



2nd Plenary meeting, Lucca, Italy, 26-27 Sept., 2013



SeaDataNet

PAN-EUROPEAN INFRASTRUCTURE
FOR OCEAN & MARINE DATA
MANAGEMENT

WP4 - Metadata catalogues Present Status and new/updated entries last year

Sissy Iona (HCMR)

Anne Che-Bohnenstengel, Friedrich Nast (BSH-DOD)

Lesley Rickards (BODC)

Peter Thijsse (MARIS)

SeaDataNet II

Aim

- to upgrade the existing system into an operationally robust and state-of-the-art Pan-European infrastructure

By

- setting, adopting and promoting common data management standards
- achieving an improved capacity for handling marine biological data
- achieving INSPIRE compliance and realizing interoperability with other relevant data management systems and initiatives for serving specific user communities, such as the Marine Strategy Framework Directive
- achieving both delayed-mode and real-time data provision capacities for operational oceanography
- expanding the number of connected data centres

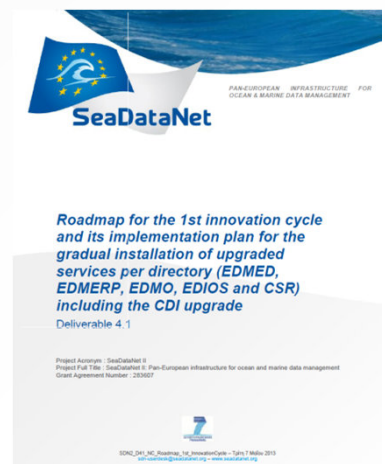
SeaDataNet Upgrade in 2 cycles

- 1st Innovation cycle (by end 2013)
 - Automatic transfer of updated and new metadata entries from partners to the central portal
- 2nd cycle (by end 2015)
 - handling a wide range of data types both for archived and real-time data
 - by adopting the OGC Sensor Web Enablement (SWE) standards
 - adding visualisation services
 - adding machine to machine interfaces

1st Innovation Cycle upgrades

- adopting INSPIRE compliant ISO 19139 based XML schema for CDI and CSR
- using Common Vocabularies Version 2 in all metadata directories (CDI, CSR, EDMED, EDMERP, EDIOS) and data formats (SeaDataNet ODV, SeaDataNet NetCDF)
- applying OGC CS-W harvesting between central portals and distributed data centres

Roadmap (D4.1) has been prepared with the implementation plan for the gradual installation of the upgraded metadata services of the EDMED, EDMERP, EDIOS, EDMO and CSR including the CDI



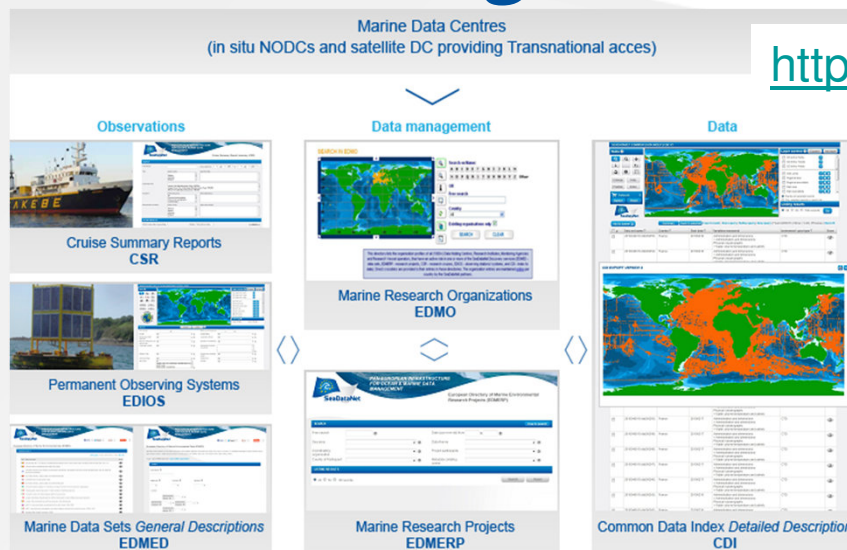
1st Innovation Cycle (end 2013)

- partners have to install and configure MIKADO, DM with CS-W harvesting and start preparing new entries
 - More explanations will be given tomorrow during the upgrading workshop
 - Later, middle Nov., partners will receive updated instructions (D4.3) after the completion of the installation by the central managers

Mid –term review, 12 Dec. 2013

- In addition, **good progress** on metadata catalogues content is required for the mid-term review

Metadata Catalogues



<http://www.seadatanet.org/Metadata>

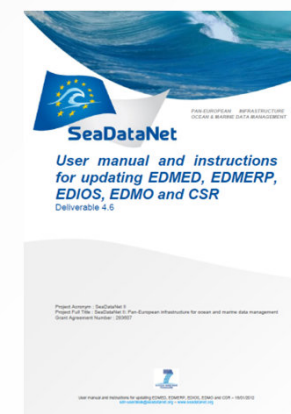
- SDN maintain and operates the European catalogue of marine projects, data sets, organizations, monitoring systems, cruise summary reports
 - Interconnected by common references EDMO, EDMERP and common vocabularies
- The content of the directories content is compiled from national contributions, and collated in each country by the SDN partners (usually NODCs)

Management

Cooperation NODC <=> other national partners:

- NODC chooses (if needed) a provided method of maintenance: XML files via MIKADO, or via CMS, or other tool
- Role NODC: => National focal point
 - Providing assistance in metadata preparation
 - Collating new records
 - Quality control of new metadata descriptions
 - Distributing to portal in case of XML files
 - Contact with central directory managers
- Role Institutes: => Support activities
 - Providing new entries
 - Update existing information

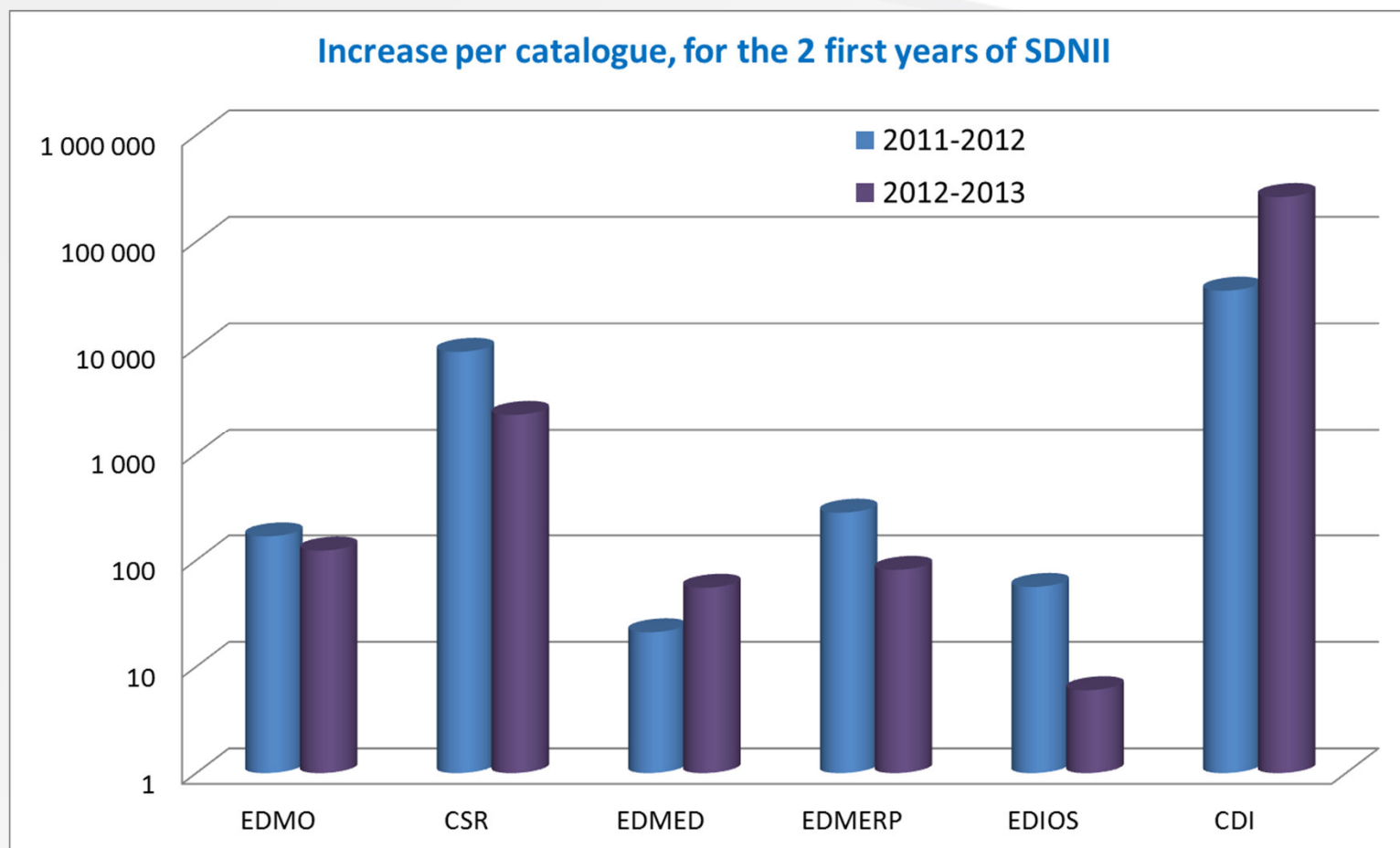
User manual (D4.6) for updating metadata directories (EDMO, EDMED, EDMERP, CSR and EDIOS), is available



Catalogues overview - Content

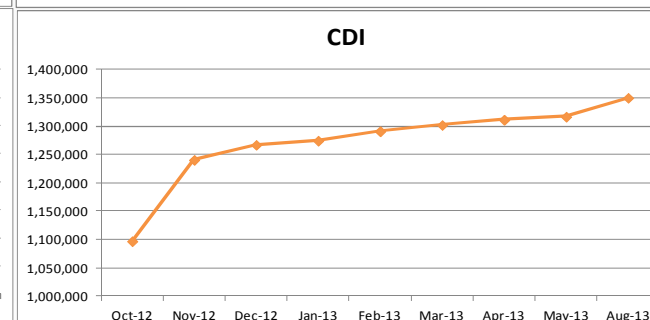
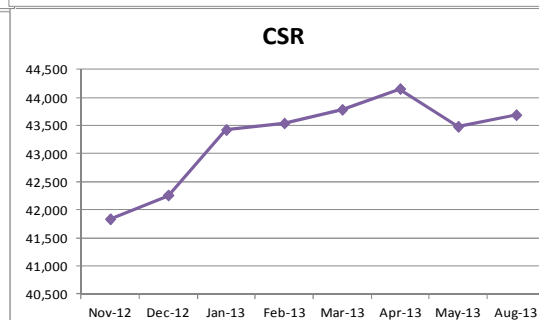
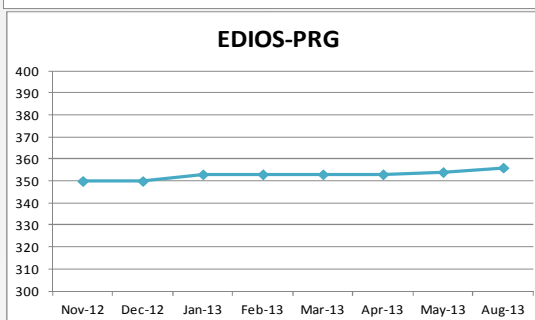
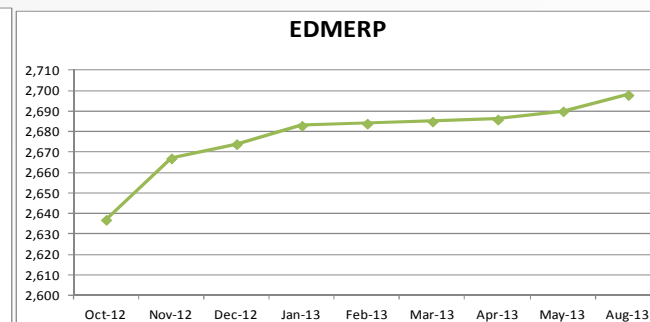
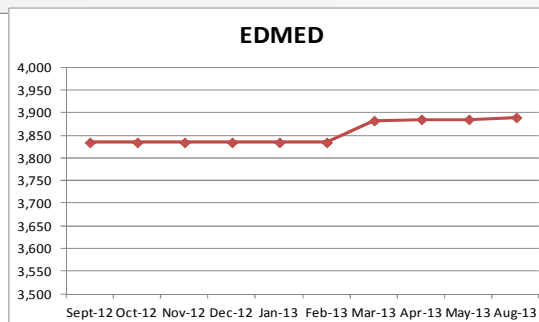
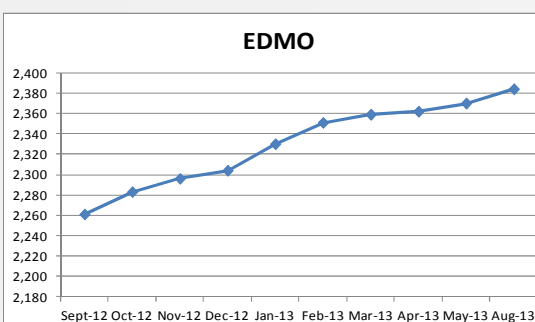
Catalogue	Nb (10/2011)	Nb (09/2012)	Nb (09/2013)	Increase since the start
EDMO : Marine organisations	2 094	2 261	2 384	290
CSR : Cruises	32 113	41 330	43 687	11 574
EDMED : Data sets	3 813	3 834	3 889	76
EDMERP : Projects	2 338	2 617	2 698	360
EDIOS : Programmes	294	350	356	62
CDI : Data	1 053 706	1 088 322	1 350 455	296 749
Number of connected data centres	65	77	88	23

Catalogues overview – increase



Catalogues global counts of last year

Catalogue	Catalogue	Sept-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Aug-13	2nd year change	Oct-11
EDMO : Marine organisations	EDMO	2.261	2.283	2.296	2.304	2.330	2.351	2.359	2.362	2.370	2.384	123	2.094
EDMED : Data sets	EDMED	3.834	3.834	3.834	3.834	3.834	3.834	3.882	3.885	3.885	3.889	55	3.813
EDMERP : Projects	EDMERP	2.617	2.637	2.667	2.674	2.683	2.684	2.685	2.686	2.690	2.698	81	2.338
EDIOS : Programmes	EDIOS-PRG	350	350	350	350	353	353	353	353	354	356	6	294
CSR : Cruises	CSR	41.330	41.481	41.832	42.256	43.423	43.539	43.782	44.153	43.479	43.687	2.357	32.113
CDI : Data	CDI	1.088.322	1.097.399	1.241.010	1.267.669	1.274.982	1.291.491	1.302.629	1.311.827	1.317.191	1.350.455	262.133	983.085
Number of SeaDataNet connected nodes			39	39	39	39	39	42	43	45	47		
Number of missing SDN nodes			9	9	9	9	9	6	5	3	1	1	





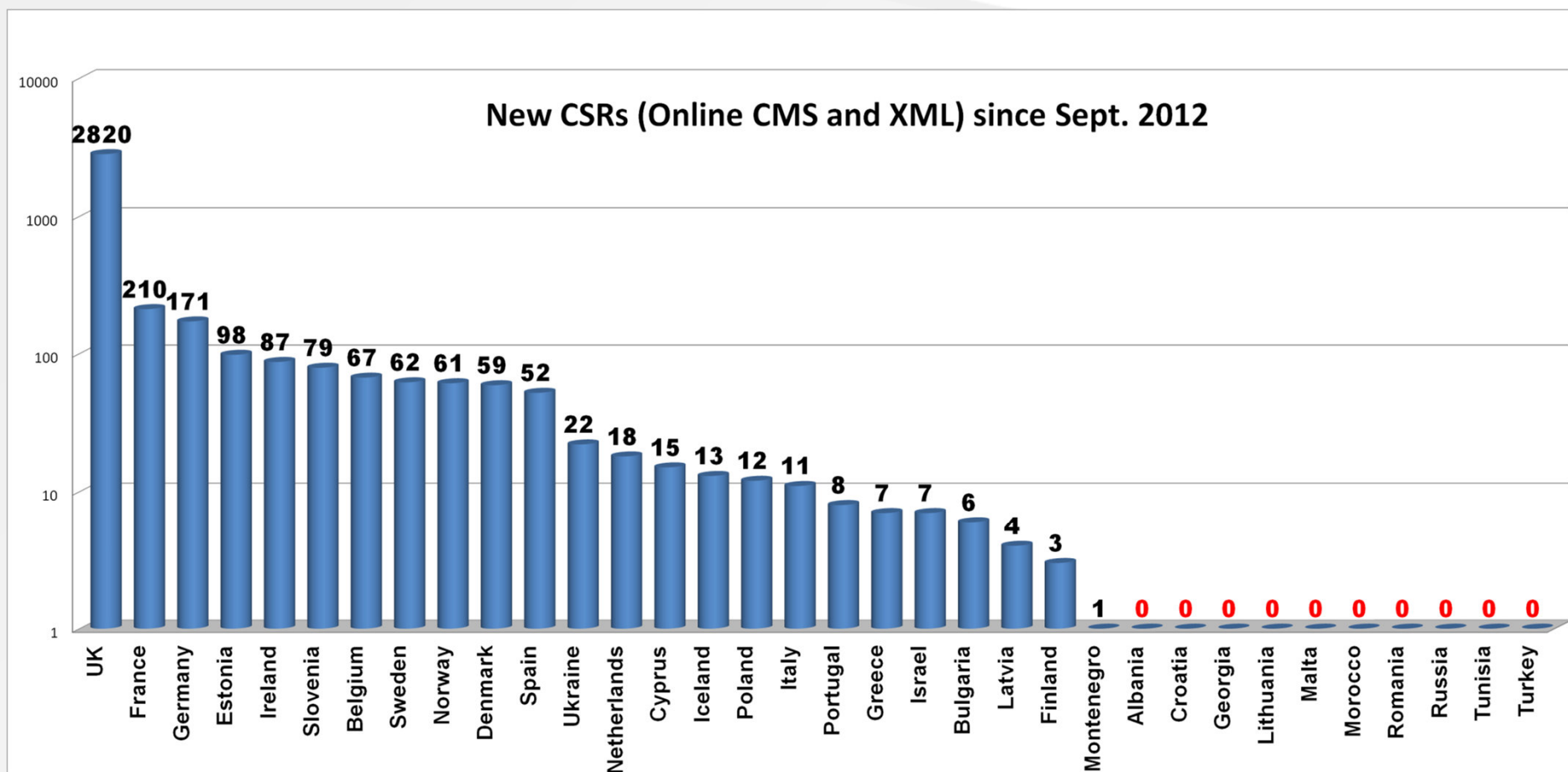
Content change per country since Sept. 2012

13

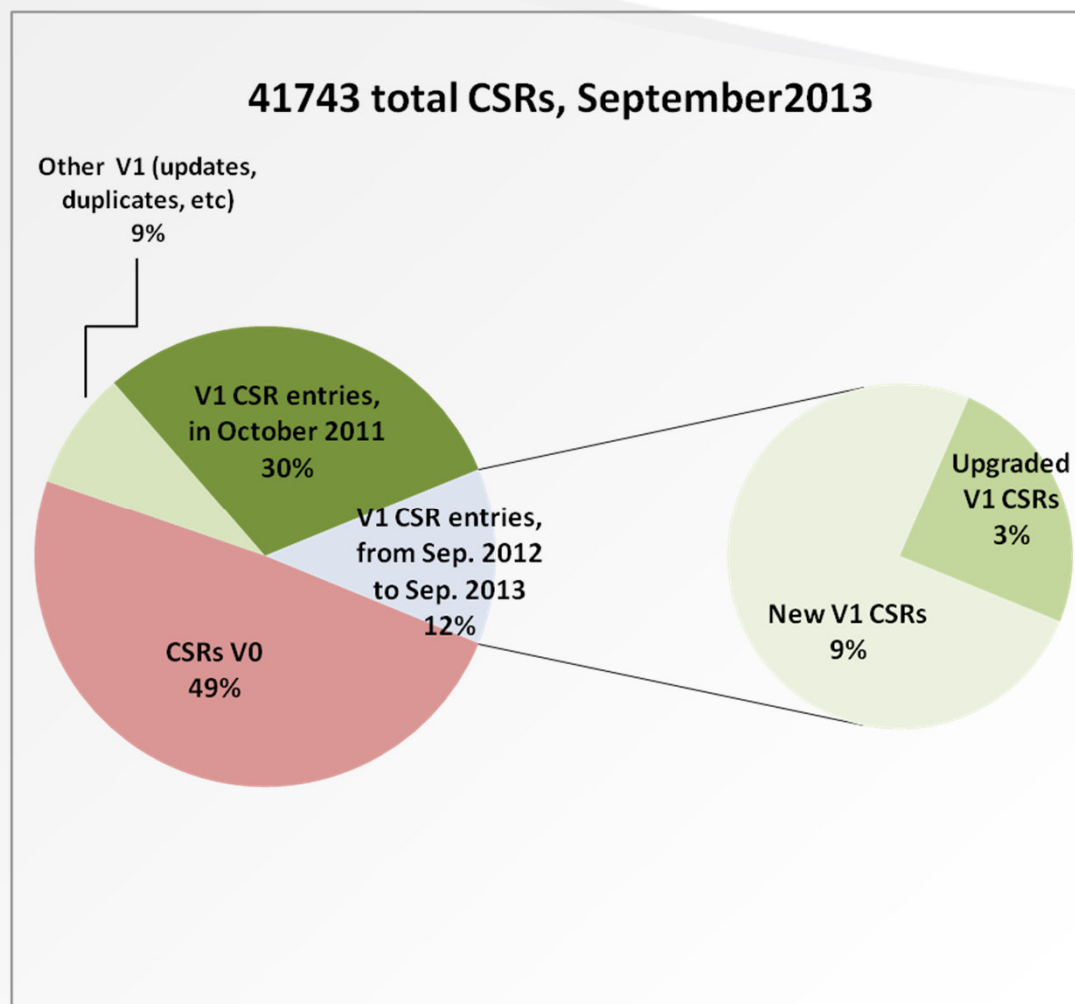
Country	New CSR (CMS & XML)	CSR upgrades (CMS & XML)	New EDMERP	New EDMED	New EDMO	New EDIOS Progs/Series*
Albania	0	0	0	0	0	x
Belgium	67		4	0	36	x
Bulgaria	6		0	0	2	x
Croatia	0		0	0	0	x
Cyprus	15	20	2	10	1	x
Denmark	59	1	0	0	17	x
Estonia	98	0	4	0	7	0
Finland	3	0	0	0	3	x
France	210	153	2	0	31	-1/-5
Georgia	0	0	0	0	2	x
Germany	171	4	21	0	10	0/0
Greece	7	0	8	0	4	0/0
Iceland	13	0	0	0	0	x
Ireland	87		0	14	14	0/0
Israel	7		0	0	0	x
Italy	11	0	1	0	14	3/10
Latvia	4		2	15	3	X
Lithuania	0		6	0	0	X
Malta	0	0	0	0	1	X
Montenegro	1		2	2	4	0/0
Morocco	0	0	0	0	2	X
Netherlands	18	0	6	17	2	X
Norway	61	837	0	0	2	0/0
Poland	12	0	0	0	4	x
Portugal	8	6	1	0	2	1/14
Romania	0		0	0	7	x
Russian Federation	0	0	0	0	15	x
Slovenia	79		0	0	0	0/0
Spain	52	0	1	0	1	1/4
Sweden	62		1	0	5	0/0
Tunisia	0		1	1	0	x
Turkey	0	0	0	0	23	x
UK	2820	259	6	5	89	1/5
Ukraine	22		0	1	3	0/0

15 countries (in green) finished/almost finished their upgrading from CSR V0 to CSR V1

CSRs change since Sept. 2012



CSR V1 upgrade status



What is new for CSR Inventory

- Common Vocabularies NERC CV2
- CSR ISO 19139 schema
- CSR ISO list for CDI
- WMS for GML Tracks

Use of NERC Vocabularies CV2 for CSRs

NEW

- ICES platform codes : C17
 - SeaVoX salt and fresh water body gazetteer : C19
- instead of SeaDataNet sea areas C16

Essentially the same

- ISO countries : C32
- Ten-degree Marsden Squares : C37
- SeaDataNet ports gazetteer: C38
- SeaDataNet CSR data categories: C77
- SeaVoX platform categories: L06
- SeaDataNet CSR quantification units: L18
- SeaDataNet parameter discovery vocabulary: P02
- SeaDataNet device categories: L05
- SeaDataNet data access restriction policies: L08

Use “NOT deprecated” terms

New vocabs
already in use
for CSR CMS
and user interface

CSR ISO 19139 Format and Cross Reference from CDI

- New XML Format
 - XML schema finalised
 - Ingestion of CSR in new format being tested
- CSR ISO List (e.g. local csr id and global csr id) (only for upgraded records)
are now available via

<http://seadata.bsh.de/isoCodelists/sdnCodelists/csrCodeList.xml>


```
<codeEntry>
  <CodeDefinition gml:id="SDN_CSRCode_20116263">
    <gml:metaDataProperty about="http://www.seadatanet.org/urnurl/SDN:EDMO::396"/>
    <gml:metaDataProperty about="http://www.seadatanet.org/urnurl/SDN:CSR::20116263"/>
    <gml:metaDataProperty about="http://seadata.bsh.de/cgi-csr/retrieve_sdn2/xmlDownload_V1.pl?csrref=20116263">
    <gml:description>CV9821 - Celtic Voyager (45CV)</gml:description>
    <gml:identifier codeSpace="SeaDataNet">20116263</gml:identifier>
    <gml:name codeSpace="EDMO">396_CV9821</gml:name></CodeDefinition>
</codeEntry>
```

BSH CSR
reference number

collating centre &
local cruise ID

*This provides a cross reference to the CSR e.g more
cruise metadata will be available through the CDI*

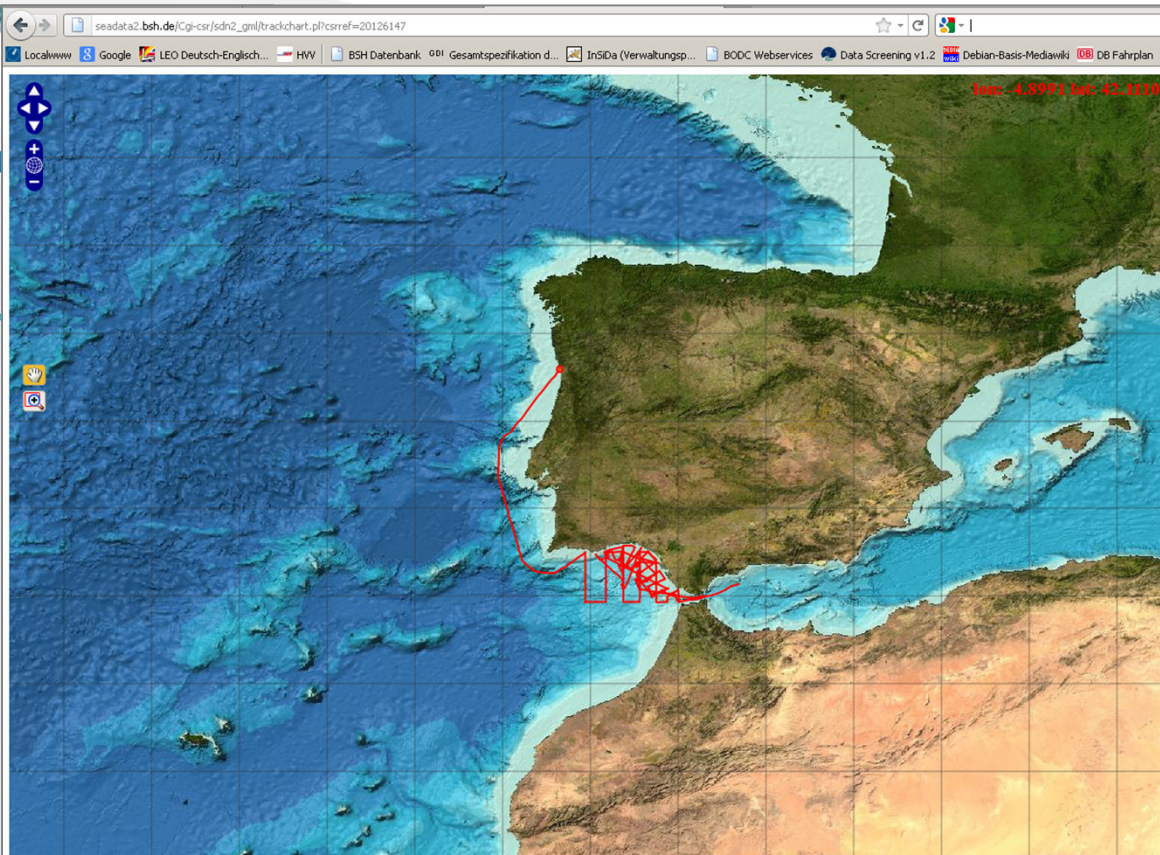
Web Map Service for GML Tracks in test



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Cruise Summary Report of Hesperides Cruise P3A2-2008 (BSH Ref-No.: 20126147)

GENERAL INFORMATION									
Platform/Ship	Hesperides								
Cruise begin	04.10.2008								
Cruise end	21.10.2008								
Port of Departure									
Port of Return									
Chief Scientist(s)	HUERTAS CABILLA, EMMA - Spanish National Research Council Instituto De Ciencias Mar								
Responsible Laboratory	Spanish National Research Council Instituto De Ciencias Marinas De Andalucia								
LOCATION									
General Ocean Areas	North East Atlantic Ocean (limit 40°W)								
Marsden Squares(S, N, E, W)									
Bounding Box(es)	<table border="1"> <thead> <tr> <th>WEST</th> <th>EAST</th> <th>SOUTH</th> <th>NORTH</th> </tr> </thead> <tbody> <tr> <td>-10.105</td> <td>-4.6151</td> <td>35.8499</td> <td>41.187</td> </tr> </tbody> </table>	WEST	EAST	SOUTH	NORTH	-10.105	-4.6151	35.8499	41.187
WEST	EAST	SOUTH	NORTH						
-10.105	-4.6151	35.8499	41.187						
Specific Geographic Areas									
Link to Track Charts	Trackchart								
PROJECT									
Project Title / Coordinating Body									
OBJECTIVES									
Description	Marine Biology								
ADDITIONAL INFORMATION									
Parameters measured	Unspecified Gravity Air temperature Wind speed and direction Atmospheric humidity Solar Radiation Air pressure Horizontal spatial co-ordinates Raw temperature and/or salinity instrument output								
Instruments used	unknown gravimeters meteorological packages Global Navigation Satellite System receivers thermosalinographs radiometers								
Linkage / Report / Station list									



Upcoming!

CSR Harvesting via CS-W from
SDN partners

and from ships later (EuroFleets)



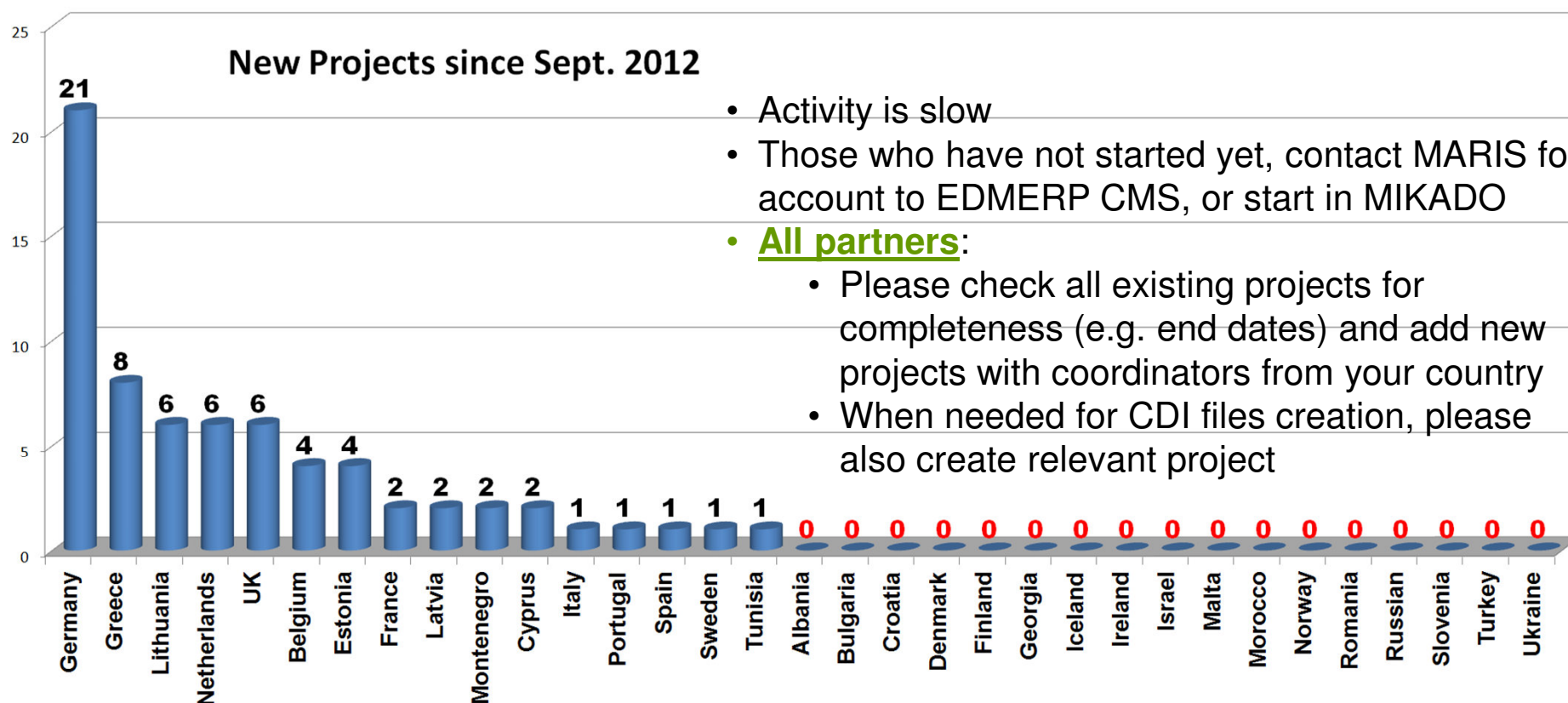
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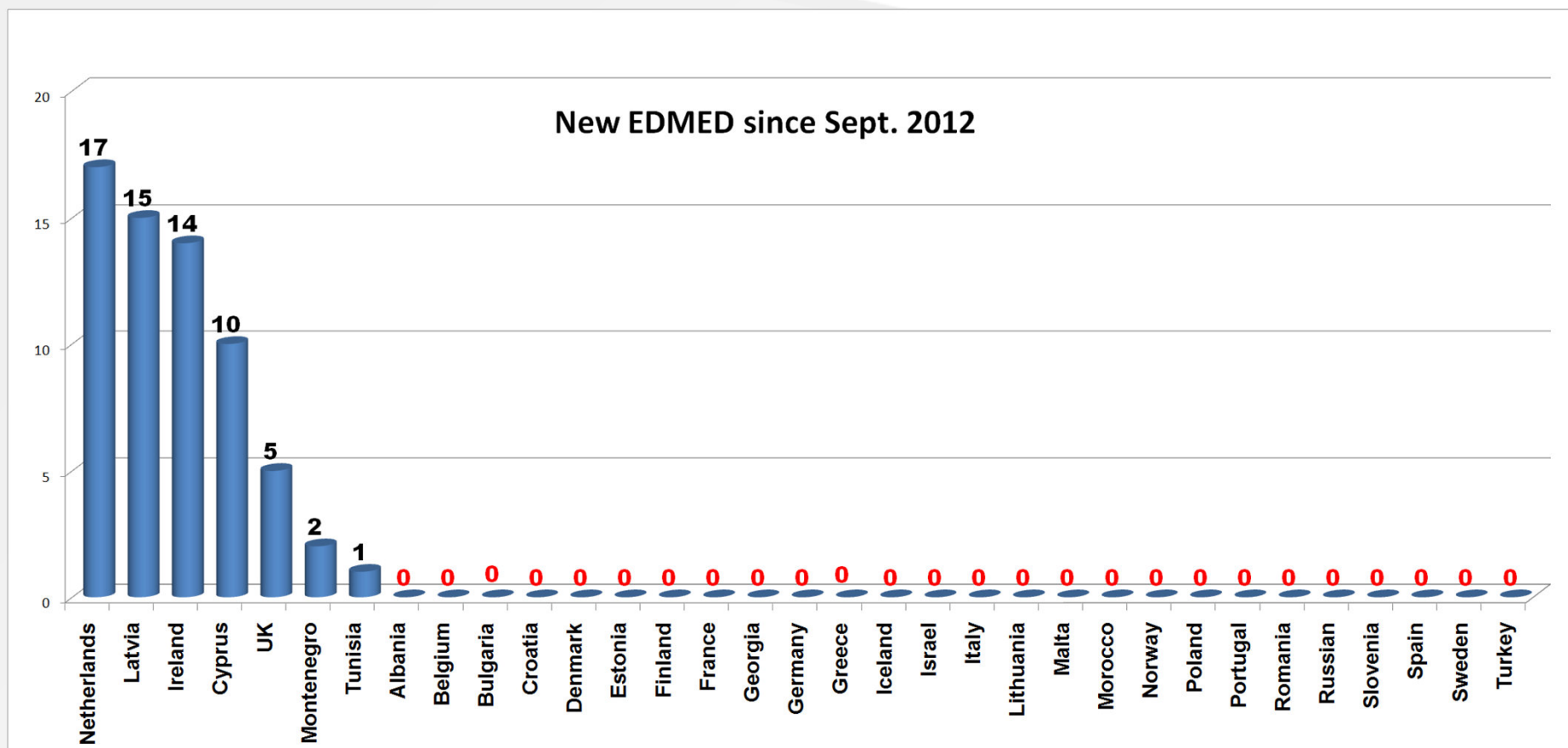
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Croatia	0		0	0	0	x
Cyprus	15	20	2	10	1	x
Denmark	59	1	0	0	17	x
Estonia	98	0	4	0	7	0
Finland	3	0	0	0	3	x
France	210	153	2	0	31	-1/-5
Georgia	0	0	0	0	2	x
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Iceland	13	0	0	0	0	x
Ireland	87		0	14	14	0/0
Israel	7		0	0	0	x
Italy	11	0	1	0	14	3/10
Latvia	4		2	15	3	X
Lithuania	0		6	0	0	X
Malta	0	0	0	0	1	X
Montenegro	1		2	2	4	0/0
Morocco	0	0	0	0	2	X
Netherlands	18	0	6	17	2	X
Norway	61	837	0	0	2	0/0
Poland	12	0	0	0	4	x
Portugal	8	6	1	0	2	1/14
Romania	0		0	0	7	x
Russian Federation	0	0	0	0	15	x
Slovenia	79		0	0	0	0/0
Spain	52	0	1	0	1	1/4
Sweden	62		1	0	5	0/0
Tunisia	0		1	1	0	x
Turkey	0	0	0	0	23	x
UK	2820	259	6	5	89	1/5
Ukraine	22		0	1	3	0/0

15 countries (in green) finished/almost finished their upgrading from CSR V0 to CSR V1

Projects change since Sept. 2012



EDMED change since Sept. 2012



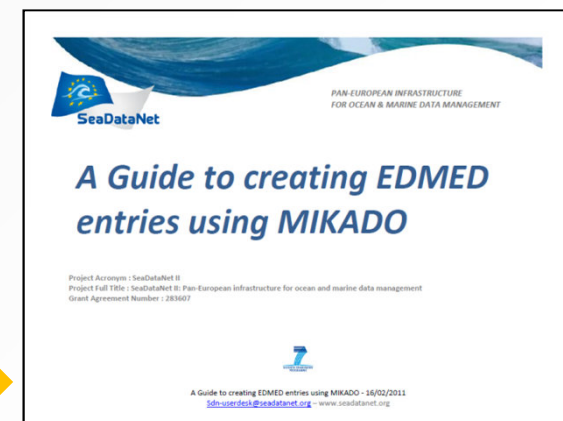
Updating and managing EDMED content

BODC needs to receive new/updated EDMED records

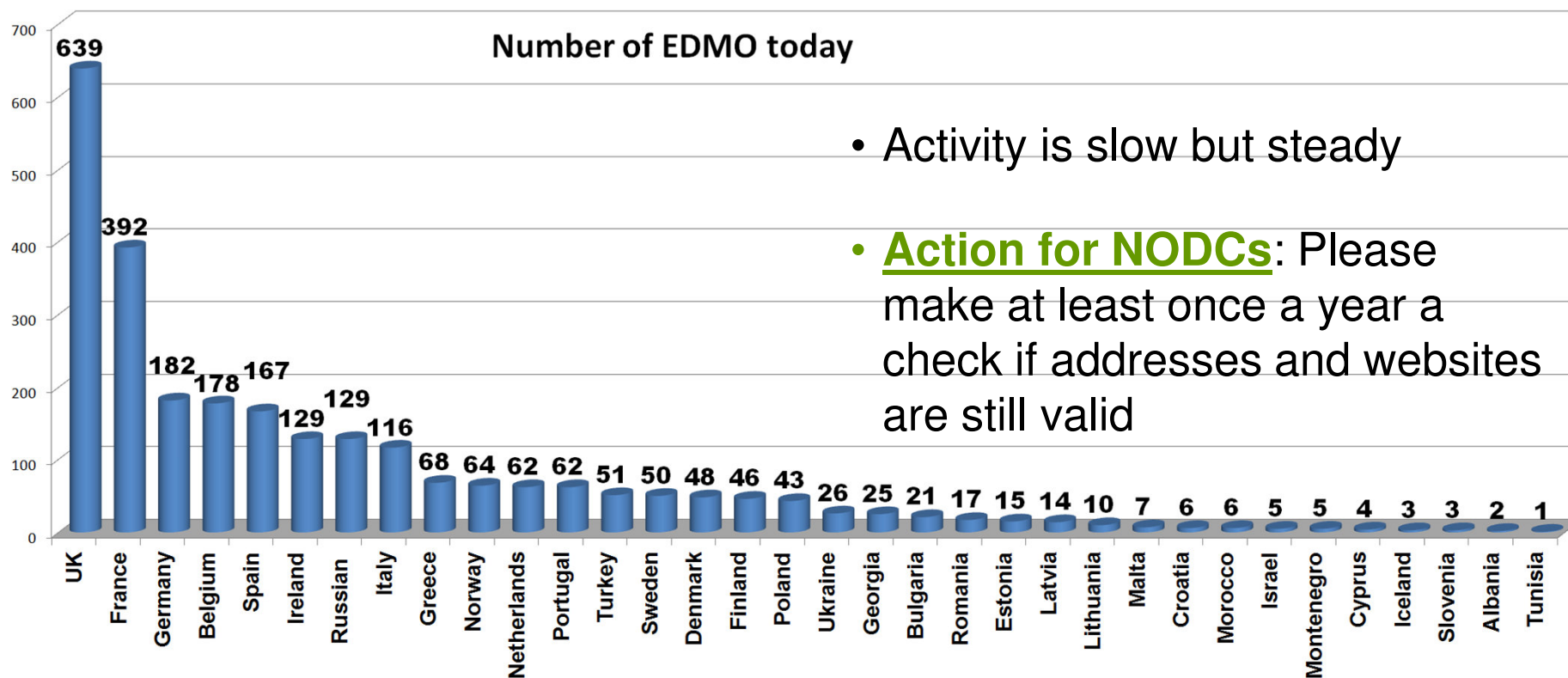
- Through the appropriate collating centre (which is responsible for managing the allocation of local ids)
- Generated using Mikado
- Please review your entries!

Help is available as follows:

- Mikado manual
- User manual for updating metadata directories (D4.6)
- New guidance note on content



Organizations today



- Activity is slow but steady
- **Action for NODCs:** Please make at least once a year a check if addresses and websites are still valid

EDIOS status

EDIOS – Entries updated from Sept 2011 to Sept 2013 (only Portugal and Ireland had new entries)

EDMO code	Partner organisation	Country	Series	Programmes
713	Marine Systems Institute at Tallinn University of Technology	Estonia	2	2
486	IFREMER / IDM/SISMER	France	990	26
1850	Federal Maritime and Hydrographic Agency	Germany	10	1
164	Hellenic Centre for Marine Research, Institute of Oceanography (HCMR/IO)	Greece	8	1
396	Marine Institute	Ireland	73	12
136	ENEA Centro Ricerche Ambiente Marino - La Spezia	Italy	38	29
2432	Institute of Marine Biology (IMBK)	Montenegro	2	1
612	Institute of Marine Research - Norwegian Marine Data Centre (NMD)	Norway	279	4
590	IHPT, Hydrographic Institute of Sciences	Portugal	14	1
1229	National Institute of Biology - NIBMarine Biology Station	Slovenia	4	1
353	IEO/Spanish Oceanographic Institute	Spain	27	2
545	Swedish Meteorological and Hydrological Institute	Sweden	25	2
687	Department of Marine Environmental & Information Technologie of the Marine Hydrophysical Institute of the Ukrainian National Academy of Sciences	Ukraine	1	1
43	British Oceanographic Data Centre	United Kingdom	15113	275
Total			16584	358

Submitting new EDIOS entries

BODC needs to receive new EDIOS records

- Through the appropriate collating centre (which is responsible for managing the allocation of local ids)
- Generated using Mikado
- **Priority** is for Observing Programmes with physical parameters (T/S, currents, sea level, waves, winds, light attenuation) for EMODnet Physics

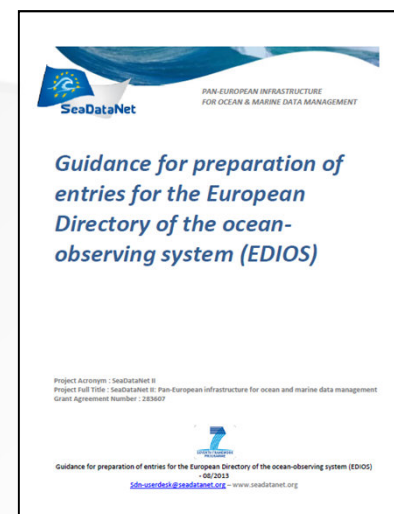


To look at currently available EDIOS entries, visit:
http://seadatanet.maris2.nl/v_edios_v2/search.asp

Submitting new EDIOS entries

Help is available as follows:

- Mikado manual
- User manual for updating metadata directories
- New guidance note on content



To look at EDIOS entries in the test database, visit:
http://edios-test.maris2.nl/v_edios_v2/search.asp

Please send completed EDIOS XML files to BODC:
Lesley Rickards (ljr@bodc.ac.uk) / Maureen Pagnani (mred@bodc.ac.uk)