

SHOM public platform for GIS data (data.shom.fr portal)

WORKSHOP ON UPDATE OF METADATA, DATA AVAILABILITY AND
APPLICATION NEEDS FOR A CCLME ECO-GIS VIEWER

Praia 03 - 05 November 2015

SHOM : French National Hydrographic and Oceanographic Service

One vocation

To ensure the quality and the availability of the physical maritime, coastal and ocean environment information, in order to meet public requirements, both civilian and military, at the lowest possible cost

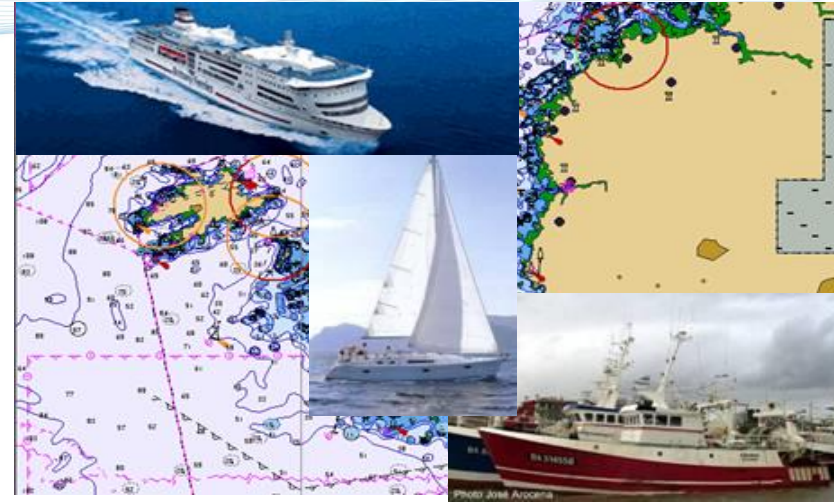
3 main missions

- National Hydrographic Service
- Defence support
- Support to maritime public policies

National Hydrographic Service

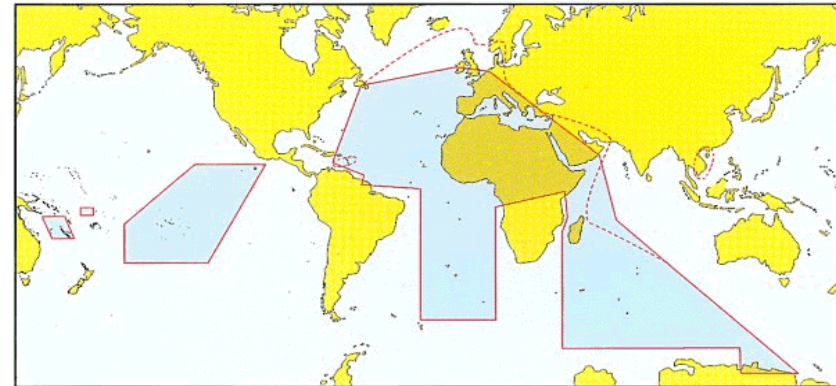
SHOM performs general hydrography duties for all seafarers to meet France's international obligations :

- The International Convention for the Safety of Life at Sea (SOLAS)
- The United Nations Convention on the Law of the Sea



Areas of interest :

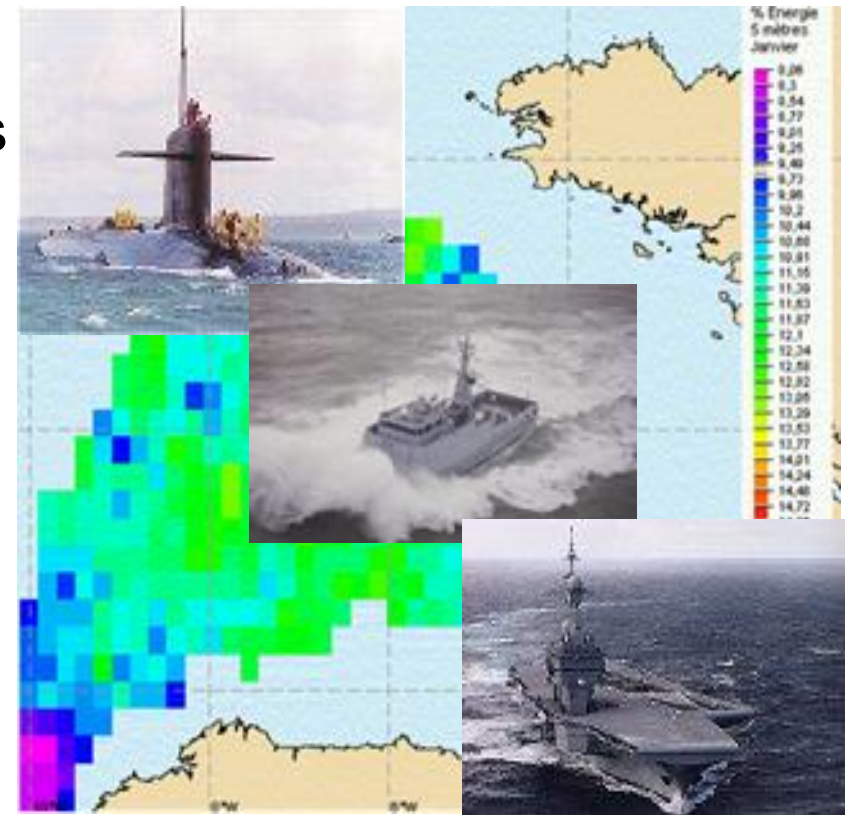
- French EEZ, areas placed under French responsibility (11 million sq. km)
- other areas of historical responsibility



Defence support

SHOM provides operational support to meet Defence requirements with regards to assessing the maritime environment

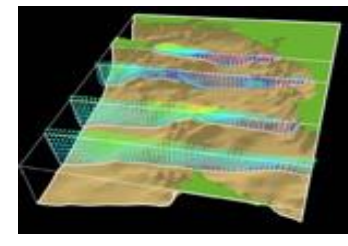
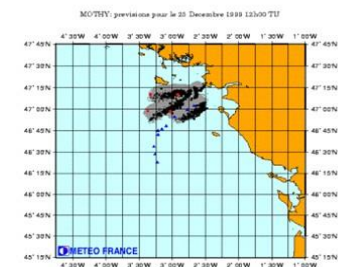
- for the benefit of Staffs and Task Forces (operation planning and management)
- to assist in designing weapon systems & command systems



Support to public policies

Production of a new range of digital cartographic and web services

- Development of a seamless cartographic reference for integrated coastal management
- Development of operational oceanography (Meteorology of the Ocean), based upon
 - Numerical modelling of the World Ocean
 - Combination of satellite and in-situ observations of the maritime domain
- Implementation of advanced alert system
 - Prevention of natural disasters by real time water level observation (permanent tide gauges network)



Outline

- ✓ **A SDI for marine data dissemination**
- ✓ Geographical web services
- ✓ Crowdsourcing and web mapping tools

INSPIRE Directive

Infrastructure for Spatial Information in the European Community

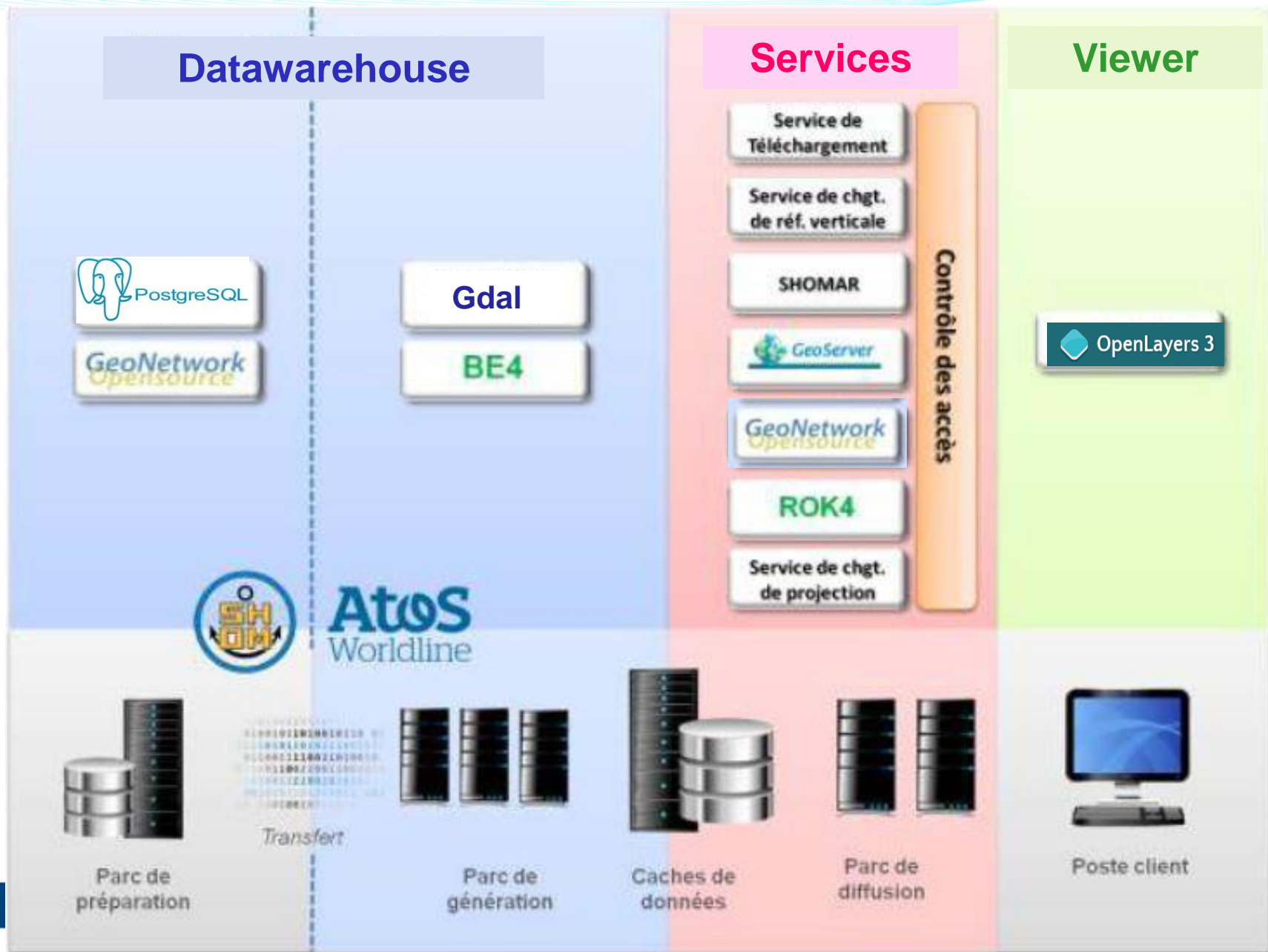
- To ensure that the spatial data infrastructures of the Member States are compatible in the community and transboundary context
- The directive requires that common implementing rules are adopted in a number of specific areas :
 - **Metadata**
 - **Data Specifications**
 - **Network services**
 - **Data and Service sharing, monitoring and reporting.**

SDI

« Collect once, use many times »

- Data.shom.fr provides key baseline data to support applications including :
 - Marine spatial planning
 - Coastal zone management
 - Coastal & offshore engineering
 - Environmental impact investigations ...
- Data.shom.fr is an infrastructural capacity to support active participation in European marine data management research projects (EMODnet, GeoSeas, ...)

SDI architecture & technologies



Maritime and littoral geographical information online

The portal allows to display and to download more than 50 layers

The screenshot displays the Data.shom.fr web portal interface. The top header features the SHOM logo and the text "DATA.SHOM.FR Information géographique maritime et littorale de référence". The left sidebar contains a "Close catalog" button and several expandable sections: "Oceanographic forecast", "Tide gauge data (REFMAR)", "Data.shom.fr" (selected) and "External data", "Charts" (with sub-options like "Assemblage des cartes marines (R..." and "Assemblage des cartes marines ve..."), "Maritime boundaries", "Maritime and costal database" (with sub-options like "Câbles et conduites", "Délimitations maritimes", "Limites du plateau continental", "Toponymie", "Trait de côte HISTOLIT®", "Trait de côte mondial", "Épaves et obstructions"), "Coastal altimetry", "Bathymetry", "Vertical Datums", and "Sedimentology" (with sub-options like "Carte sédimentaire mondiale", "Habitats benthiques", "Natures de fond au 150 000", "Natures de fond au 50 000", "Natures de fond au 500 000", "Répartition des dunes du Plateau c..."). The main map area shows a bathymetric chart of the Atlantic Ocean with various layers overlaid, including bathymetry, maritime boundaries, and coastal features. The bottom status bar displays the coordinates "WGS84: 015° 45' 28.7" N, 025° 23' 39.9" W", a "Legal notice and warnings" link, and a scale of "Scale 1 : 1 733 376".

Close catalog

Oceanographic forecast

Tide gauge data (REFMAR)

Data.shom.fr External data

Charts

- ☐ Assemblage des cartes marines (R...
- ☒ Assemblage des cartes marines ve...
- ☐ Carte littorale
- ☐ Catalogue des ENC
- ☐ Catalogue des cartes marines
- ☐ Spatiocartes marines

Maritime boundaries

Maritime and costal database

- ☒ Câbles et conduites
- ☐ Délimitations maritimes
- ☐ Limites du plateau continental
- ☐ Toponymie
- ☐ Trait de côte HISTOLIT®
- ☐ Trait de côte mondial
- ☐ Épaves et obstructions

Coastal altimetry

Bathymetry

Vertical Datums

Sedimentology

- ☐ Carte sédimentaire mondiale
- ☐ Habitats benthiques
- ☐ Natures de fond au 150 000
- ☐ Natures de fond au 50 000
- ☐ Natures de fond au 500 000
- ☐ Répartition des dunes du Plateau c...

WGS84: 015° 45' 28.7" N, 025° 23' 39.9" W

Legal notice and warnings

Scale 1 : 1 733 376

News | Help | FR | EN

Send a feedback

Maritime and littoral geographical information online

Close legend

Carte sédimentaire mondiale

Legend

- Argiles
- Argiles Silts
- Caillouts
- Caillouts Gravieres
- Caillouts Sables
- Caillouts Vases
- Gravieres
- Gravieres Caillouts
- Gravieres Sables
- Gravieres Vases
- Roches
- Sables
- Sables Caillouts
- Sables fins
- Sables fins Caillouts
- Sables fins Vases
- Sables Gravieres
- Sables fins Gravieres Vases
- Sables fins Sables
- Sables fins Vases
- Silts
- Silts Argileux
- Vases
- Vases Gravieres
- Vases Sables
- Vases Sables fins

Abstract

Le produit nature superficielle du fond est un produit de sédimentologie vectorielle représentant, à l'échelle mondiale, la nature sédimentologique du fond codée sur 30 classes. La résolution est de 5'.

Limitations

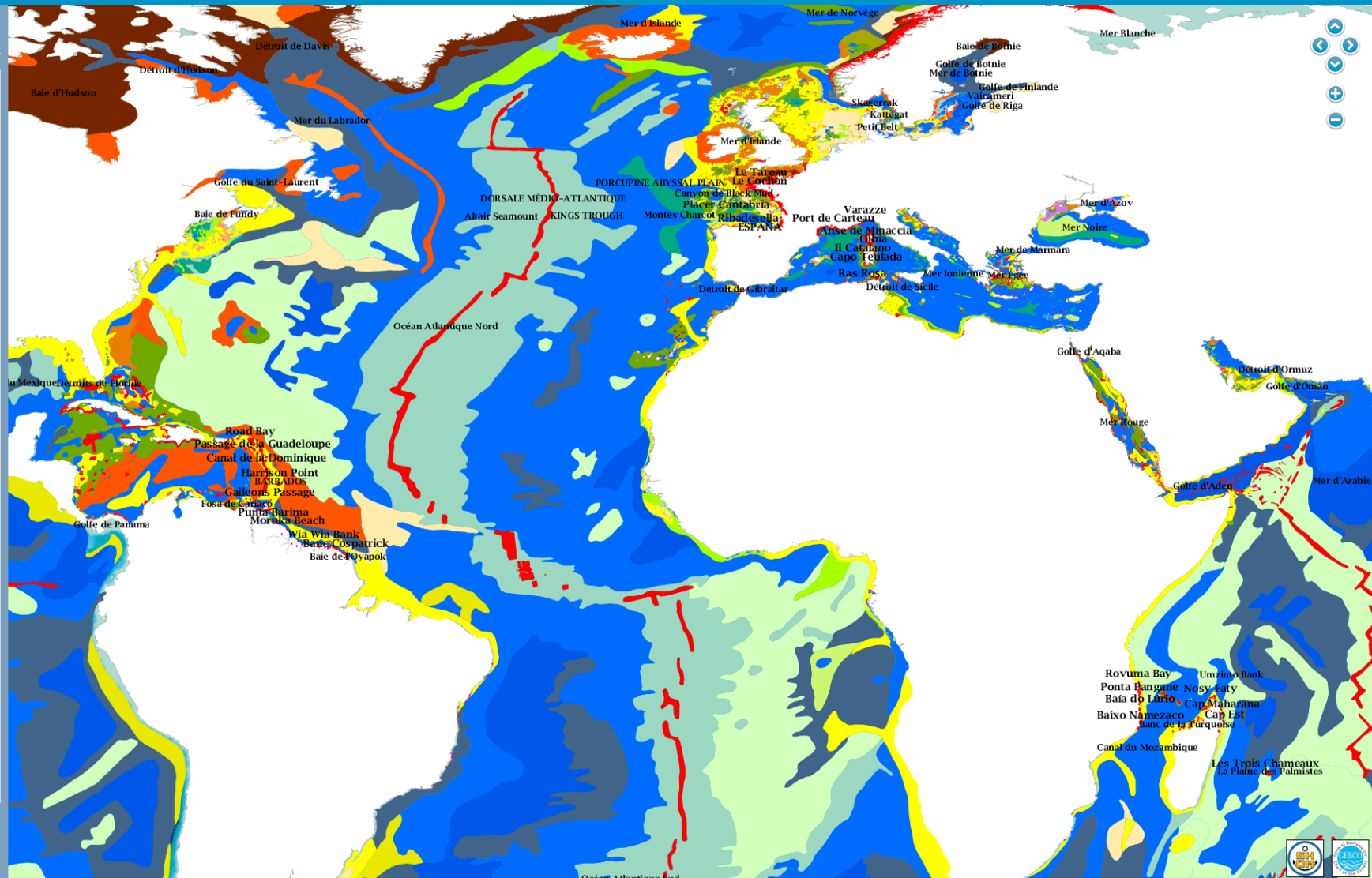
Le SHOM propose des licences de réutilisation non commerciale et de réutilisation interne dans le cadre d'une activité économique, pour connaître les conditions générales de vente et d'utilisation.

La réutilisation commerciale des données fait l'objet d'un contrat spécifique.

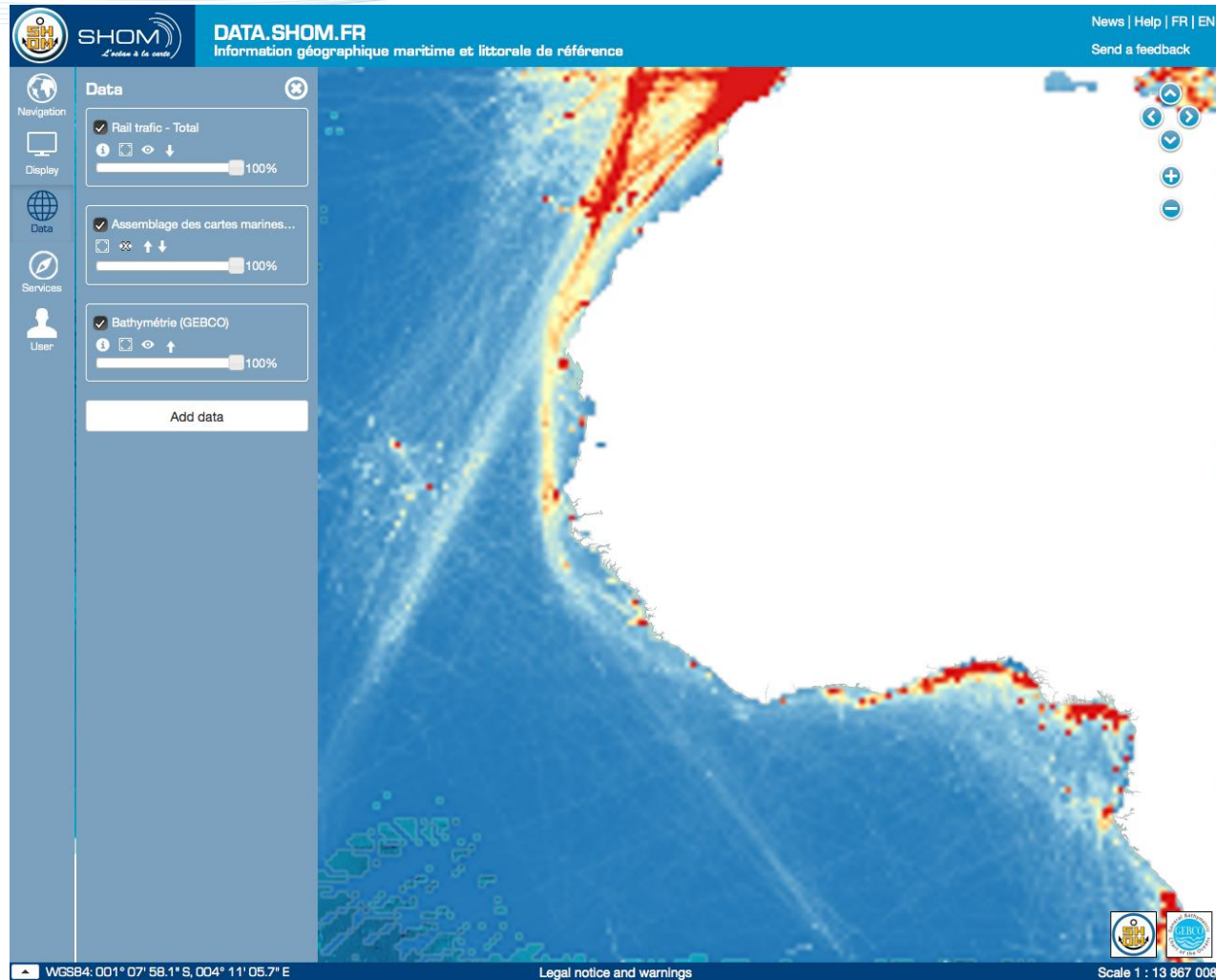
Contact

SHOM: bps@shom.fr

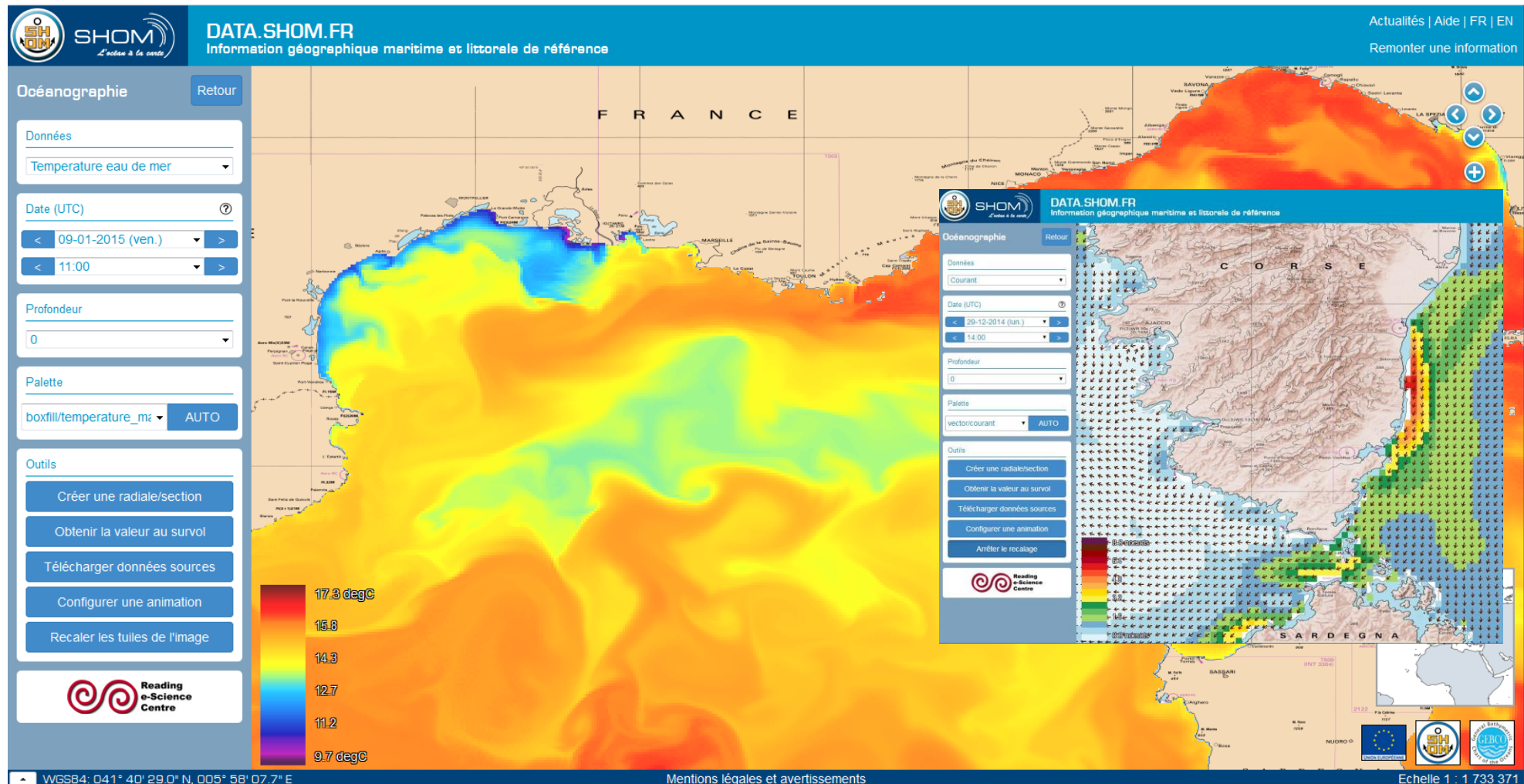
Access raw meta-data file...



Maritime and littoral geographical information online

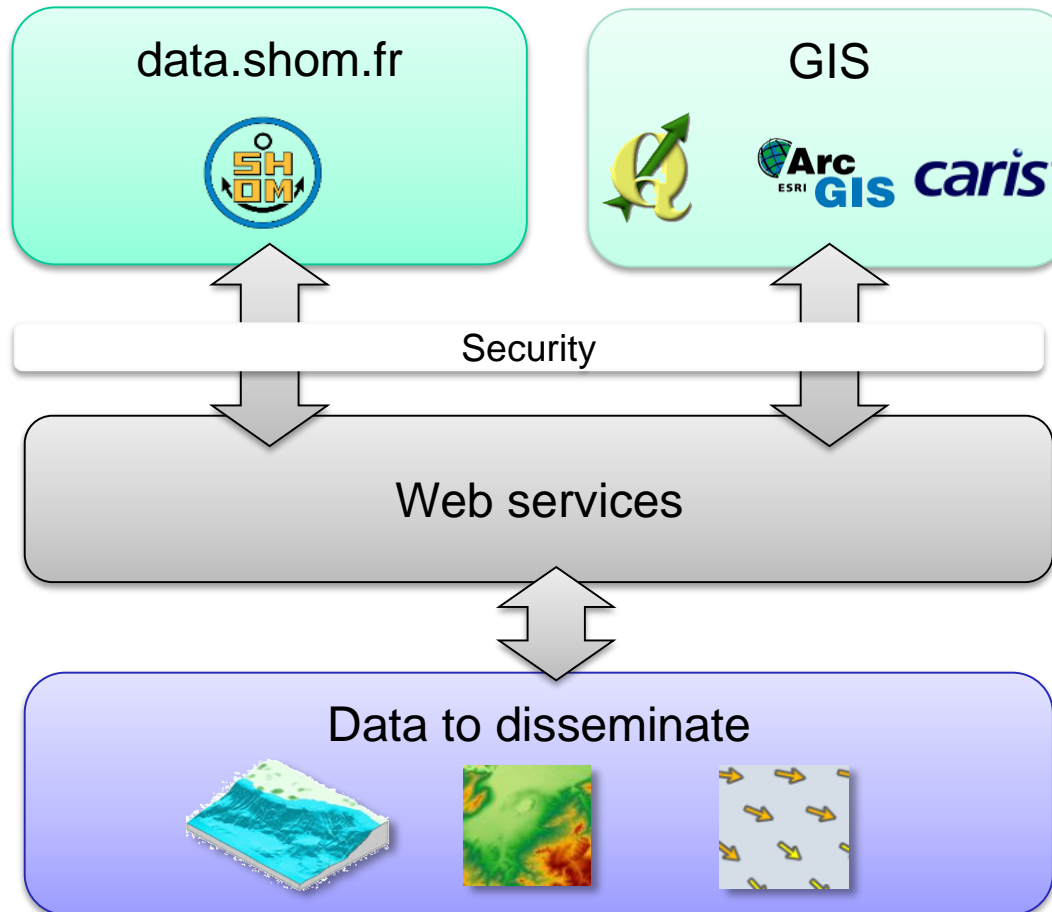


temperature, salinity, waves, currents (ncWMS) **in Open Data**



Outline

- ✓ data.shom.fr : a platform for data dissemination
- ✓ **Geographical web services**
- ✓ Crowdsourcing and web mapping tools



Web services

Flux WMS : <http://services.data.shom.fr/INSPIRE/wms/r/>

Flux WMTS : <http://services.data.shom.fr/wmts/>

Flux WFS : <http://services.data.shom.fr/wfs>

Data.shom.fr to visualize external web services & combine data

http://wms.pcn.minambiente.it/ogc?map=/ms_ogc/WMS_v1.3/raster/ortofoto_colore_06.map

The screenshot displays the DATA.SHOM.FR web application interface. The top header features the SHOM logo, the text "DATA.SHOM.FR", and navigation links for "Actualités", "Aide", "FR", and "EN". Below the header, the main content area shows a map of a coastal region with various data layers overlaid. The left sidebar contains a "Données" section with four data layers, each with a checkbox, a visibility icon, a zoom icon, and a slider set to 100%:

- ☒ Scuole pubbliche per l'infanzia, ...
- ☒ Ortofoto a colori anno 2006
- ☒ Date ortofoto a colori anno 2006
- ☒ Bathymétrie (GEBCO)



Below the data layers is a button labeled "Ajouter des données". The map itself shows a coastal area with various data points and labels. The bottom status bar displays the coordinates "WGS84: 044° 05' 27.0" N, 009° 48' 41.5" E", the text "Mentions légales et", and the scale "Echelle 1 : 27 083".

Outline

- ✓ data.shom.fr : a platform for data dissemination
- ✓ Geographical web services
- ✓ **Crowdsourcing and web mapping tools**

Crowdsourcing service

INFONAUT (infonaut.data.shom.fr): an on-line service to share nautical informations



INFONAUT
Service de remontées collaboratives d'informations nautiques du SHOM

Actualités | Aide | FR | EN
data.shom.fr

1. CATÉGORISER

TYPE D'INFORMATION:

Sélectionnez le type d'information que vous souhaitez signaler :

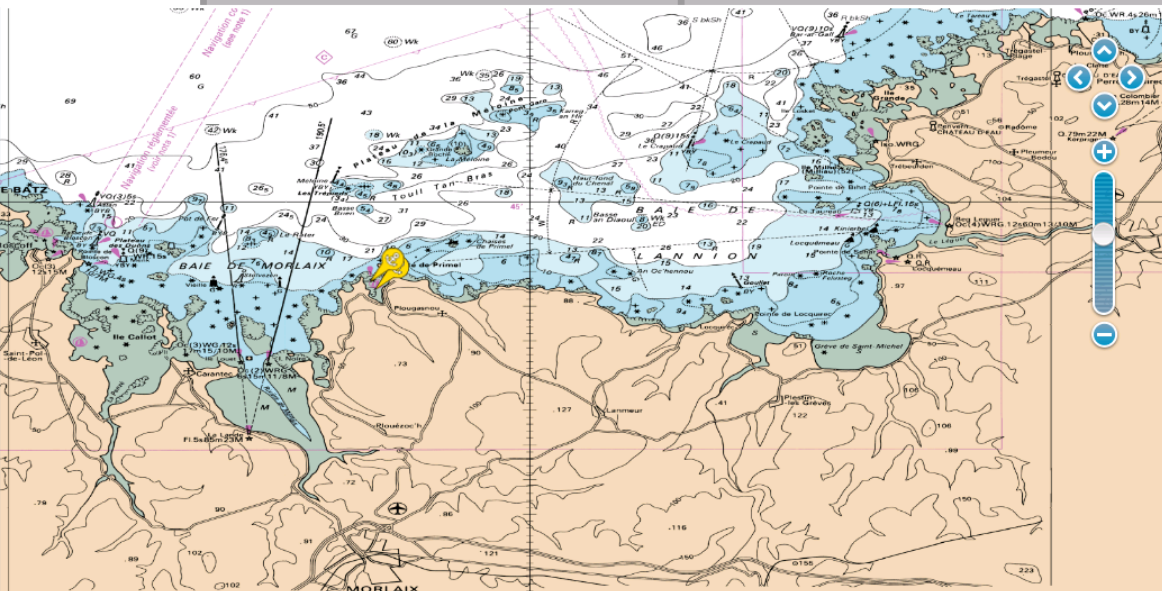
- ☐ Profondeurs
- ☐ Epaves et obstructions
- ☐ Trait de côte
- ☐ Câbles et conduites
- ☐ Toponymes
- ☒ Bouées, balises
- ☐ Zones réglementées
- ☐ Autres (préciser)
- ☐ Natures de fond
- ☐ Feux et signaux de brume

Vous pouvez consulter les dernières informations saisies qui sont en cours de validation ou refusées. Pour signaler une nouvelle information, cliquez ici :

[Saisir une information](#)

[Mentions légales et CGU](#)

2. POSITIONNER



3. DÉCRIRE

Date de création : 01/06/2013 16:44

Statut : En cours de traitement

Contributeur : DIRM NAMO/DIESM/SPBB

Description : Balise de caractère latéral Tribord, nommée "Rheun Predou". Cette balise n'existe plus, constaté le 17 septembre 2012.
CLETEXT : 14583F2833-98

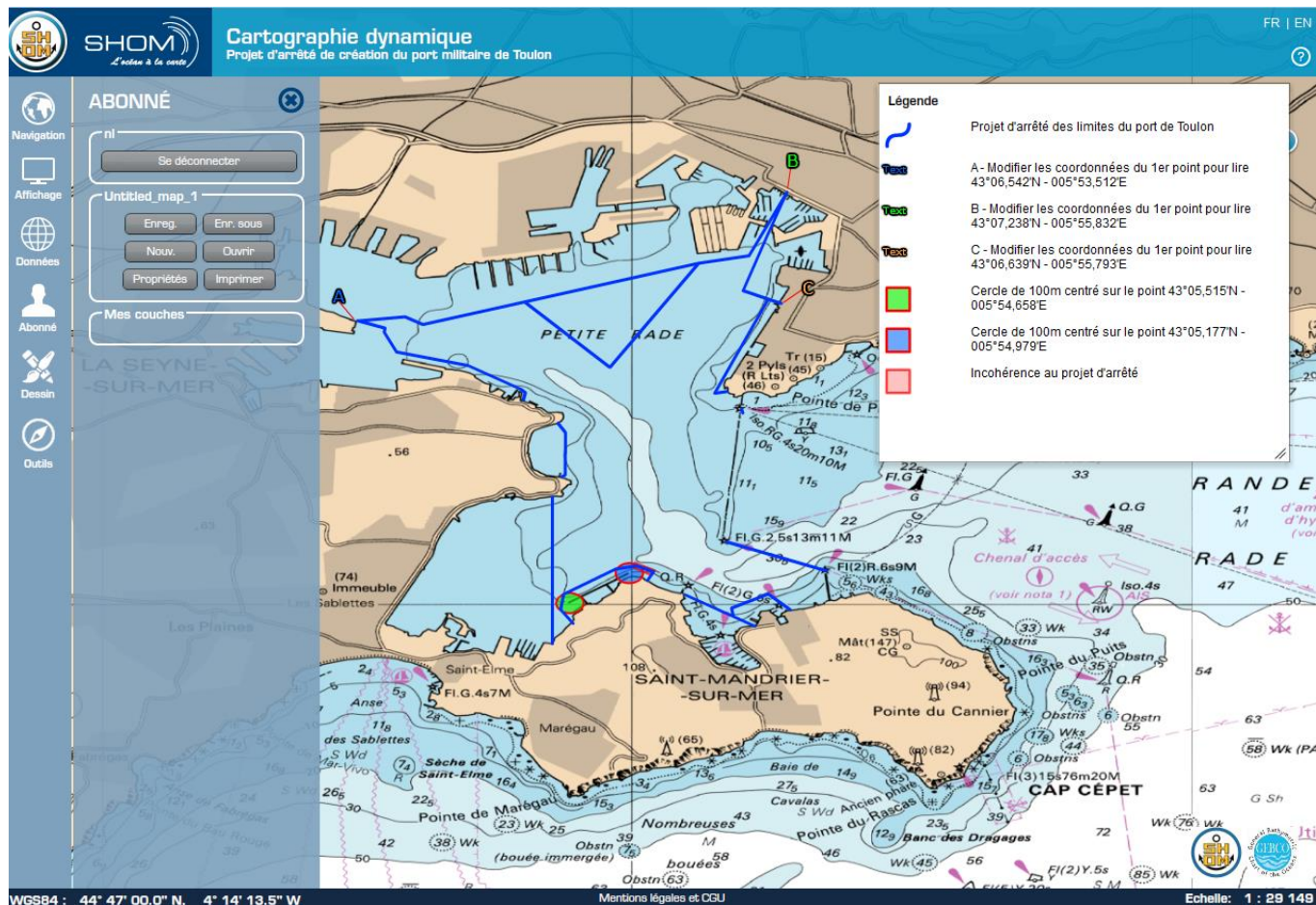
☒ en attente
☐ refusée
☐ validée

WGS84 : 48° 32' 50.6" N, 3° 50' 58.5" W

Echelle : 1 : 170 090

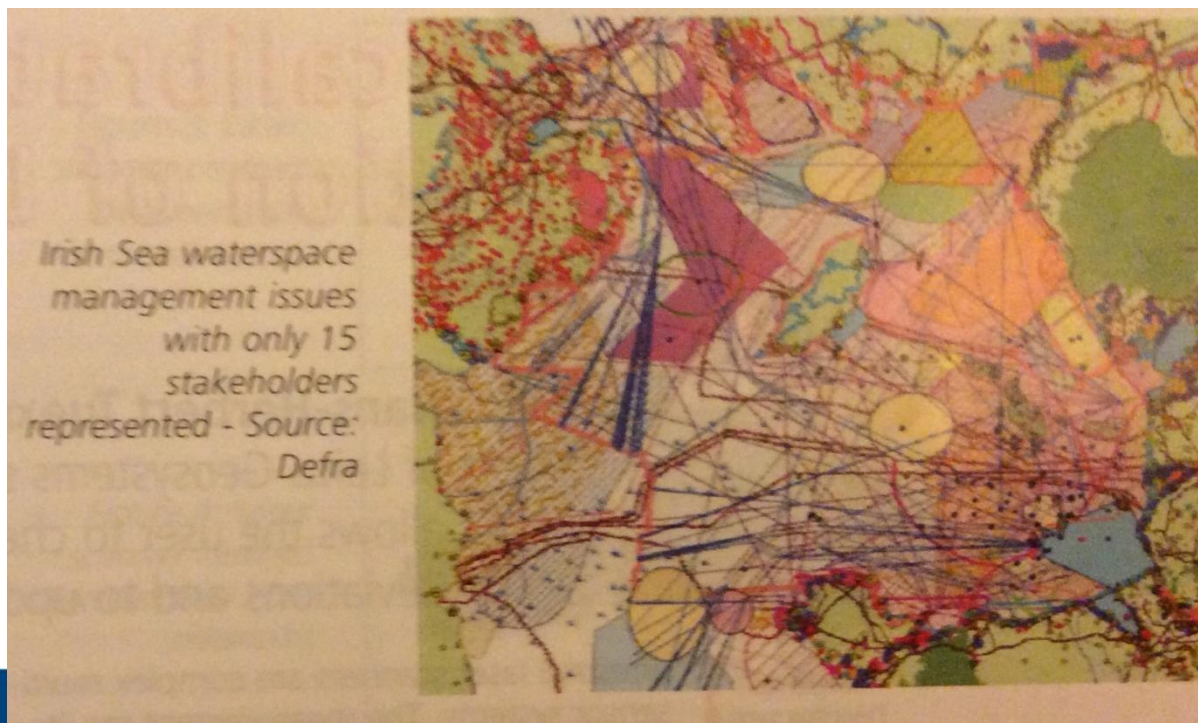
Cartodyn (cartodyn.data.shom.fr)

A web mapping service to generate maps



How to create meaningful data products ?

- Thanks to INSPIRE, Open data, open standards, more and more data is being made available, usable in desktop GIS and webGIS
- Rather than provide the expected greater “situation awareness”, it sometimes have the opposite effect



November 2015

How to create meaningful data products ?

- Only some ideas ...
 - Put the end user needs first
 - Build on existing efforts
 - Training is needed

Thank you for your attention!



<http://www.shom.eu>