th May 2010. At that date the proto-type EMODNET Hydrographic portal must be operational and serving out a number of hydrographic data products and metadata, describing the background data sets, that were used for the making of the data products. The data products will also be provided as data layers to the European Atlas of the Seas and to the European broad-scale seabed habitat mapping project.

2. PROGRESS REPORT AND ACTIONS

The first 2 months of the project were mainly devoted to the project start-up. Partners participated in two meetings:

- first EMODNET General Assembly, organised by EU in Brussels, 26th June 2009
- Kick-off meeting of the Hydrography Lot, organised in Bunnik – The Netherlands, 1st July 2009. This meeting was attended by all partners of the Hydrography Lot.

At the kick-off meeting the partners discussed the overall approach to the project and agreed on a number of actions to be undertaken in the coming months for further implementation of the project. The issues discussed and the agreed actions are given below.

- **Website, extranet and dissemination**

MARIS as coordinator has set-up a website at http://www.emodnet-hydrography.eu At present it only gives access to the **Extranet**, which gives partners an archive of all contract documents and project documents. Each partner has received an e-mail with his/her personal log-in details for the Extranet. Moreover MARIS has set up the **projectgroup@emodnet-hydrography.eu** mailing list, which includes all partners. Only included partners can write to this list, which then distributes their message to all partners.

Action: MARIS will ask permission from EU that we can publish about the project without each time written consent from the EU as included now in the EU contract articles.

Action: MARIS will prepare an abstract and leaflet about the EMODNET Hydrography pilot, that all partners can use for communication. Deadline: end August 2009.

The EU will prepare an EMODNET logo and housestyle. These will be ready around November 2009 and can then be used for further styling of the EMODNET Hydrography website .

- **Contractual arrangements**

MARIS is the contract partner for the EU. Therefore Dick M.A. Schaap has prepared a draft **Consortium Agreement**, that includes arrangements for a.o. the project partnership, the budget division, and the payment schedule.

Action: All partners will review the draft Consortium Agreement, which is available via the Extranet, and send comments and detailed proposals for modifications to dick@maris.nl before 21st July 2009. Dick M.A. Schaap will then prepare and distribute a second version before end July 2009.

- **Data products to be delivered**

Contractually the following geographical information system layers must be produced and provided to users:

- water depth in gridded form over whole of maritime basin on a grid of at least quarter a minute of longitude and latitude.
- water depth in vector form with isobaths at a scale of at least one to one million.
- depth profiles along tracklines
- multibeam surveys along tracklines
- coastlines
- underwater features – wrecks, seabed obstructions etc

It is accepted that the accuracy and precision of the gridded data will vary over the basins in question. No new data will be collected specifically for this project. The aim is to provide access to data from existing monitoring programmes. The data products and related metadata will be made freely available for all users without any restriction or registration. However for access to the background data the SeaDataNet data policy and CDI access mechanism will be applied. This includes respecting the data policies and access restrictions of the background data owners.

Action: IFREMER and NERC-NOCS will analyse the list of data products, to be delivered, and also taking into account the original tender will make together a proposal about the practical translation and specifications of the deliverables. E.g. this includes a specification of the overall to be applied gridsize, vertical datum (LAT?), chart datum (WGS'84?) and scale and source(s) of coastlines. It also includes the definition of possible pilot areas with higher resolution as demonstrators. Deadline: end August 2009

Action: IFREMER, NERC-NOCS and Atlis will prepare a proposal for the QA / QC method to be applied for making the hydrographic data products from the background data sets and how to indicate the quality / confidence levels of the data products. Deadline: mid September 2009

- **Geographic boundaries**

The hydrographic data will concern the following geographical regions:
- the Greater North Sea, including the Kattegat and stretches of water such as Fair Isle, Cromarty, Forth, Forties,Dover, Wight, and Portland. (taskleader Atlis)
- the English Channel and Celtic Seas. (taskleader NERC-NOCS)
- Western Mediterranean, the Ionian Sea and the Central Mediterranean Sea (taskleader IFREMER)

The boundaries of these regions are not clear yet. At the EMODNET kick-off it was agreed to follow the IHO 1953 boundaries of regions, but that does not fully solve it. Also other EMODNET pilots face the same problem.

Action: The taskleaders Atlis, NERC-NOCS and IFREMER will each prepare their understanding of the boundaries of their task regions. MARIS will then forward their proposal to the EU for harmonisation and confirmation. Deadline: mid August 2009

- **Available data sets**

The making of the hydrographic data products will require as input background hydrographic data sets from Hydrographic Offices, and from the partner institutes. The Hydrographic Offices of Germany, Norway, Denmark, Netherlands and Belgium have agreed to provide data sets. Partly these have to be purchased, partly these will be provided for free.

Action: The regional taskmanagers will prepare an inventory of the data sets, that they already manage and that can be used for the DTM's production. IFREMER together with IEO and SHOM for the Mediterranean. NERC-NOCS together with GSI, IFREMER and SHOM for the Channel region and Atlis together with NERC-NOCS for the North Sea region. Deadline: end August 2009

Action: Atlis will prepare a shopping list from the catalogues of these HO's and will assess the costs of the purchase. Deadline: end August 2009. This list and assessment will be discussed with all partners, before MARIS as budget keeper will undertake the actual purchase. Note: it is advised also to approach the UK HO for the UK North Sea area.

- **Metadata**

The HO's are somewhat worried about EMODNET and the pilot. At the same time we are not going to deliver high resolution data products. Also we will only use their input for making the data products, while we will refer to the HO's for access to the used background data.

A possible problem is the metadata. It is agreed that we will apply the SeaDataNet Common Data Index (CDI) metadata profile, which is based upon the ISO 19115 standard. Work is underway in SeaDataNet to include in the CDI format also a GML object, so that the location of individual surveys can be described. With this extension and using SeaDataNet tools it should not be difficult to prepare CDI entries for each background survey data set, that is being used for the making of the data products. This applies well for the partner datasets. However the HO's possibly will deliver us already aggregated datasets (from their internal DTM) in stead of individual surveys.

Action: Atlis and MARIS will consider how we can convince HO's to deliver us also metadata about the underlying surveys of the aggregated datasets, that they will deliver to us. Or to seek an alternative. This includes a comparison between CDI and S100 and to interest the HO's in the EMODNET pilot as a testbed for S100 and INSPIRE compliance. Deadline: mid September 2009

- **GEBCO involvement**

GEBCO data sets might be used for completing areas with little or no datasets coverage.

Action: Dick M.A. Schaap will participate in the coming GEBCO Conference in September 2009 in Brest – France and will present the EMODNET pilot project to inform GEBCO members (incl HO's) and to seek good cooperation. Eric Moussat will inform the GEBCO organiser of Dick's participation and give Dick the necessary information about the Conference. Deadline: a.s.a.p.

- **Budget for data acquisition**

The budget for purchasing datasets from external sources amounts 110.000 Euro. A major part might be spent on the HO's. But it is agreed that we also reserve a part – say 30.000 Euro – for the Mediterranean taskleader IFREMER to use as incentive money for getting additional data for the Mediterranean regions.

Action: IFREMER will explore options for getting additional datasets from external sources in the Mediterranean region and will assess / negotiate the required budget. The outcome will be discussed with all partners, before actual spending will take place. Deadline: end September 2009.

- **Data flow and specification of formats**

The background data sets will be used to create DTM's by respectively IFREMER, Atlis and NERC-NOCS for the 3 regions, that they lead. Therafter all 3 DTM's will be loaded and integrated into the portal DTM, operated by Atlis.

Action: Atlis will prepare and distribute to all partners specifications for the exchange of the regional DTM's into the central portal DTM. Deadline: end August 2009

Action: MARIS will prepare and distribute to all partners specifications for the production and exchange of the Common Data Index metadata files. Deadline: end August 2009

The EMODNET Hydrography portal will provide various services and functionalities to users for viewing and downloading the hydrographic data products. The central integrated DTM and the central integrated CDI metadatabase will provide the basis databases, on which the user applications will be provided.

- **Portal – user interface - functionalities**

Atlis gave a presentation of its SENS portal functionalities. At present the application and user interface are focused upon hydrographic survey organizations, that are managing their individual surveys ands then want to aggregate selected surveys into data products. For EMODNET we will turn this around: the data products and their catalogue (layers + product generation description) are central to users. Therafter users can retrieve metadata about the surveys, that have been used for these data products as CDI entries. The metadata then includes info about the options for retrieving those individual datasets, by using the SeaDataNet CDI shopping mechanism.

Action: Atlis and MARIS together will prepare functional specifications for the portal applications and required customization cq adaption, thereby seeking crossfertilisation between SENS and SeaDataNet. Deadline: end September 2009.

- **New EU Call for Tender**

The EU is planning a new Call early July 2009.
Action: MARIS will distribute the new Call to all partners, once published.

Action: All partners will evaluate the new Call and inform MARIS whether they see perspective for tendering as a complementary project and which additional partners they would perceive to be required. Deadline: mid August 2009.

- **Sustained operation**

The project has a duration of 3 years. A sustained operation is foreseen. This will be subject of the evaluation and analysis workpackage, that will include a businessplan for further operation.