

CDI Data Discovery and Access service – statistics and viewing services

***SeaDataNet Plenary Meeting 16 September
2015***

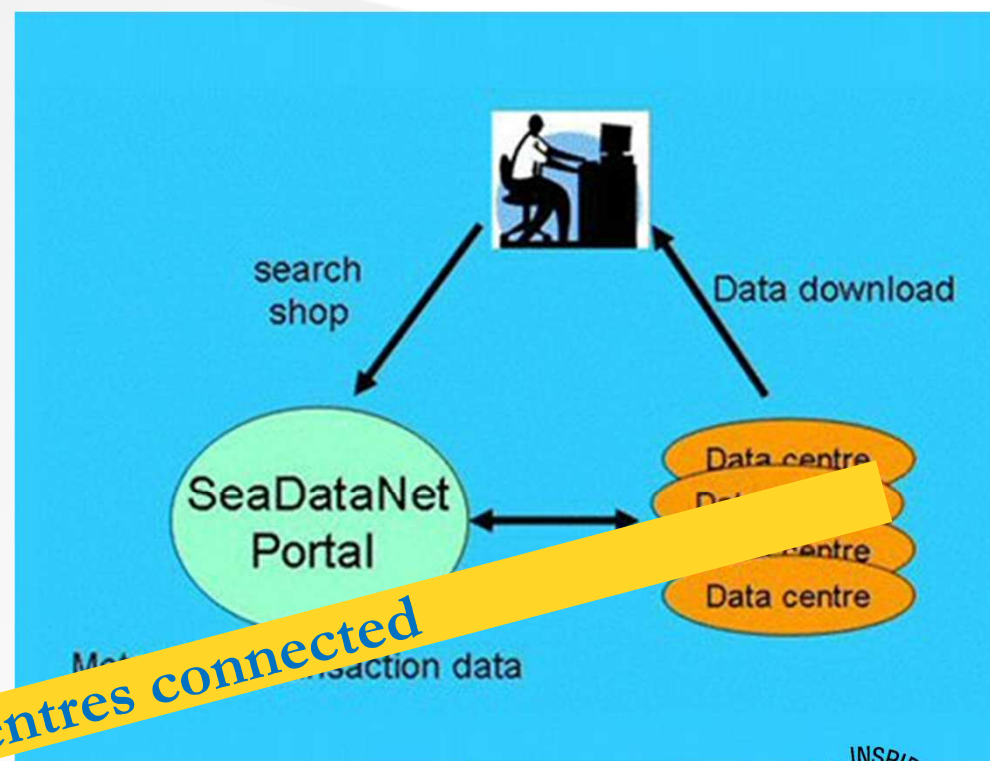
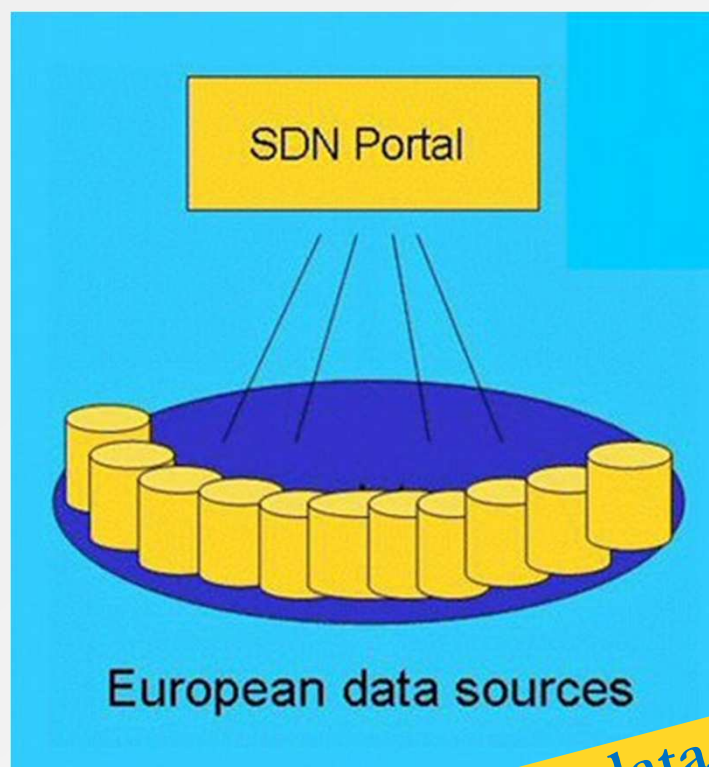
D.M.A. Schaap - Technical Coordinator



SeaDataNet

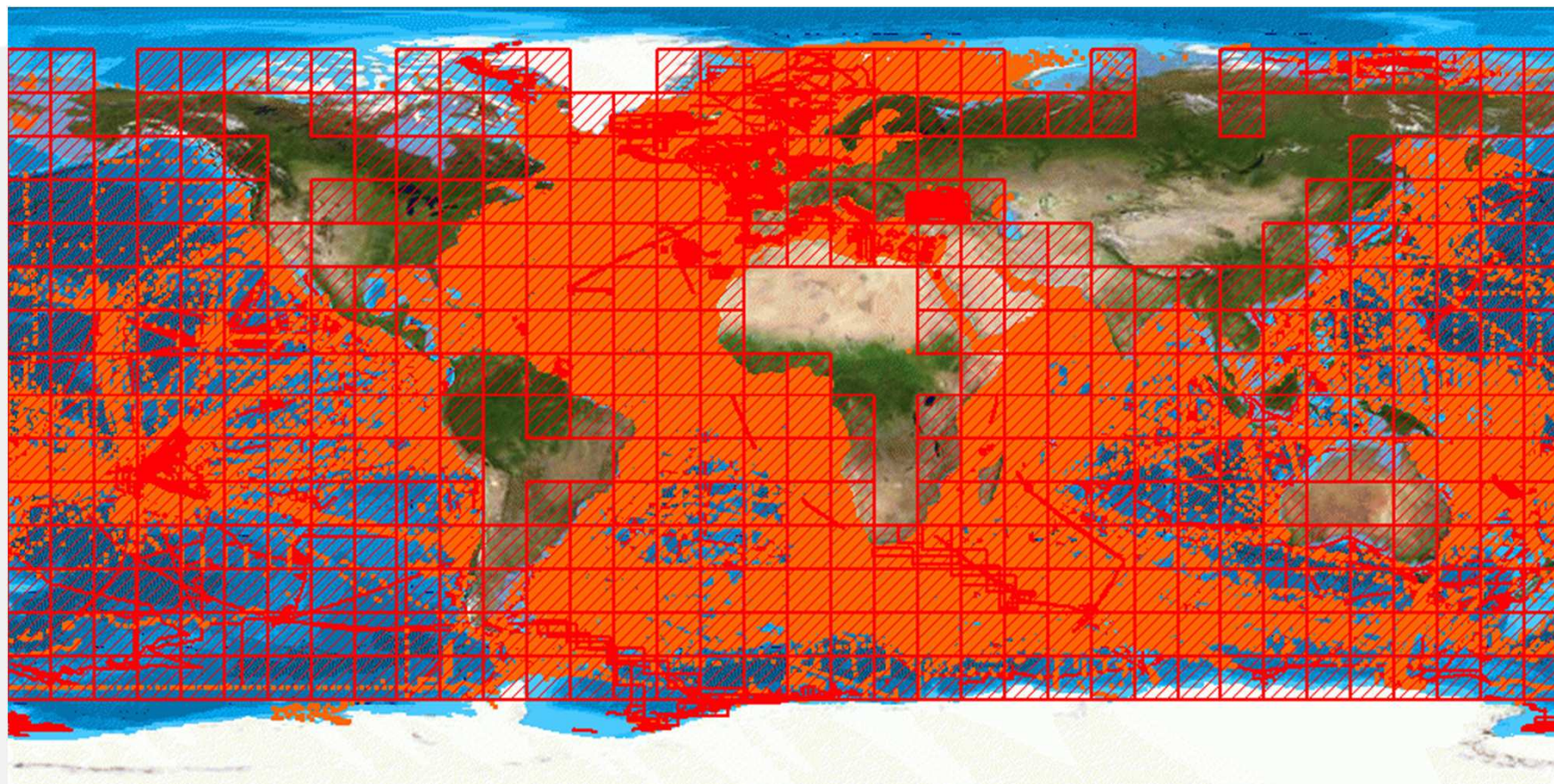
PAN-EUROPEAN INFRASTRUCTURE
FOR OCEAN & MARINE DATA
MANAGEMENT

CDI service for discovery and unified access of data

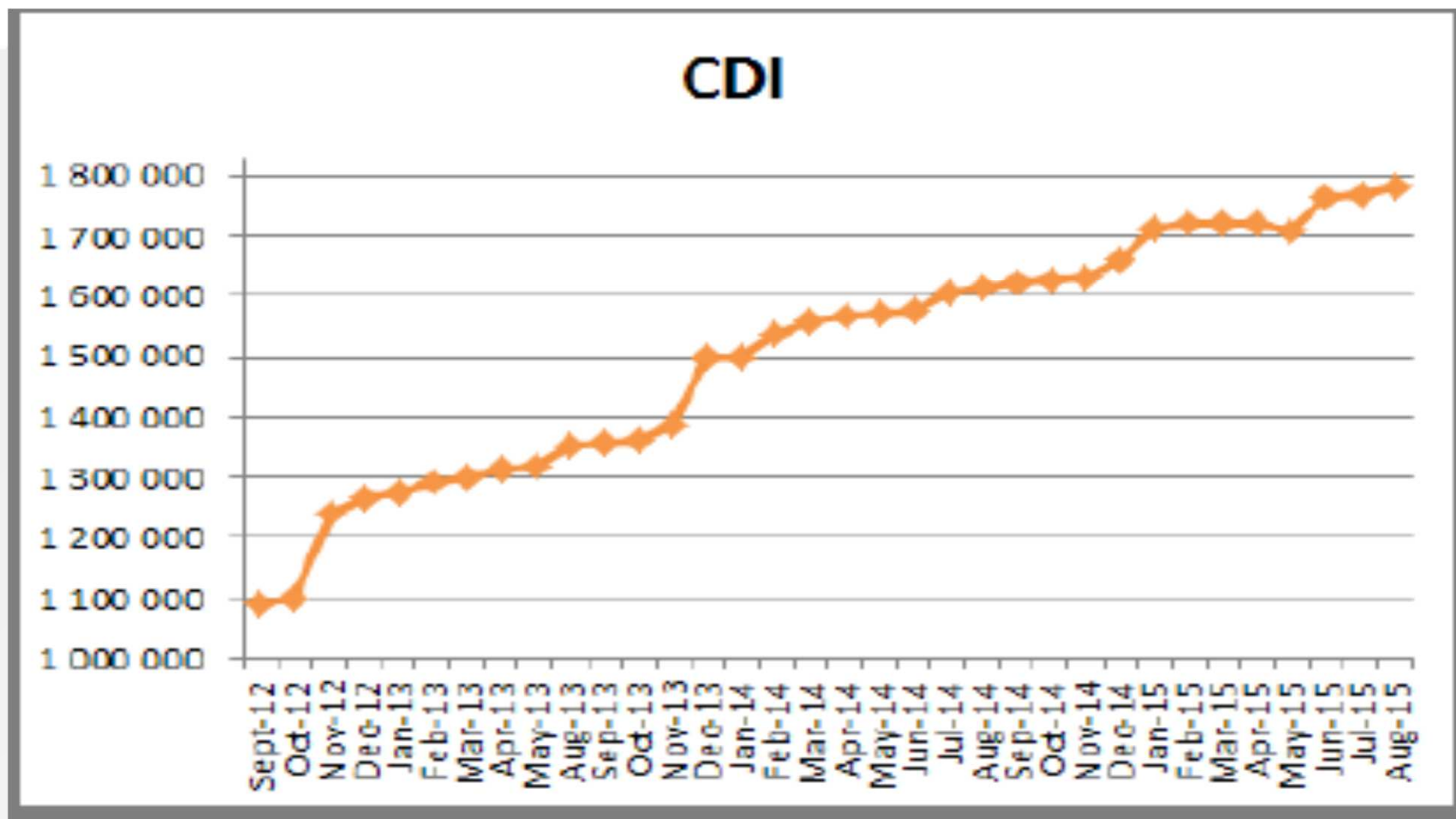


> 100 data centres connected



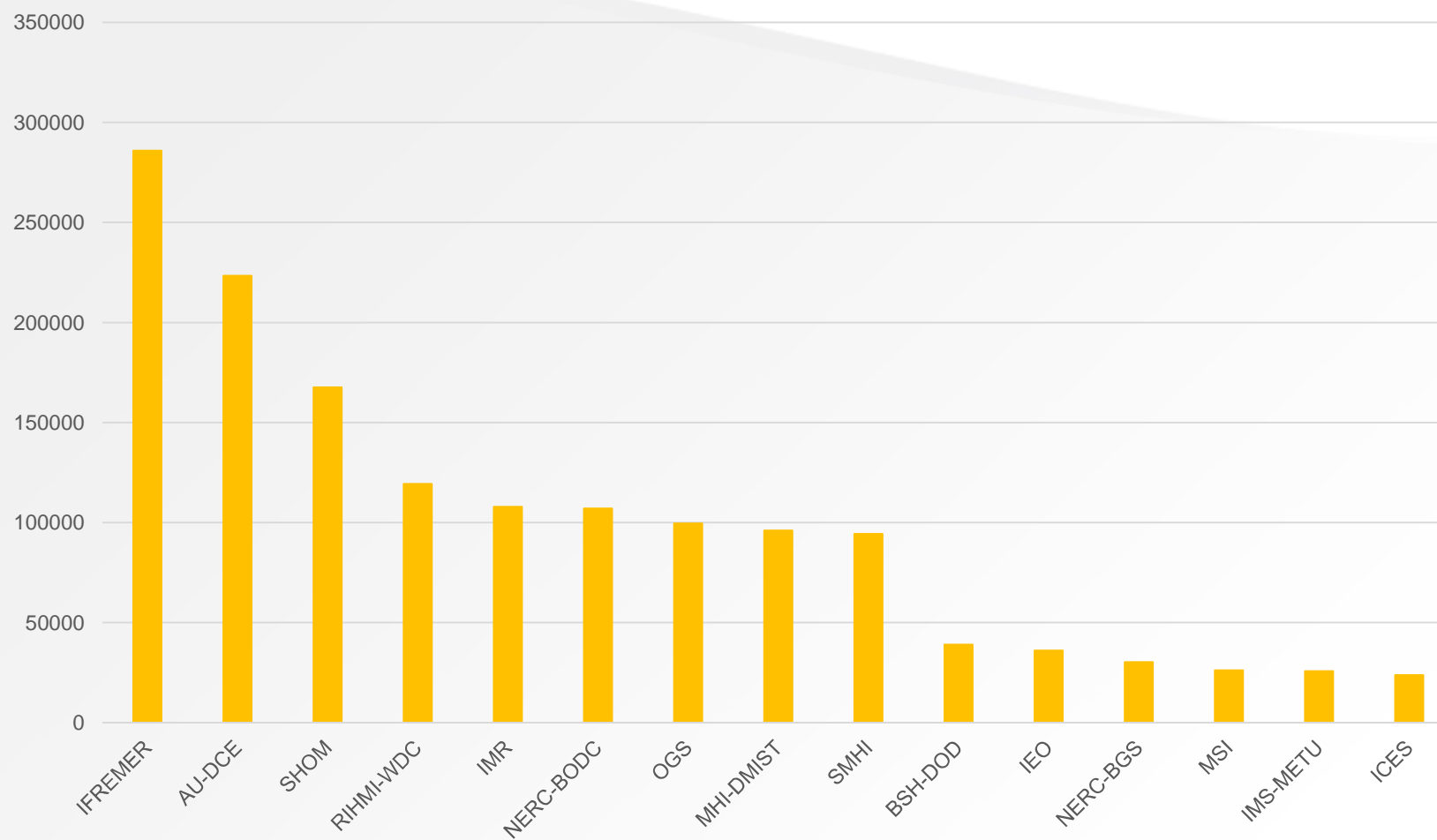


Coverage September 2015: **> 1,78 million** CDI entries from **102** data centres in **34** countries and **564** originators for physics, chemistry, geology, geophysics, bathymetry and biology; years **1800 – 2015**; **85,8 %** unrestricted or under SeaDataNet licence



Increase of CDI since September 2012

Top 15 CDI submissions





SeaDataNet

PAN-EUROPEAN INFRASTRUCTURE
FOR OCEAN & MARINE DATA
MANAGEMENT

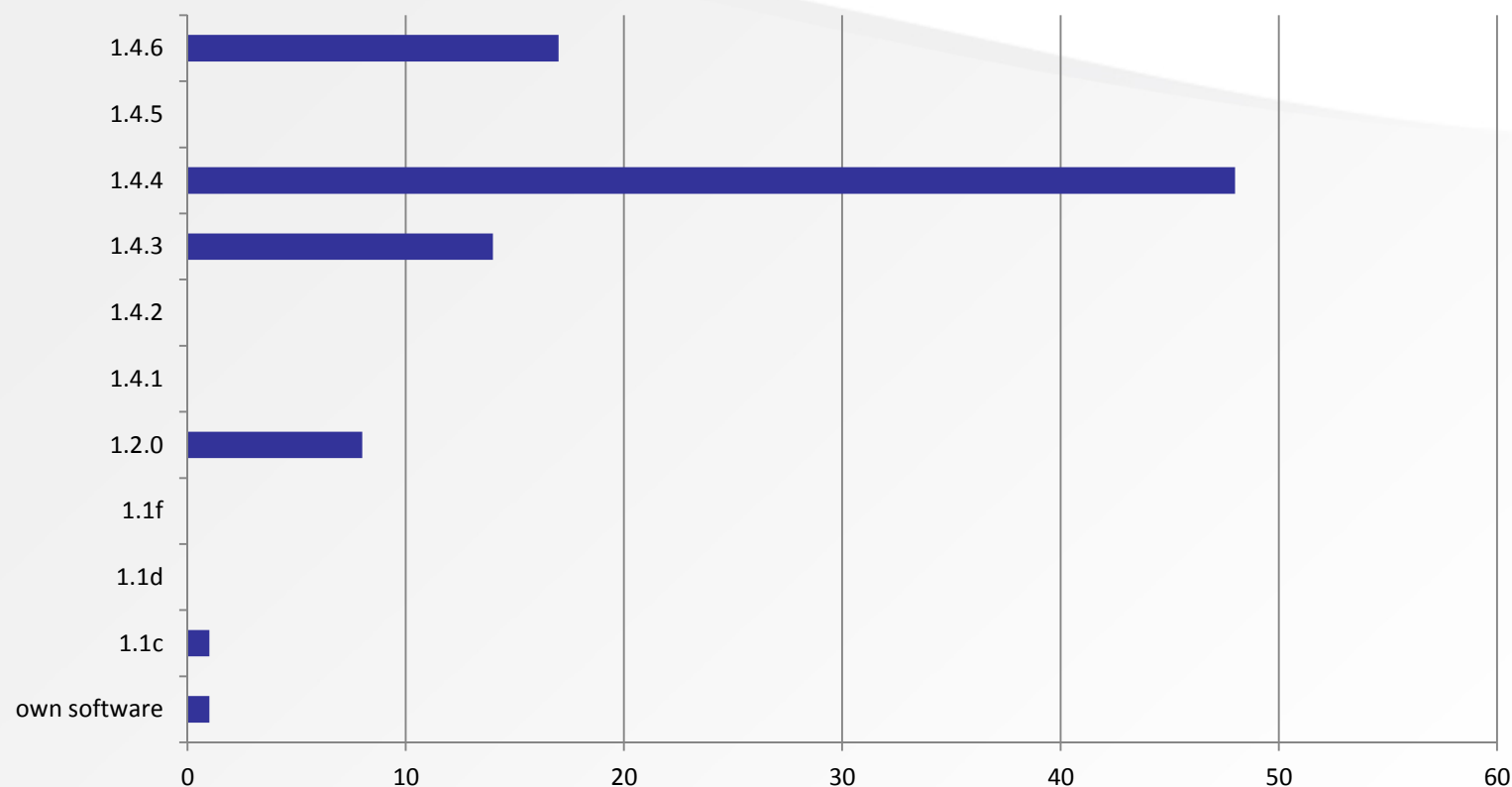


14 September 2015: **102** data centres connected:

Number of data centres no longer connected

- **LNEG – Portugal** (re-organisation) – data now via **IPMA**)
- **USRIEP and TVNU – Ukraine** (due to Crimea crisis) – data now via **MHI**
- **YugNIRO – Ukraine** (due to Crimea crisis)
- **IGEWE – Albania** (not achieved)

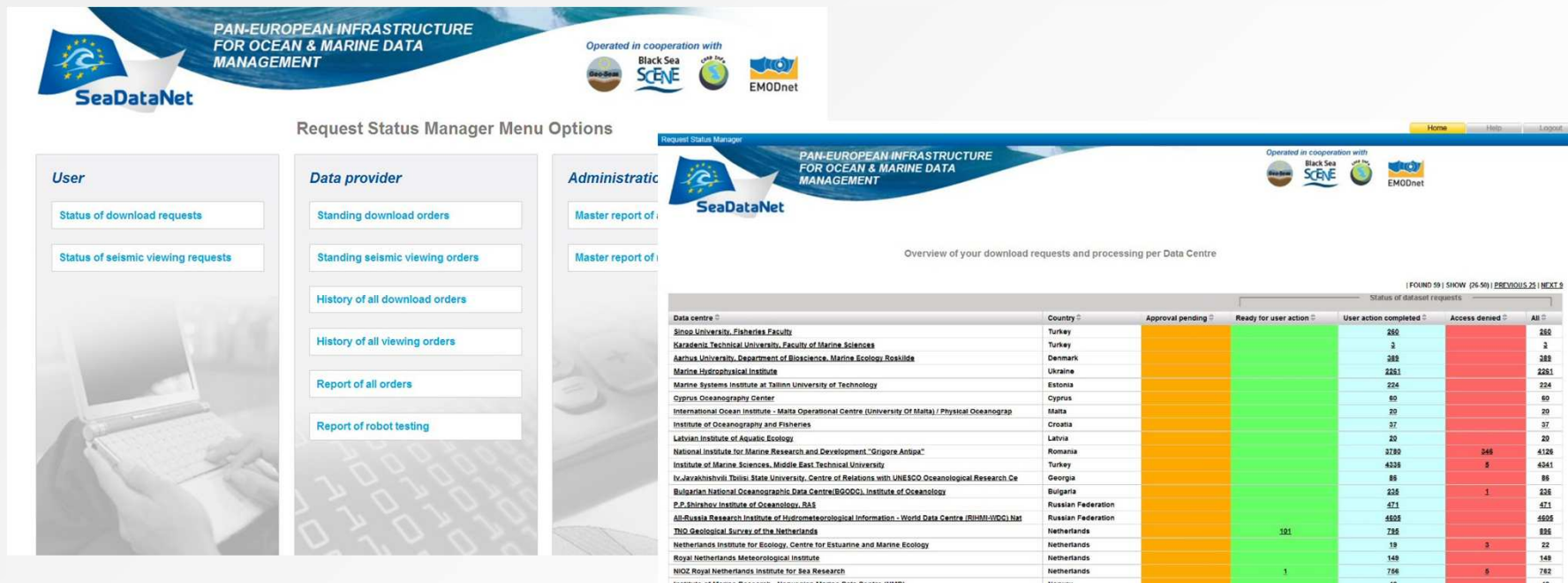
Situation with DM installations



88 data centres with DM (87 with Marine-ID); 13 with interim-solution; 1 with own software. All data centres should upgrade to adopt new functionalities and to make the SeaDataNet CDI service more robust and homogeneous

Request Status Manager

- Tracking and tracing of all shopping requests
- By users
- By data providers
- Analysis of transactions
- Checking status of orders and downloading from data providers



The screenshot displays the Request Status Manager web application. The interface includes a top navigation bar with the SeaDataNet logo and the text "PAN-EUROPEAN INFRASTRUCTURE FOR OCEAN & MARINE DATA MANAGEMENT". Below the navigation bar, there are three main menu sections: "User", "Data provider", and "Administrative". The "User" section contains links for "Status of download requests" and "Status of seismic viewing requests". The "Data provider" section contains links for "Standing download orders", "Standing seismic viewing orders", "History of all download orders", "History of all viewing orders", "Report of all orders", and "Report of robot testing". The "Administrative" section contains links for "Master report of" and "Master report of".

The main content area shows an "Overview of your download requests and processing per Data Centre". It includes a table with the following columns: Data centre, Country, Approval pending, Ready for user action, User action completed, Access denied, and All. The table lists various data centres and their corresponding request counts.

| Data centre | Country | Approval pending | Ready for user action | User action completed | Access denied | All |
|--|--------------------|------------------|-----------------------|-----------------------|---------------|------|
| Sinop University, Fisheries Faculty | Turkey | 286 | 0 | 286 | 0 | 286 |
| Karadeniz Technical University, Faculty of Marine Sciences | Turkey | 3 | 0 | 3 | 0 | 3 |
| Aarhus University, Department of Bioscience, Marine Ecology Roskilde | Denmark | 388 | 0 | 388 | 0 | 388 |
| Marine Hydrophysical Institute | Ukraine | 2261 | 0 | 2261 | 0 | 2261 |
| Marine Systems Institute at Tallinn University of Technology | Estonia | 224 | 0 | 224 | 0 | 224 |
| Cyprus Oceanography Center | Cyprus | 60 | 0 | 60 | 0 | 60 |
| International Ocean Institute - Malta Operational Centre (University Of Malta) / Physical Oceanography | Malta | 20 | 0 | 20 | 0 | 20 |
| Institute of Oceanography and Fisheries | Croatia | 37 | 0 | 37 | 0 | 37 |
| Latvian Institute of Aquatic Ecology | Latvia | 20 | 0 | 20 | 0 | 20 |
| National Institute for Marine Research and Development "Grigore Antipa" | Romania | 3780 | 0 | 3780 | 248 | 4028 |
| Institute of Marine Sciences, Middle East Technical University | Turkey | 4338 | 0 | 4338 | 8 | 4346 |
| Iv.Javakishvili Tbilisi State University, Centre of Relations with UNESCO Oceanological Research Ce | Georgia | 86 | 0 | 86 | 0 | 86 |
| Bulgarian National Oceanographic Data Centre (BOODC), Institute of Oceanology | Bulgaria | 235 | 0 | 235 | 1 | 236 |
| P.P. Shirshov Institute of Oceanology, RAS | Russian Federation | 471 | 0 | 471 | 0 | 471 |
| All-Russian Research Institute of Hydrometeorological Information - World Data Centre (IHI-MI-WDC) Nat | Russian Federation | 4605 | 0 | 4605 | 0 | 4605 |
| THIO Geological Survey of the Netherlands | Netherlands | 191 | 0 | 191 | 0 | 191 |
| Netherlands Institute for Ecology, Centre for Estuarine and Marine Ecology | Netherlands | 19 | 0 | 19 | 3 | 22 |
| Royal Netherlands Meteorological Institute | Netherlands | 149 | 0 | 149 | 0 | 149 |
| NIOD Royal Netherlands Institute for Sea Research | Netherlands | 786 | 1 | 786 | 9 | 796 |

Request Status Manager - reporting

Overseeing all transactions and preparing reports

[Home](#)
[Help](#)
[Logout](#)

Request Status Manager

Search

CDI partner

All

User name

User organisation

-

Service type

All

Last update (yyyy-mm-dd) from

to

Request date (yyyy-mm-dd) from

to

Status

All

User country

Portal

All






Restriction

All

Search

Reset

Operated in cooperation

Master Analysing and reporting all requests by all users and for all Data Centres

25

50

100

1000 RECORDS

Go

Export

FOUND 1800364 | SHOW (1-25) | PREVIOUS | NEXT 25

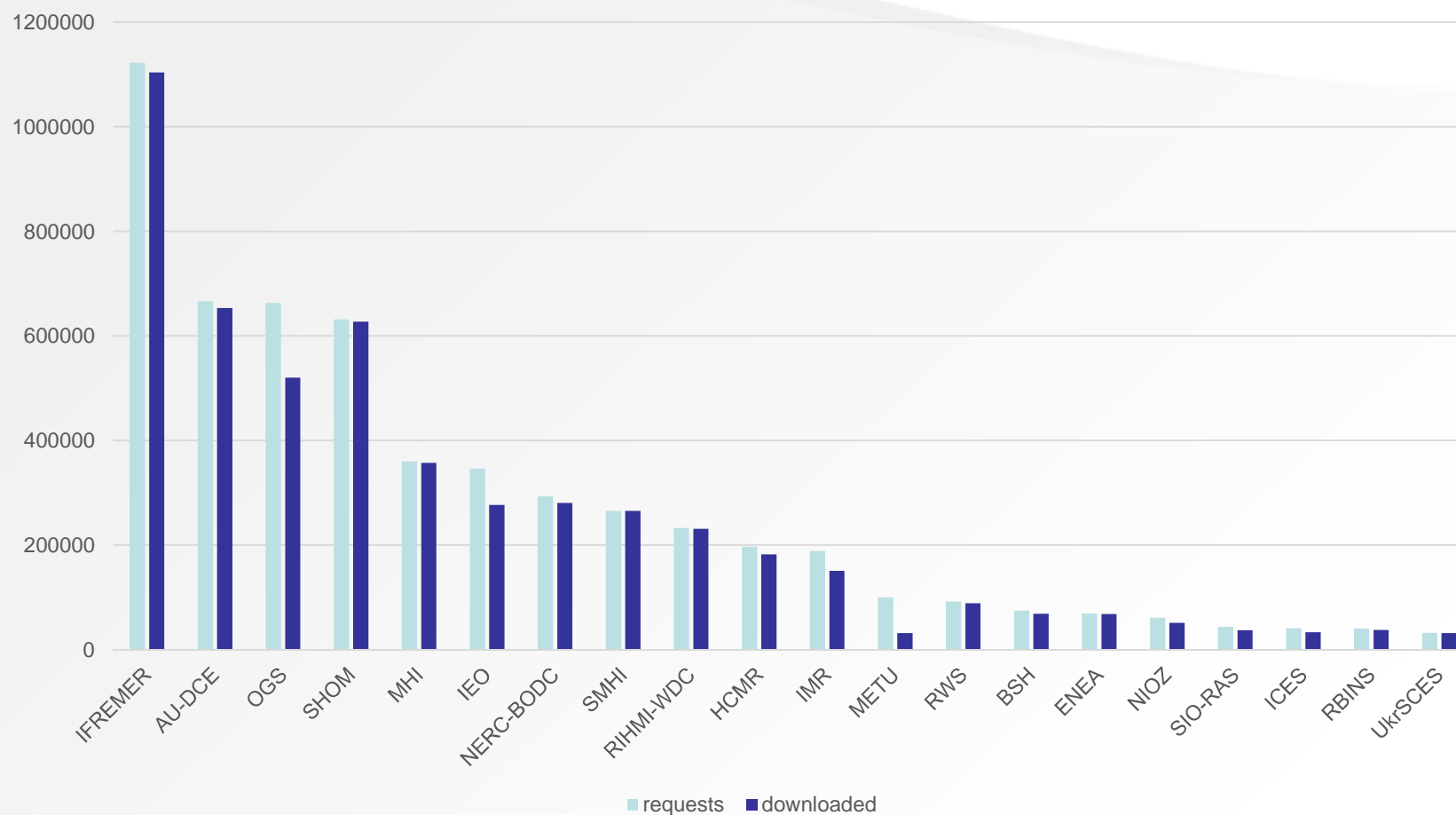
| Dataset CDI-ID | LOCAL_CDI_ID | Dataset name | CDI partner | User name | Portal | Status | Service type | Request-key | Request date | Last update |
|------------------------|---------------------------|-------------------|--|---|----------------------|-----------------------|---------------------|-------------|--------------|-------------|
| 482974 | 19980098ST177278sed_MUDAB | 19980098sed_MUDAB | German Oceanographic Datacentre (NODC) | Mr Hendrik Wolschke - hendrik.wolschke@hzg.de | seadatanet.maris2.nl | Ready for user action | Downloading service | 6360 | 2013-03-08 | 2013-03-08 |
| 482922 | 19980073ST146837sed_MUDAB | 19980073sed_MUDAB | German Oceanographic Datacentre (NODC) | Mr Hendrik Wolschke - hendrik.wolschke@hzg.de | seadatanet.maris2.nl | To be discussed | Downloading service | 6360 | 2013-03-08 | 2013-03-08 |
| 482907 | 19980071ST201035sed_MUDAB | 19980071sed_MUDAB | German Oceanographic Datacentre (NODC) | Mr Hendrik Wolschke - hendrik.wolschke@hzg.de | seadatanet.maris2.nl | To be discussed | Downloading service | 6360 | 2013-03-08 | 2013-03-08 |
| 482870 | 19980070ST213323sed_MUDAB | 19980070sed_MUDAB | German Oceanographic Datacentre (NODC) | Mr Hendrik Wolschke - hendrik.wolschke@hzg.de | seadatanet.maris2.nl | Ready for user action | Downloading service | 6360 | 2013-03-08 | 2013-03-08 |
| 482829 | 19970114ST275636sed_MUDAB | 19970114sed_MUDAB | German Oceanographic Datacentre (NODC) | Mr Hendrik Wolschke - hendrik.wolschke@hzg.de | seadatanet.maris2.nl | Ready for user action | Downloading service | 6360 | 2013-03-08 | 2013-03-08 |
| 482823 | 19970114ST275630sed_MUDAB | 19970114sed_MUDAB | German Oceanographic Datacentre (NODC) | Mr Hendrik Wolschke - hendrik.wolschke@hzg.de | seadatanet.maris2.nl | Ready for user action | Downloading service | 6360 | 2013-03-08 | 2013-03-08 |
| 482770 | 19970114ST275577sed_MUDAB | 19970114sed_MUDAB | German Oceanographic Datacentre (NODC) | Mr Hendrik Wolschke - hendrik.wolschke@hzg.de | seadatanet.maris2.nl | Ready for user action | Downloading service | 6360 | 2013-03-08 | 2013-03-08 |
| 482743 | 19970114ST275550sed_MUDAB | 19970114sed_MUDAB | German Oceanographic Datacentre (NODC) | Mr Hendrik Wolschke - hendrik.wolschke@hzg.de | seadatanet.maris2.nl | Ready for user action | Downloading service | 6360 | 2013-03-08 | 2013-03-08 |
| 482738 | 19970114ST275545sed_MUDAB | 19970114sed_MUDAB | German Oceanographic Datacentre (NODC) | Mr Hendrik Wolschke - hendrik.wolschke@hzg.de | seadatanet.maris2.nl | Ready for user action | Downloading service | 6360 | 2013-03-08 | 2013-03-08 |
| 482702 | 19970069ST203304sed_MUDAB | 19970069sed_MUDAB | German Oceanographic Datacentre (NODC) | Mr Hendrik Wolschke - hendrik.wolschke@hzg.de | seadatanet.maris2.nl | Ready for user action | Downloading service | 6360 | 2013-03-08 | 2013-03-08 |
| 482672 | 19970068ST248249sed_MUDAB | 19970068sed_MUDAB | German Oceanographic Datacentre (NODC) | Mr Hendrik Wolschke - hendrik.wolschke@hzg.de | seadatanet.maris2.nl | Ready for user action | Downloading service | 6360 | 2013-03-08 | 2013-03-08 |
| 482661 | 19970003ST141491sed_MUDAB | 19970003sed_MUDAB | German Oceanographic Datacentre (NODC) | Mr Hendrik Wolschke - hendrik.wolschke@hzg.de | seadatanet.maris2.nl | Ready for user action | Downloading service | 6360 | 2013-03-08 | 2013-03-08 |
| 482659 | 19970003ST141488sed_MUDAB | 19970003sed_MUDAB | German Oceanographic | Mr Hendrik Wolschke - | seadatanet.maris2.nl | Ready for user | Downloading service | 6360 | 2013-03-08 | 2013-03-08 |

Transactions in SDN2 CDI system – RSM

- Since 1st October 2011:
 - Number of requests including robot users: **6366530**
 - Number of downloaded files incl robots: **5873343**
 - Number of requests excluding robot users: **2882252**
 - Number of downloaded files: **2490567 data sets**
 - Done by: **836 registered users** (1 year ago: 478)

Transactions in SDN2 CDI system – RSM – incl Robots

Top 20 data centres in transactions





SeaDataNet

PAN-EUROPEAN INFRASTRUCTURE
FOR OCEAN & MARINE DATA
MANAGEMENT

Viewing services for CDI – OGC WMS - WFS

- Open Geospatial Consortium (OGC) Web Map Service (WMS) and Web Feature Service (WFS) protocols to exchange maps and metadata including URLs to further metadata and data.
- WMS GetCapabilities also specifies how the WFS can be called and integrated in another portal. Implementing WFS is depending on the client and might require some programming.
- The WMS URL for SeaDataNet is:

<http://geoservice.maris2.nl/wms/seadatanet/seadatanet/>

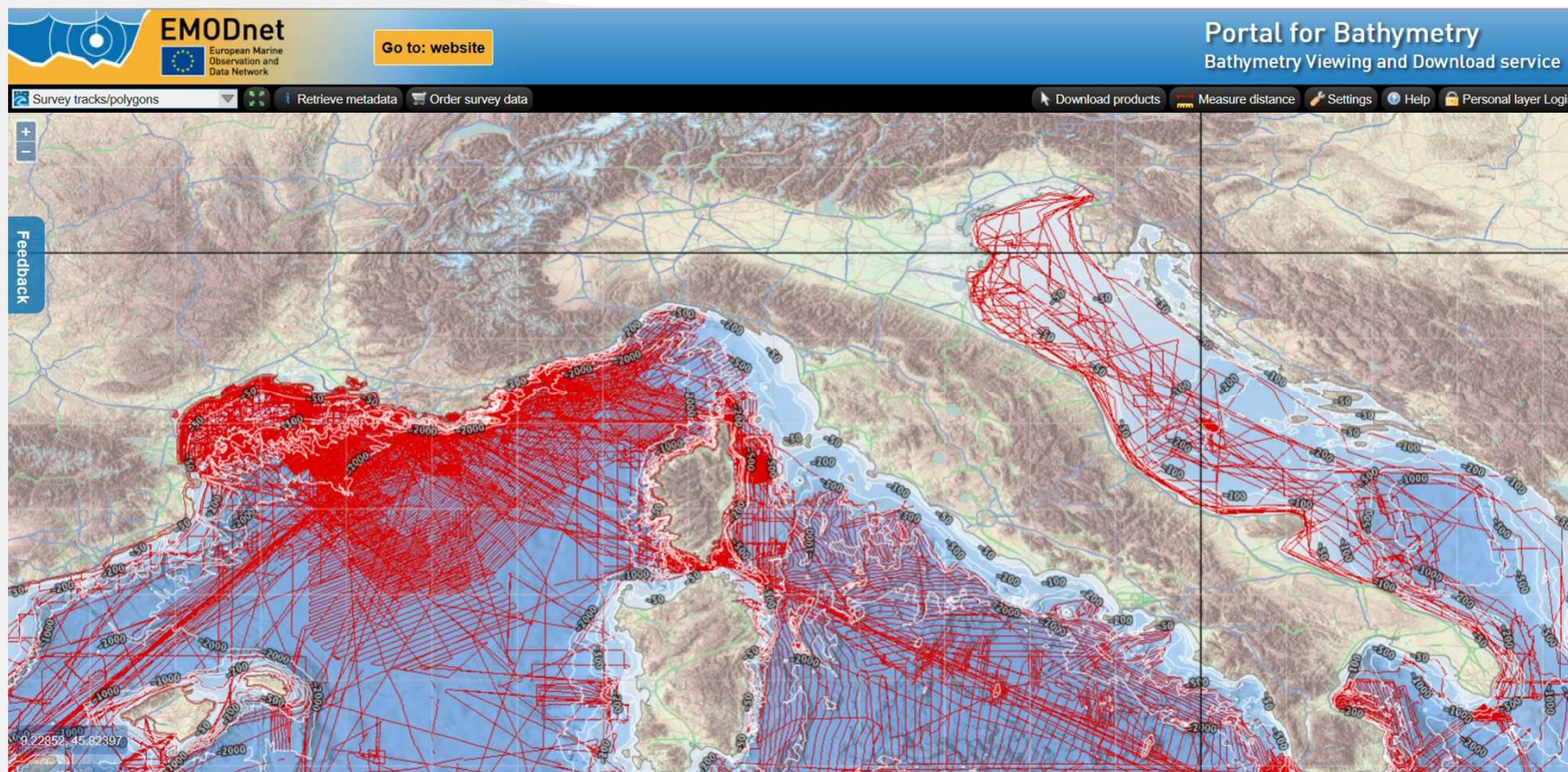
<http://geoservice.maris2.nl/wms/seadatanet/seadatanet?service=WMS&request=GetCapabilities>



SeaDataNet

PAN-EUROPEAN INFRASTRUCTURE
FOR OCEAN & MARINE DATA
MANAGEMENT

Example for CDI – OGC WMS - WFS



EMODnet Bathymetry with overlay of CDI - WMS services



SeaDataNet

PAN-EUROPEAN INFRASTRUCTURE
FOR OCEAN & MARINE DATA
MANAGEMENT

Example for CDI – OGC WMS - WFS

EMODnet European Marine Observation and Data Network

Go to: website

Portal for Bathymetry
Bathymetry Viewing and Download service

Survey tracks/polygons

Retrieve metadata Order survey data

Download products Measure distance Settings Help Personal layer Login

Feedback

Survey tracks/polygons

WHAT?

Data set name: TIR99

Discipline: Marine geology, Terrestrial

Parameter groups: Gravity, magnetics and bathymetry, Terrestrial

Discovery parameters: Bathymetry and Elevation

GEMET-INSPIRE themes: Oceanographic geographical features

Abstract: The data were acquired with a Simrad EM120 S Multi Beam echosounder aboard the Russian R/V Strakhov in order to cover the central-southern Tyrrhenian sea for geological reconnaissance in the framework of an Italian project funded by CNR and APAT (Geological Survey Agency).

Data format: Climate and Forecast NetCDF Version 3.5

Data set creation date: 20101027

WHERE?

Map

GML id: mc01

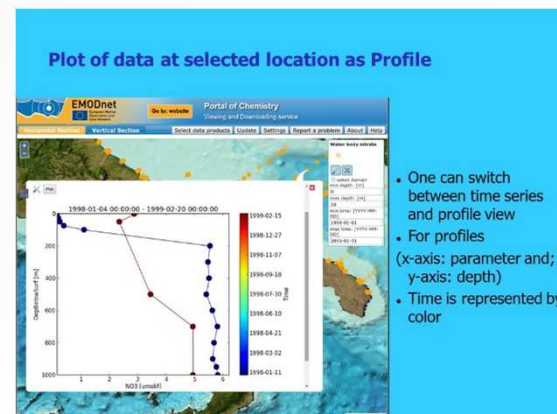
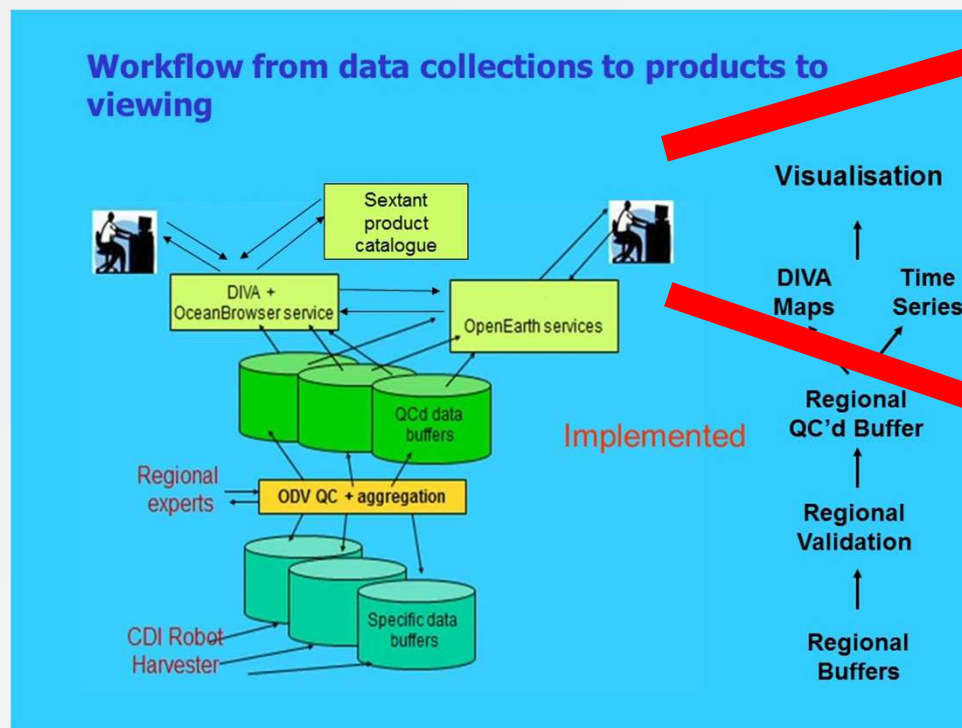
GML objects

| Name | Description |
|------------------------|------------------------|
| Track T99001 for TIR99 | Track T99001 for TIR99 |

EMODnet Bathymetry with CDI - WFS for CDI details

Viewing services on CDI – buffer data sets

- As part of EMODnet Chemistry – advanced services



Viewing services on CDI – operational oceanography

- Via Sensor Web Enablement – SOS services

Station start date 20140313

WHO?

Originator ☐ OGS (Istituto Nazionale di Oceanografia e di Geofisica Sperimentale), Division of Oceanography


Data Holding centre ☐ OGS (Istituto Nazionale di Oceanografia e di Geofisica Sperimentale), Division of Oceanography

Project name ☐ Fixed point Open Ocean Observatories

HOW TO GET THE DATA?

Data Distributor ☐ OGS (Istituto Nazionale di Oceanografia e di Geofisica Sperimentale), Division of Oceanography

Access/ordering of data web data access with registration

Internet access/ordering 

Access restriction by negotiation

Additional services

| Website | Reference | Distribution method | Data size |
|---|---|------------------------|-----------|
| <input type="checkbox"/> Operational Time series visualisation of parameter | Electrical conductivity of the water body | 52n-sos-restful-ts-api | |
| <input type="checkbox"/> Operational Time series visualisation of parameter | Temperature of the water body | 52n-sos-restful-ts-api | |
| <input type="checkbox"/> Operational Time series visualisation of parameter | Concentration of oxygen {O2 CAS 7782-44-7} per unit volume of the water body [dissolved plus reactive particulate phase] | 52n-sos-restful-ts-api | |
| <input type="checkbox"/> Operational Time series visualisation of parameter | Pressure (spatial co-ordinate) exerted by the water body by profiling pressure sensor and corrected to read zero at sea level | 52n-sos-restful-ts-api | |

OTHER INFO

Quality info

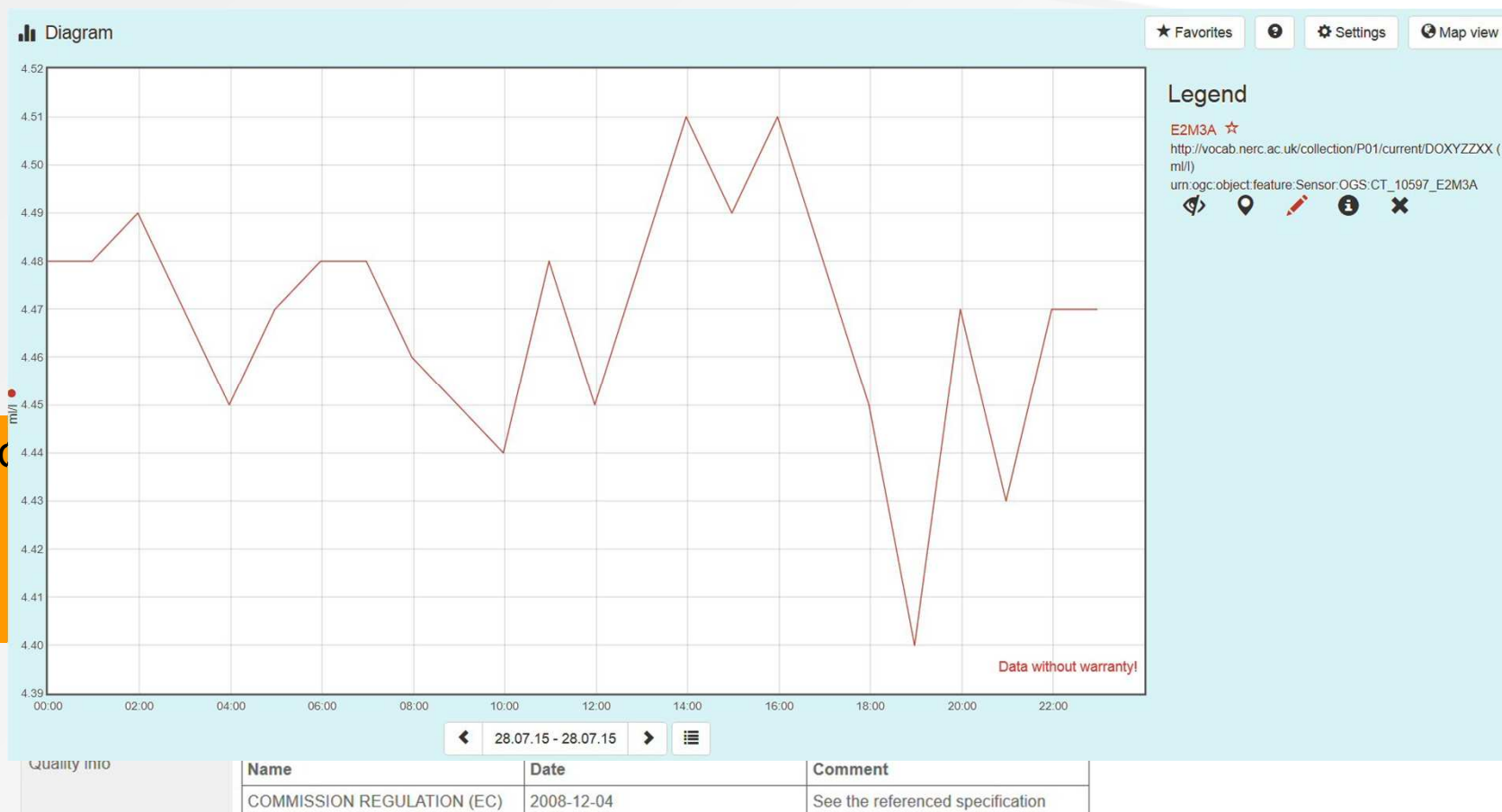
| Name | Date | Comment |
|----------------------------|------------|----------------------------------|
| COMMISSION REGULATION (EC) | 2008-12-04 | See the referenced specification |

Links to
SOS
viewer



Viewing services on CDI – operational oceanography

- Via Sensor Web Enablement – SOS services



Links to
SOS
viewer

Viewing services on WP10 – T&S Climatology

- online via **ODV-API** and binary collection file for **OCEANOTRON** server with OGC WMS, OGC SOS, OpenDAP interfacing for clients for analysis, subsetting, visualisations, and extractions

