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**Title:**

A9.8-D3: Ocean demonstrator final release

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**Working Group:**

HS-Ocean

**References:**
**Quality Assurance:**

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|--|--|
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| <input type="checkbox"/> Review dependend WP Leaders | (Depended WP Leaders: )                                |
| <input type="checkbox"/> Review Executive Board      | (Executive Board Members: )                            |
| <input checked="" type="checkbox"/> Review others    | (Other Reviewers: Astrid Fichtinger, Christine Giger ) |

**Delivery Date:** 8 October 2010

**Short Description:**

This deliverable consists of the implementation of the Ocean scenario demonstrator. In order to facilitate Humboldt user community, the Humboldt framework experience during the scenario development and implementation is produced in the form of a step-by-step guidance and uploaded on the Humboldt training platform. This document only provides references to the demonstrator and training platform of the Ocean Scenario as a deliverable for management purposes.

**Keywords:**

Demonstrator, Ocean scenario, oil spill, pollution report, protected areas

**History:**

<i>Version</i>	<i>Author(s)</i>	<i>Status</i>	<i>Comment</i>
001	Peter Thijsse	RFC	
002	Peter Thijsse	Final	After review A. Fichtinger and small comments E. Moussat
003	Peter Thijsse	Final	Updated with introduction from Training module 1 and revised links to several services

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## 1 Introduction

The primary objective of the Ocean scenario (undertaken by the partners BODC (UK), CLS (FR), HCMR (GR), IFREMER (FR) and MARIS (NL)) is to test the HUMBOLDT framework for its ability to solve data harmonisation issues in applications for assessing and managing marine and ocean oil/contaminants spill crises. The scenario consists of multiple regional demonstrators. These ocean demonstrators will be based on two components:

- Data integration solving harmonisation issues using the framework components
- Visualisation of harmonised datasets using defined standards and components and thus proving the solution works.

The basis for the demonstrators (and for the need of harmonization work) can already be found in existing developments in the marine and oceanographic domain. In the three regions the HUMBOLDT partners are continuously collecting data, (and still are) developing models, viewing software and decision support software to determine the best solution in case of an oil spill crisis. These applications are developed to assist decision makers in the regions to decide which countermeasures are needed.

Two different information communities are involved in this deployment area, with specific technology and data: that of 'sea/ocean' and 'land'. Until now the viewing and decision support software lacked input from the land domain because appropriate datasets simply were hard to find and to include in the applications. This is caused by a low degree of cross-border standardisation and harmonization (ocean and marine software also not ready). It means that e.g. image data (raster) of the ocean part will now be combined with topographic and ecological data (vector) of the beaches and shores.

Data management developments in the Ocean and Marine domain are very closely related to INSPIRE. The main data management streams are stimulated by the SeaDataNet and MyOcean projects both striving for INSPIRE compliance for their data and metadata formats as for example:

1. SeaDataNet's CDI Metadata profile
2. MyOcean's Cameoon for data product catalogues
3. Standardised data exchange formats for marine data (ODV, MedAtlas and NetCDF)

This training module and demonstrators will aim to supply you the following information:

- An introduction in important data for oil spill applications
- Illustrate the possibilities for Humboldt software (CST, Mediator Service) to use harmonized distributed data
- Illustrate the added value of combining this information from various sources

Alike the Ocean scenario, the training modules and demonstrators are divided into material for the 3 regional applications and one overarching application. While each region (UK, Greece, and France) works on harmonization of certain datasets, as well as their own visualization demonstrator (France and Greece), the MARIS umbrella scenario is a cross-regional Ocean Scenario in which the data harmonisation efforts done by all HS-Ocean partners will be combined in one interface.

The main purpose of the umbrella scenario is to create a specific demonstrator well targeting the harmonization issues, demonstrating used standards and making optimum use of the datasets as defined in the Ocean Common Data Model (CDM). The difference with the other Ocean scenarios is

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that it does not directly use already existing developments regarding oil spill scenarios, but builds on top of the datasets created during the regional developments. In this sense the scenario is an extra (separate) action. The basic data structure underneath the scenario is a CDM for oceanographic data, a core of the data model as it is used in the regions.

Please be noted that the demonstrators are not aimed to be real decision support systems in case of oil spills (these are already being developed and fall outside of the scope), but purely aim to support the harmonization work in HUMBOLDT.

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## 2 Demonstrators

This deliverable presents shortly the actual implementation of the Ocean scenario demonstrators. In order to facilitate Humboldt user community, the Humboldt framework experience during the scenario development and implementation is produced in the form of a step-by-step guidance and uploaded on the Humboldt training platform. This was done for each scenario and is accessible from the URL:

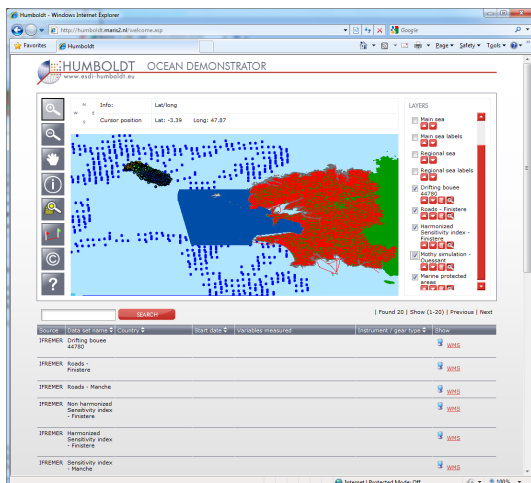
<http://www.inspire-x.eu/humboldt/>

The section for the Ocean scenario combines guidelines how the Humboldt Framework was used and visualisation of the results.

### Online live demonstrators

For a direct look at the central user interface for visualisation of all datasets of the Ocean Scenario, please use the following link:

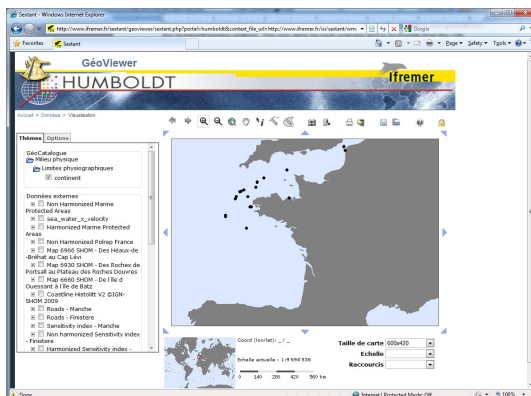
<http://humboldt.maris2.nl/welcome.asp>



IFREMER Sextant viewer with Humboldt context:

[http://www.ifremer.fr/sextant/geoviewer/sextant.php?](http://www.ifremer.fr/sextant/geoviewer/sextant.php?portal=humboldt&context_file_url=http://www.ifremer.fr/isi/sextant/wmc/humboldt/context.xml)

[portal=humboldt&context\\_file\\_url=http://www.ifremer.fr/isi/sextant/wmc/humboldt/context.xml](http://www.ifremer.fr/isi/sextant/wmc/humboldt/context.xml)



The other visualisation tools have been integrated in the training platform.

### Available services

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Further, the Ocean scenario has created specific WMS, WFS and CSW services that produce the datasets as presented in the visualisation software. Please be aware that WMS and WFS services often only give response if queried with the correct parameters (to be requested via getcapabilities).

Central CSW at MARIS using Gi-CAT (harvesting all datasets below)

<http://80.101.101.181/gi-cat-7.0.1/>

IFREMER WMS

<http://www.ifremer.fr/services/wms/humboldt>

IFREMER WFS

<http://www.ifremer.fr/services/wfs/humboldt>

IFREMER Pollution Reports (Binding record; Coupling the particular layers WMS and WFS)

<http://80.101.101.181/gi-cat-humboldt/data/ifremer-polrep-wms-wfs.xml>

HCMR WMS

[http://mapserver.ath.hcmr.gr/cgi-bin/mapserv?  
map=/srv/mapserver.ath.hcmr.gr/maps/oilslicknew.map&](http://mapserver.ath.hcmr.gr/cgi-bin/mapserv?map=/srv/mapserver.ath.hcmr.gr/maps/oilslicknew.map&)

HCMR WFS

[http://mapserver.ath.hcmr.gr/cgi-bin/mapserv?  
map=/srv/mapserver.ath.hcmr.gr/maps/oilslicknew.map&](http://mapserver.ath.hcmr.gr/cgi-bin/mapserv?map=/srv/mapserver.ath.hcmr.gr/maps/oilslicknew.map&)

HCMR Pollution Reports (Binding record; Coupling the particular layers WMS and WFS)

<http://80.101.101.181/gi-cat-humboldt/data/hcmr-polrep-wms-wfs.xml>

BODC WMS

[http://grid.bodc.nerc.ac.uk/web\\_services/wms](http://grid.bodc.nerc.ac.uk/web_services/wms)

BODC WFS

[http://grid.bodc.nerc.ac.uk/web\\_services/wfs](http://grid.bodc.nerc.ac.uk/web_services/wfs)

BODC Pollution Reports (Binding record; Coupling the particular layers WMS and WFS)

<http://80.101.101.181/gi-cat-humboldt/data/bodc-polrep-wms-wfs.xml>

SeaDataNet CDI points (Binding record: Coupling CDI records of marine geological data (SeaDataNet project) as WMS + WFS )

<http://80.101.101.181/gi-cat-humboldt/data/seadatanet-cdi-wms-wfs-points.xml>

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SeaDataNet CDI (Binding record: Coupling CDI records of marine geological data (SeaDataNet project) as WMS + WFS ) <http://80.101.101.181/gi-cat-humboldt/data/seadatanet-cdi-wms-wfs-lines.xml>

SeaDataNet CDI polygons (Binding record: Coupling CDI records of marine geological data (SeaDataNet project) as WMS + WFS ) <http://80.101.101.181/gi-cat-humboldt/data/seadatanet-cdi-wms-wfs-polygons.xml>

IFREMER CSW

<http://www.ifremer.fr/humboldt/srv/en/csw>

CLS CSW

[http://atoll.mercator-ocean.fr/csw/csw?\\_context=mercator](http://atoll.mercator-ocean.fr/csw/csw?_context=mercator)

CLS WMS

<http://opendap-myoccean.mercator-ocean.fr/thredds/wms/mercator-psy2v3-phys-nat>