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
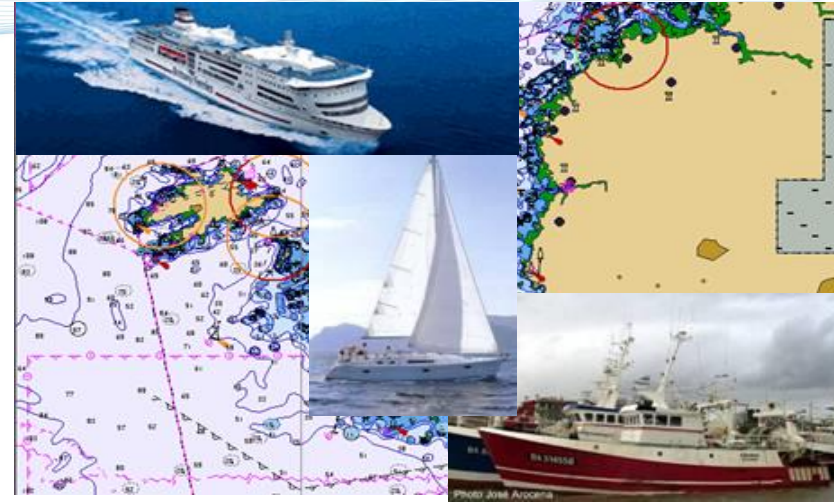
3 main missions

- 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 responsability (11 million sq. km)
- other areas of historical responsability
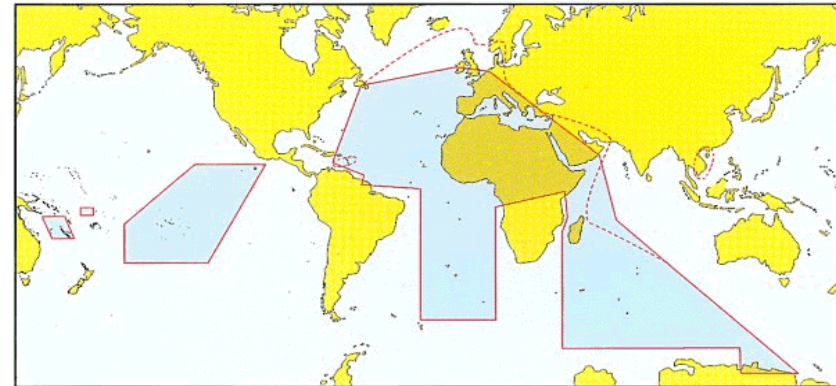
Defence support

SHOM provides operationnal 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
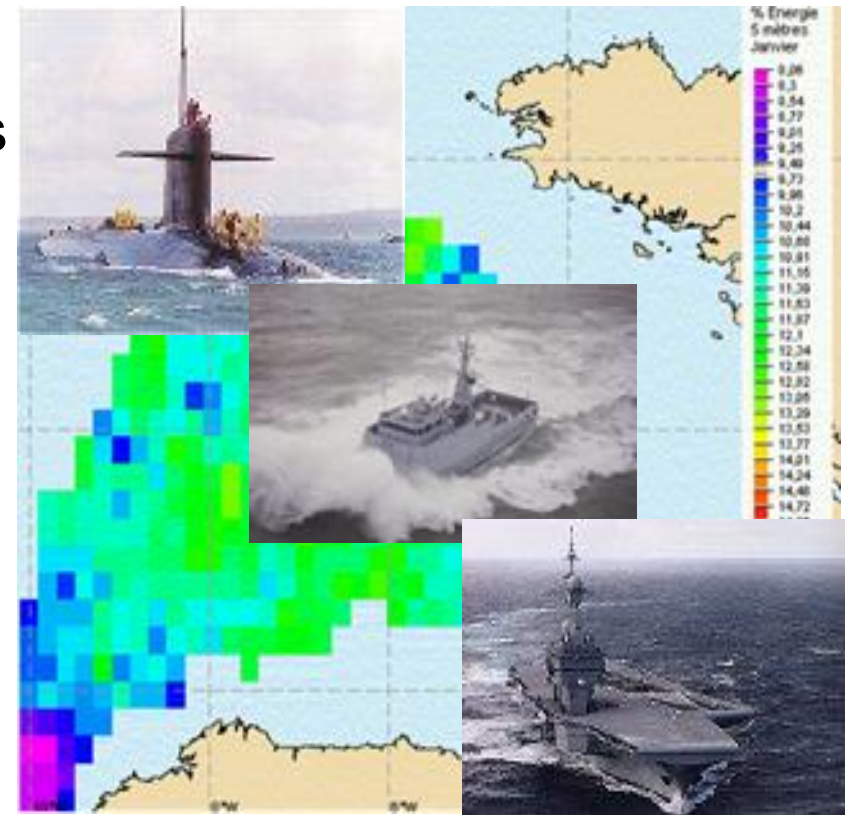
Support to public policies

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)
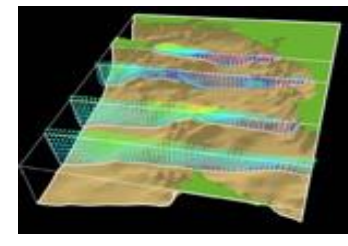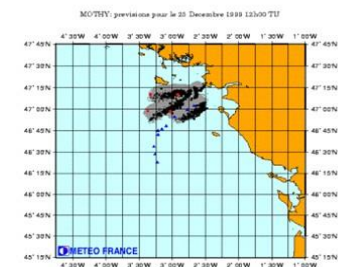
Outline

✓ **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
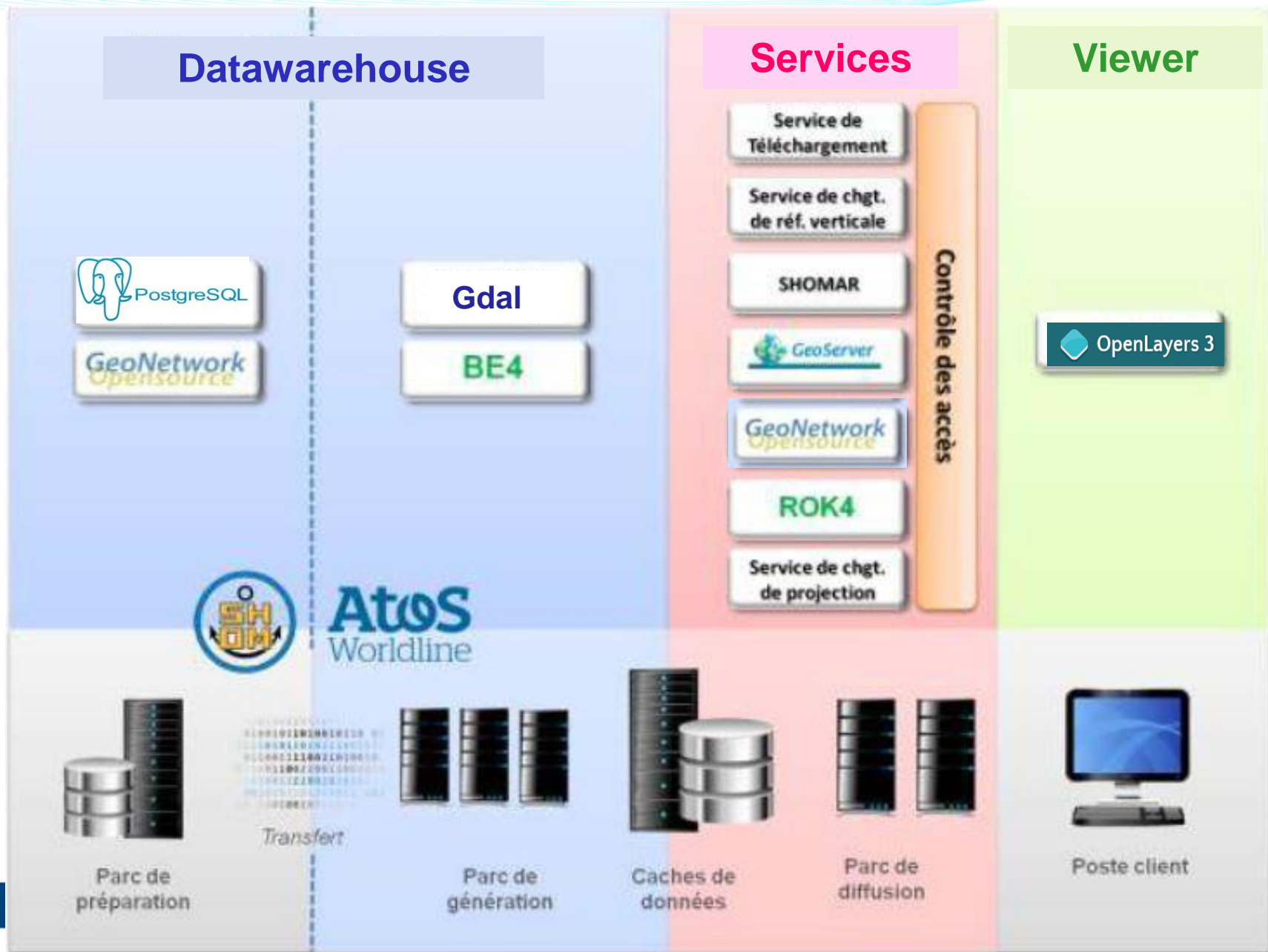
Data.shom.fr

Maritime and littoral geographical information online

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

Data.shom.fr

Maritime and littoral geographical information online

Data.shom.fr

Maritime and littoral geographical information online
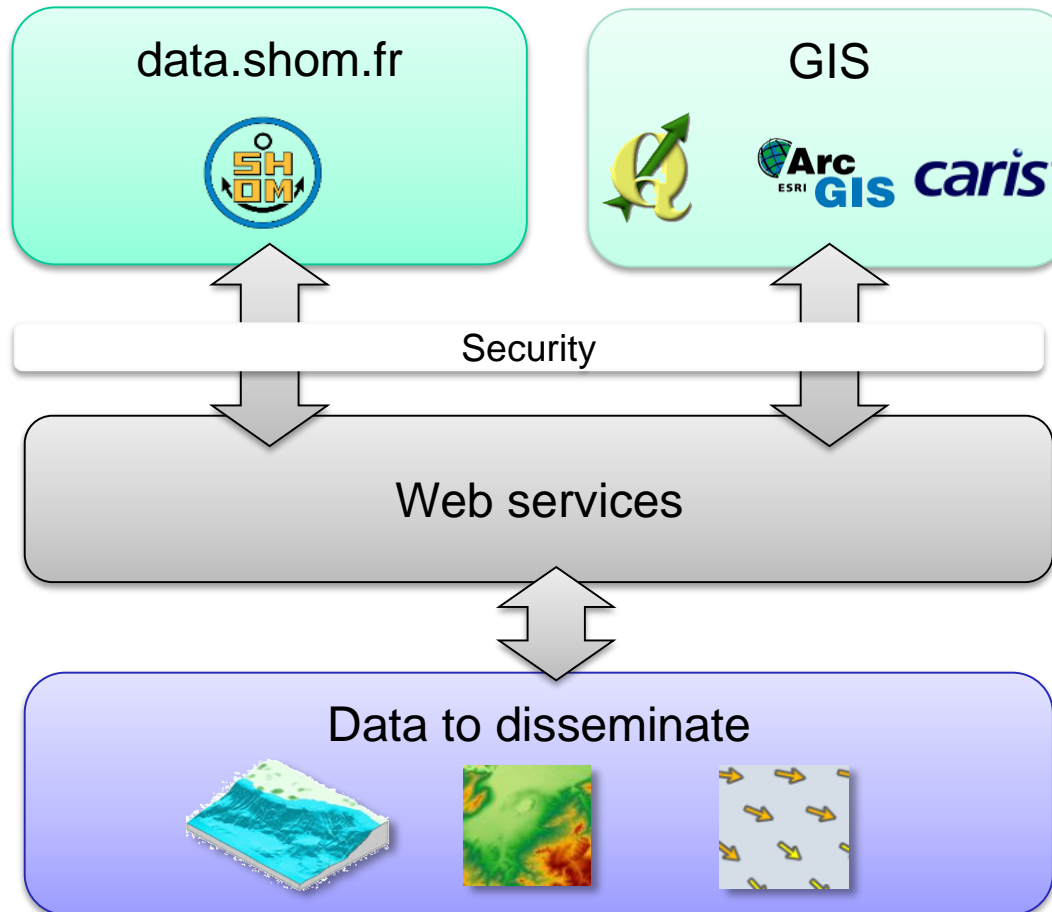
Data.shom.fr

Oceanic forecast

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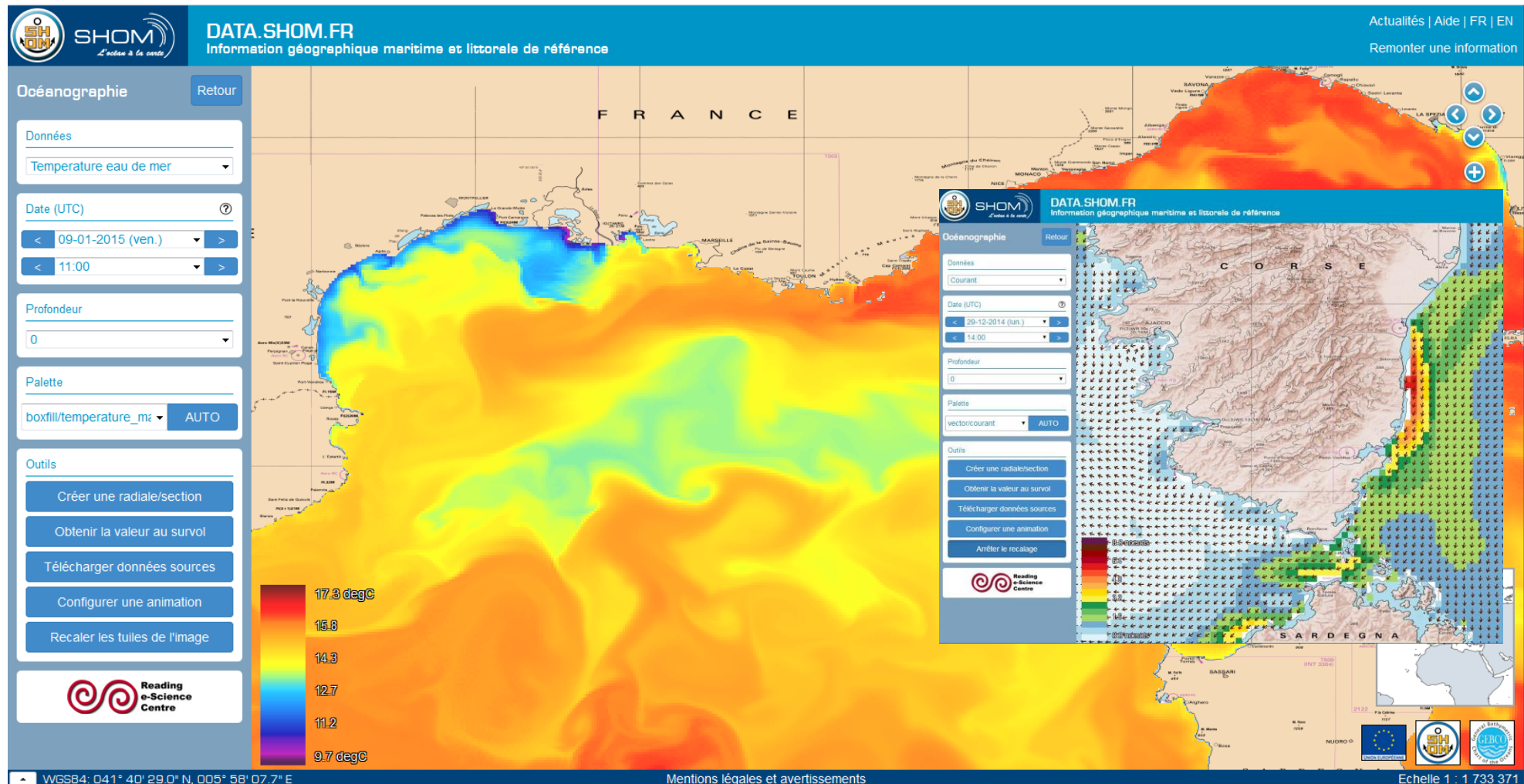
Outline

✓ data.shom.fr : a platform for data dissemination

✓ **Geographical web services**

✓ Crowdsourcing and web mapping tools

data.shom.fr

data.shom.fr	GIS

Security

Web services

Data to disseminate

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 vizualize external web services & combine data

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

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

Cartodyn (cartodyn.data.shom.fr)
A web mapping service to generate maps
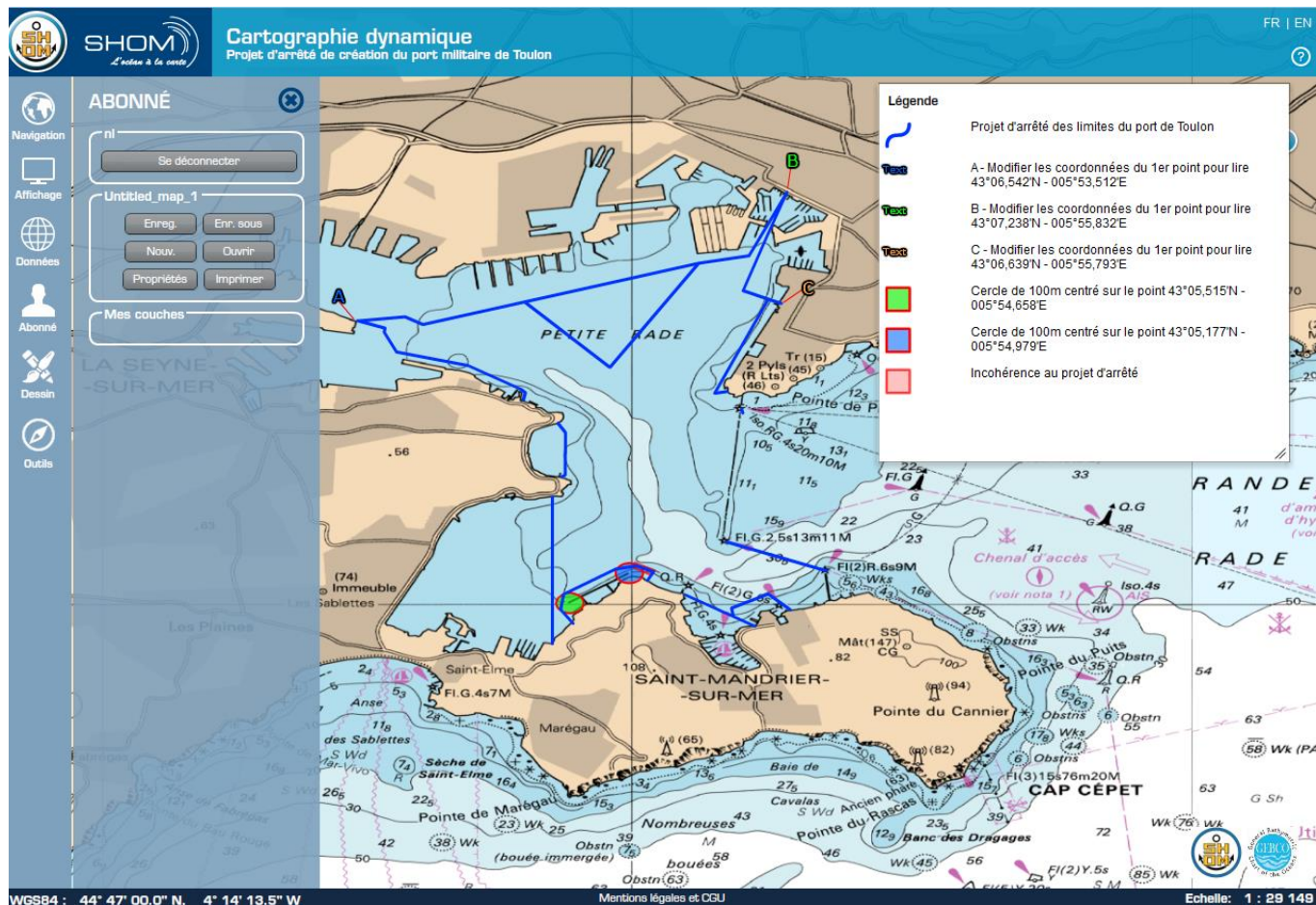
How to create meaningfull data products ?

■ Thanks to INSPIRE, Open data, open standards, more and more data is being made available, usable in desktop GIS and webGIS

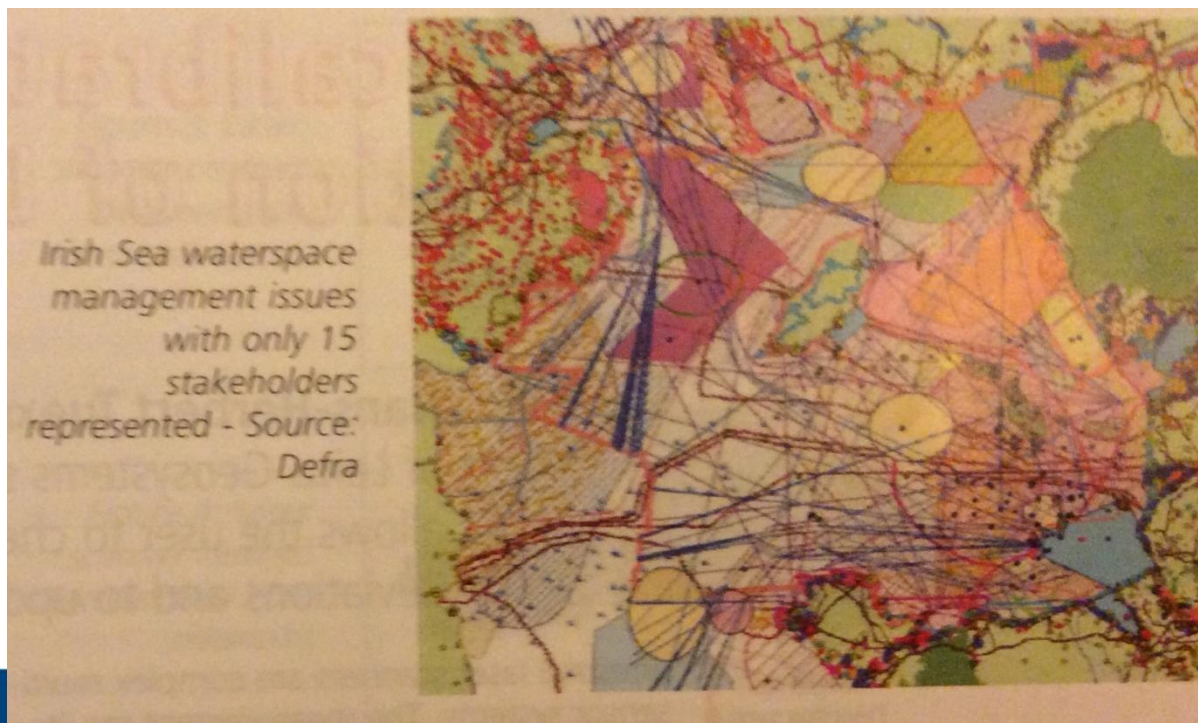■ Rather than provide the expected greater "situation awareness", it sometimes have the opposite effect

Irish Sea waterspace management issues with only 15 stakeholders represented - Source: Defra

MINISTÈRE
DE LA DÉFENSE

How to create meaningfull 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