

**Offer for Work on:**

**Interim Evaluation of European  
Marine Observation and Data Network**

For the European Commission

Presented by:

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## Introduction

This proposal presents the approach that MRAG Ltd (the contractor) would use to undertake an interim evaluation of the European Marine Observation and Data Network (EMODNET) for the European Commission. This would be completed in accordance with the terms of reference within the following timeframe:

Task	T+ 1 month	T+ 2 month	T+ 3 month	T+ 4 month	T+ 5 month	T+ 6 month
Inception meeting in Brussels						
Task 1						
Task 2						
Task 3 (Legal)						
Draft final report						
Presentation						
Final report						

Please refer to the last section for details of the budget for completion of the project.

## Understanding of the ToR

The terms of reference call for an assessment of how well the portals have overcome legal obstacles to data sharing identified in “legal aspects of marine environmental data”. For the purposes of this proposal it is understood that the term “data sharing” should refer to the use and re-use of marine environmental data. As noted in “legal aspects of marine environmental data”, marine environmental data of the type that can be accessed through the portals is subject to two separate bodies of law with distinct and sometimes opposing objectives.

One body of law seeks to promote access to environmental data and the re-use of data held by public sector bodies including environmental data. These include the Access to Environmental Information Directive<sup>1</sup> and the PSI Directive<sup>2</sup>. The other body of law seeks to encourage innovation by recognising the rights of creators of intellectual property through the grant of intellectual property rights (IPR). Put another way the first body of law seeks to promote flows of environmental data, while the second body of law may have the effect of constraining such flows.

The focus of this proposal is on the second body of law, in other words the law relating to IPR. This is because the instruments that promote *inter alia* access to environmental information and the re-use of public sector information operate in parallel to IPR, at both EC and Member State level. More specifically these instruments cross refer to IPR and take account of the IPR regime but without fundamentally altering it.

The IPR regime is relevant because the notion of “intellectual property” is sufficiently broad to include data of the type that can be accessed through the portals. Consequently copyright restrictions regarding further reproduction and distribution may still apply to such data.

<sup>1</sup> Directive 2003/4/EC of 28 January 2003 on public access to environmental information and repealing Council Directive 90/313/EEC.

<sup>2</sup> Directive 2003/98/EC of 17 November 2003 on the re-use of public sector information.

Moreover databases, which term is broadly defined, can also benefit from copyright protection as well as a specific *sui generis* database right<sup>3</sup>.

An owner of IPR, like the owner of any other type of asset, is basically free to determine whether or not the data may be used or re-used by a third party and, if so, the conditions that may govern such use or re-use.<sup>4</sup> The overall effect is that the right to use and re-use marine environmental data of the type that can be accessed through the portals will depend on the particular data policy of the owner of the data (or more precisely the owner of IPR in the data) who, to further complicate matters, may be a person other than the actual holder of the data. Where a data holder decides to make data available to third parties, their relevant data policies will generally recommend or impose the use of a formal contractual licence agreement to control the release and further use of the data. A licence to use data, like many other types of contract, can be created in a number of different ways ranging from a standard contract to which applicants can adhere (e.g. a click-licence for data that are made accessible on the internet), or may be (to a certain extent) open for negotiation on an individual basis. Such licences invariably contain conditions relating to such matters as liability, the proper use of the data, the purposes for which the data may be used (e.g. that the data may not be used for commercial purposes), confidentiality and the data owner's IPR in the data. Moreover and particularly but not exclusively in the case of data to be used for commercial purposes, licences may address the issue of payment for the use of the data.

In terms of the portals, therefore, the basic task is to assess how the approach of the portals to the IPR of the owners of the data to which they provide access in terms of the use and re-use of those data.

## Approach

There are three tasks to be performed under the Terms of Reference. The first task is to conduct an assessment of the user friendliness of each portal, and then the contractor will have to gauge how reusable the data that is available through the portal is. Finally the contractor will determine how far the portals have overcome legal obstacles of data sharing. The approach outlined below will be applied and replicated for each of the five portals as identified in the TOR: hydrography; geology; chemistry; biology; and physical habitats.

### Task 3.1

The first task will be to determine the user friendliness of the portal. This will begin with an examination of both the content and the functionality of the portals. The contractor will record their experiences and explain what aspects of the portal provided a good understanding of essential components, inclusive of:

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<sup>3</sup> European Community Directive 96/9/EC of 11 March 1996 on the legal protection of databases.

<sup>4</sup> Public sector data holders must ensure that their data policies are consistent with the PSI Directive in terms of the re-use but only in those cases where those policies permit re-use: the directive does not make re-use mandatory.

## 1. The scope of EMODNET

- This will be evaluated by examining the main text content in the portal and attempting to complete basic tasks such as searching, catalogue, and viewing data on GIS interface.

## 2. The data coverage

- Analysis will attempt to determine if there are any temporal or spatial gaps in the data available through the portal. In this component, it will also be important to determine: what proportion of data is freely available? What requires registration? And, what is only available under licence?

## 3. The Data Quality

- The contractor will determine to what extent the metadata is complete in terms of the data that is held in the portal. It will also assess if there is information on the quality of the data and how the information on quality is expressed?

## 4. How to download data

- The contractor will examine the speed that search results are returned and determine if the information returned by the search engine is accurate. When the required data has then been identified, the speed at which it can then be downloaded will be documented. If any registration or licences are required in the portal, then further assessment of the registration/licensing process will be conducted.
- For each of the portals a matrix of the formats that the data is available in will be created. The final report will include a list of the software that can be used by each format and whether it is a propriety format.

## 5. How to provide feedback

- The contractor will document the level of ease at which there is to provide feedback on the portal. It will be documented if feedback can be given on specific products or if it is only possible to leave general feedback. The assessor will also record if your feedback is visible to other users.

After the assessment of the portal has been completed, we would attempt to gather stakeholder opinions of the portals. This would begin by conducting stakeholder analysis in order to determine the different types of stakeholder for each portal and would then build up a detailed contact register.

With the development of the contact list, it will be possible to gain feedback from portal users by developing a user satisfaction questionnaire and put up online. Some of these questions could include (but not exclusively or exhaustively) as an example:

- What was your reason to go to the portal? Did you have a specific task to do? Did the portal help you complete the task?

- What was your first impression of the portal?
- How intuitive was the portal, did you need to follow instructions? If you used instructions in the portal- were they clear?
- Could you find the information/data you needed quickly/easily? Were there gaps in the information that you were provided? Was the data in a format that you needed?
- Did you have any problems using the portal? Did you leave any feedback? Did you receive any response to this feedback?

### **Task 3.2**

We would complete the task required in 3.2 for each of the portals, for each task we would document experience using the analysis questions of task 3.1. as a starting point.

We would then document any further steps that we need to do to complete the task such as processing/transformations of data, describe any extra tools that we need to uses, and indicate if they are propriety, how easy they are to uses themselves.

### **Task 3.3**

In terms of the methodology for this task the approach will involve a combination of desk study and telephone interviews with the coordinators of the projects behind the portals. Under the first heading it will be necessary to carefully review each of the portals in terms of their respective approaches to IPR (both explicit and implicit) as well as the progress reports. A preliminary perusal of the portals reveals a number of references to IPR in terms of substance and approach. For example the hydrography portal makes use of the online shopping mechanism of the SeaDataNet CDI service. On the hand, the approach of the biology portal is slightly different in terms of references to IPR.

Finally having formed a clear picture of the respective approaches of the different portals it will be necessary to undertake a legal analysis and to document the main findings.





# Terms of Reference for Study on Interim Evaluation of European Marine Observation and Data Network

## 1. OBJECTIVES

The objective is to provide an interim evaluation of the work done under the marine knowledge chapter of the preparatory actions of the EU's integrated maritime policy. In particular the contractor will:

1. assess the user-friendliness of the portals
2. gauge the re-usability of the data
3. determine how well the portals have overcome the legal obstacles to data sharing identified in "legal aspects of marine environmental data"<sup>1</sup>

## 2. BACKGROUND – PROJECTS TO BE ASSESSED

In 2008 and 2009 a set of projects were launched following calls for tender, MARE/2008/03 (4 lots) and MARE/2008/07 (1 lot), whose objectives were to assemble fragmented and inaccessible marine data into interoperable, contiguous and publicly available data streams for complete maritime basins. The specific objectives of each lot were to:

1. collate existing data from public and private organisations relating to the state of maritime basins; processing them into interoperable formats which includes agreed standards, common baselines or reference conditions; assessing their accuracy and precision and assembling them into common datasets;
2. develop, test, operate and maintain a portal allowing public access and viewing of these data and a link to WISE-marine
3. monitor and report on the effectiveness of the system in meeting the needs of users in terms of ease of use, quality of information and fitness for purpose of the products delivered;

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<sup>1</sup> "Legal Aspects Of Marine Environmental Data" study under Framework Service Contract, No. FISH/2006/09 – LOT2

4. analyse what further steps need to be taken to improve the accuracy, precision, coverage and ease of use of the data, including a scheme for sustainable quality assurance and control of the data delivered to the system, both in this preparatory action and in the future larger system.
5. analyse the necessary requirements to maintain the components built up in each lot as a sustainable infrastructure
6. keep the portal operational afterwards and be prepared to transfer to the Commission.

Full details of all the projects including contracts, presentations and progress reports are included on the EU's maritime forum<sup>2</sup>:

### **3. TASKS**

#### **3.1. User-friendliness of the portal**

The contractor should determine how well each portal - hydrography, geology, chemistry, biology, physical habitats - delivers to the users a good understanding of

1. the scope of the European Marine Observation and Data Network
2. the data coverage of the portal
3. the quality of data in the portal
4. how to download data from the portal
5. how to provide feedback

The results of the analysis will be summarised and included in the final report.

#### **3.2. Re-usability of data**

The contractor should assess the re-usability of the portal by downloading data, importing them into their own systems (geographical information system, statistical analysis package) and performing simple processing tasks. These tasks are:

##### *3.2.1. Hydrography*

Download data of bathymetry and coastline from one sea-basin

Prepare map of coastline and bathymetry

Prepare map showing confidence levels in bathymetry

##### *3.2.2. Geology*

Download data of marine sediments and underlying strata for one sea-basin

Prepare map of sediments

Prepare map of underlying strata

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<sup>2</sup> <https://webgate.ec.europa.eu/maritimeforum/taxonomy/term/162>



Prepare map showing confidence levels in sediment data

### 3.2.3. *Chemistry*

Download data of two pollutants in the water column and one in the sediment in one sea basin

Prepare timeplots of measurements of these pollutants showing seasonal dependence.

Prepare map of annual average levels along coastline for one particular year

### 3.2.4. *Biology*

Download data on species from portal

Determine for the North Sea and the Atlantic Iberian Coast the number of records of each family of species – phytoplankton, zooplankton, angiosperms, macro-algae, invertebrate bottom fauna, bird communities, sea mammals, reptiles

### 3.2.5. *Physical Habitats*

Download data on physical habitats from portal

Construct table comparing the percentages of each sea-basin covered by each habitat at levels 2 and 3.

The contractor will summarise the challenges in completing these tasks.

## 3.3. **Progress on Accessibility**

Based on the first two tasks, and by questioning the coordinators of the projects (by telephone), assess how well the portals have overcome legal obstacles to data sharing identified in "legal aspects of marine environmental data"<sup>3</sup>.

## 4. **DELIVERABLES**

1. One report describing the outcome of the study
2. One five page executive summary

The reports should be in English and delivered in electronic form (Microsoft Word and adobe pdf)

## 5. **TIMETABLE**

Within one month of the start of the project the contractor should meet with Commission staff to inaugurate the project

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<sup>3</sup> "Legal Aspects Of Marine Environmental Data" study under Framework Service Contract, No. FISH/2006/09 – LOT2

Four months after signature of the contract, the contractor will deliver a draft report

The contractor will present the results to the Commission at a meeting in the two weeks following delivery of the draft report.

The Commission will deliver comments on the draft report within one calendar month of the delivery of the draft report

The final report and executive summary will be delivered by the contractor six calendar months after the signature of the contract.