



SeaDataCloud

WP5 – Metadata and data catalogues

S. Iona, HCMR/HNODC

M. Hebden, BODC

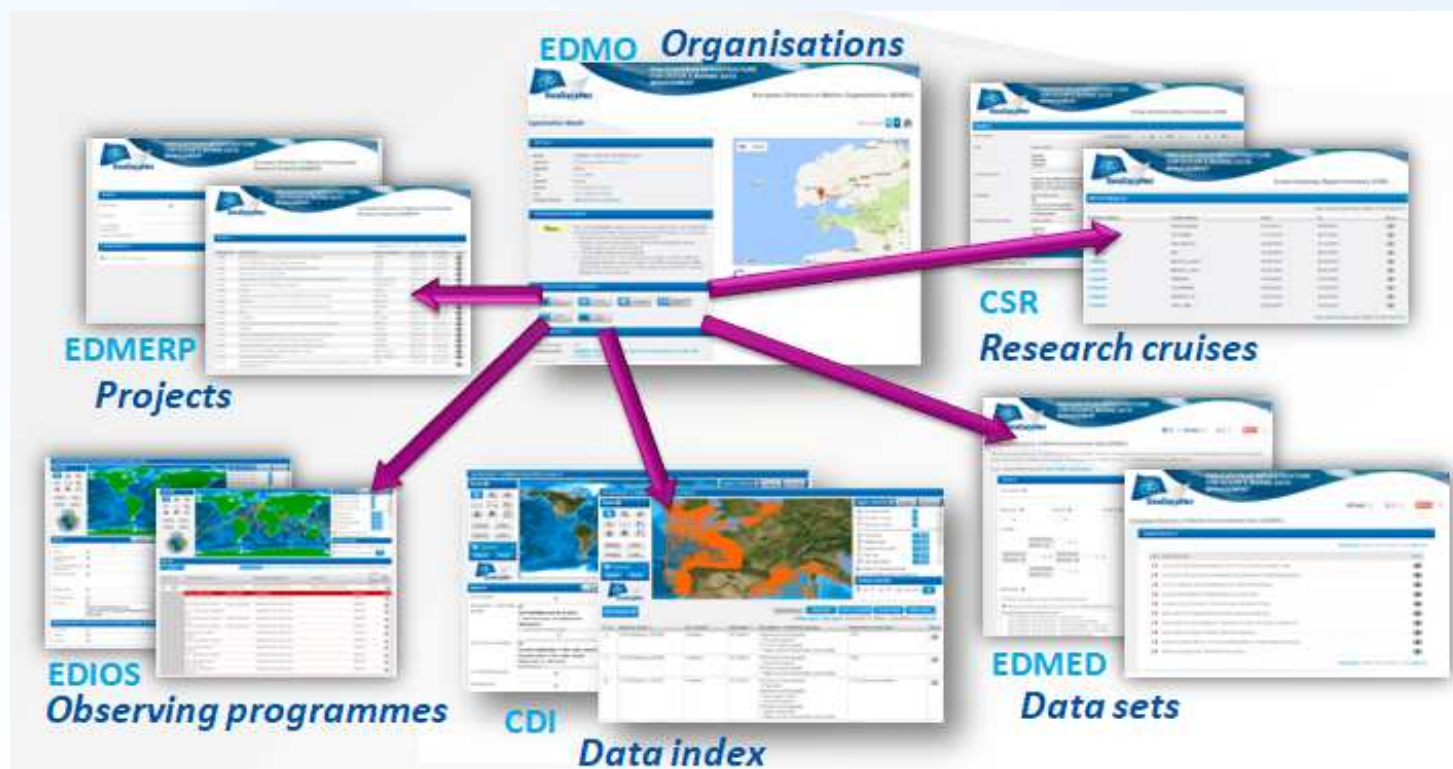
P. Thijsse, MARIS

F. Loeckle, BSH

2nd Annual Meeting, UTM-CSIC, Barcelona, Spain, 8-9 October, 2018

sdn-userdesk@seadatanet.org – www.seadatanet.org

SeaDataNet Metadata directories and services for search and display



Maintenance modalities and governance per directory

Directory + pan-European coordinator	Format info	Online CMS	XML exchange from national to pan-European level
EDMED (coordinator BODC)	Check EDMED format	No	Yes
EDMERP (coordinator MARIS)	Check EDMERP format	Online	Yes
CSR (coordinator BSH)	Check CSR format		Online *
EDIOS (coordinator BODC)	Check EDIOS format	No	Yes
EDMO (coordinator MARIS)			Online
CDI (coordinator MARIS)	Check CDI format		No

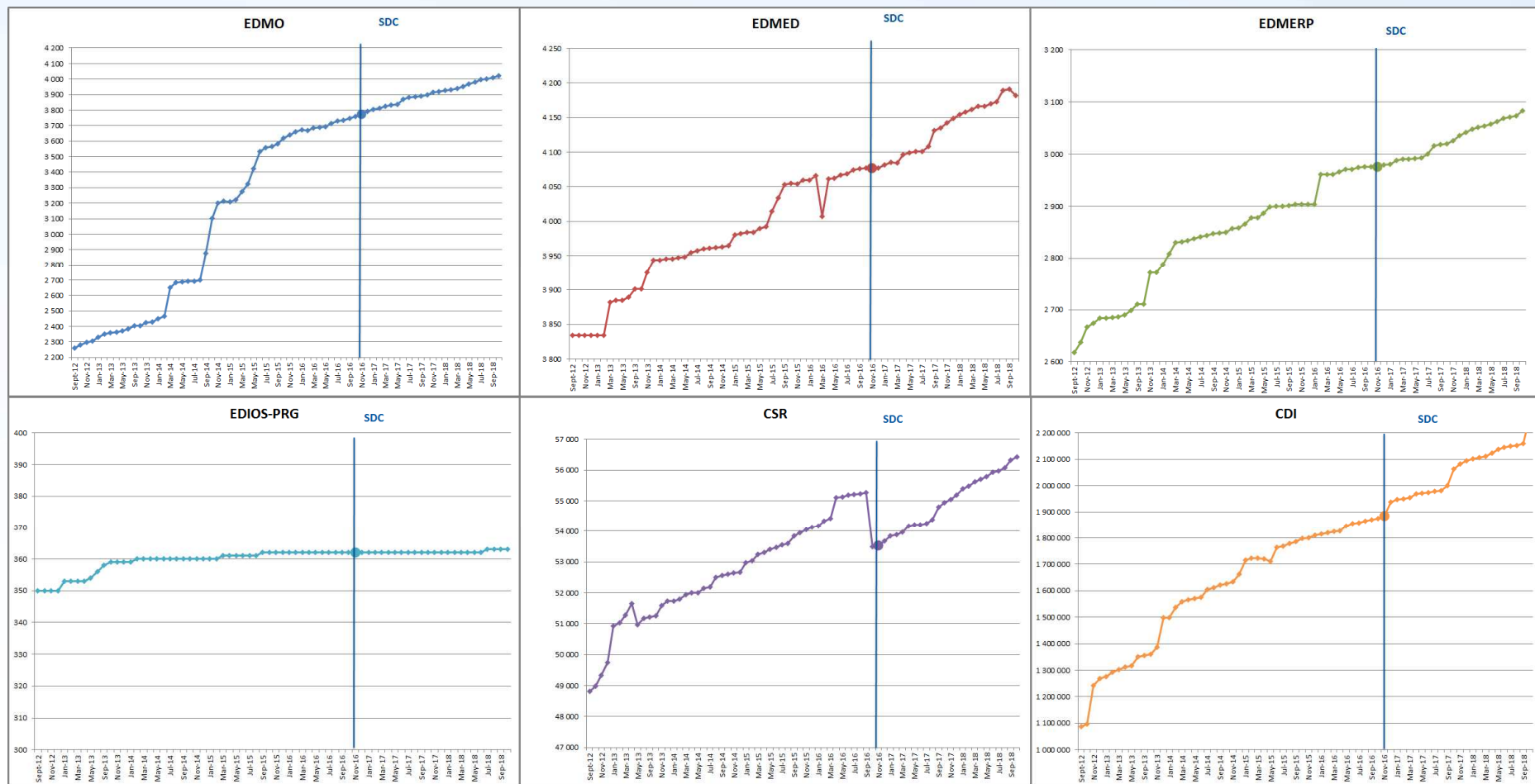
National nodes use on-line (like CMS forms) and off-line tools (MIKADO) that produce XML ISO 19115, 19139 compliant exchanges

Overall progress during the first two years

Catalogue	SDC start (1/11/2016)	Year 1 (1/11/2017)	Year 2 (1/11/2018)	Increase since the start
EDMO	3 758	3 899	4 021	263
EDMED	4 077	4 135	4 182	105
EDMERP	2 975	3 020	3 083	108
EDIOS-PRG	362	362	363	1
CSR	53 484	54 949	56 436	2 952
CDI	1 873 823	2 063 832	2 262 108	388 285

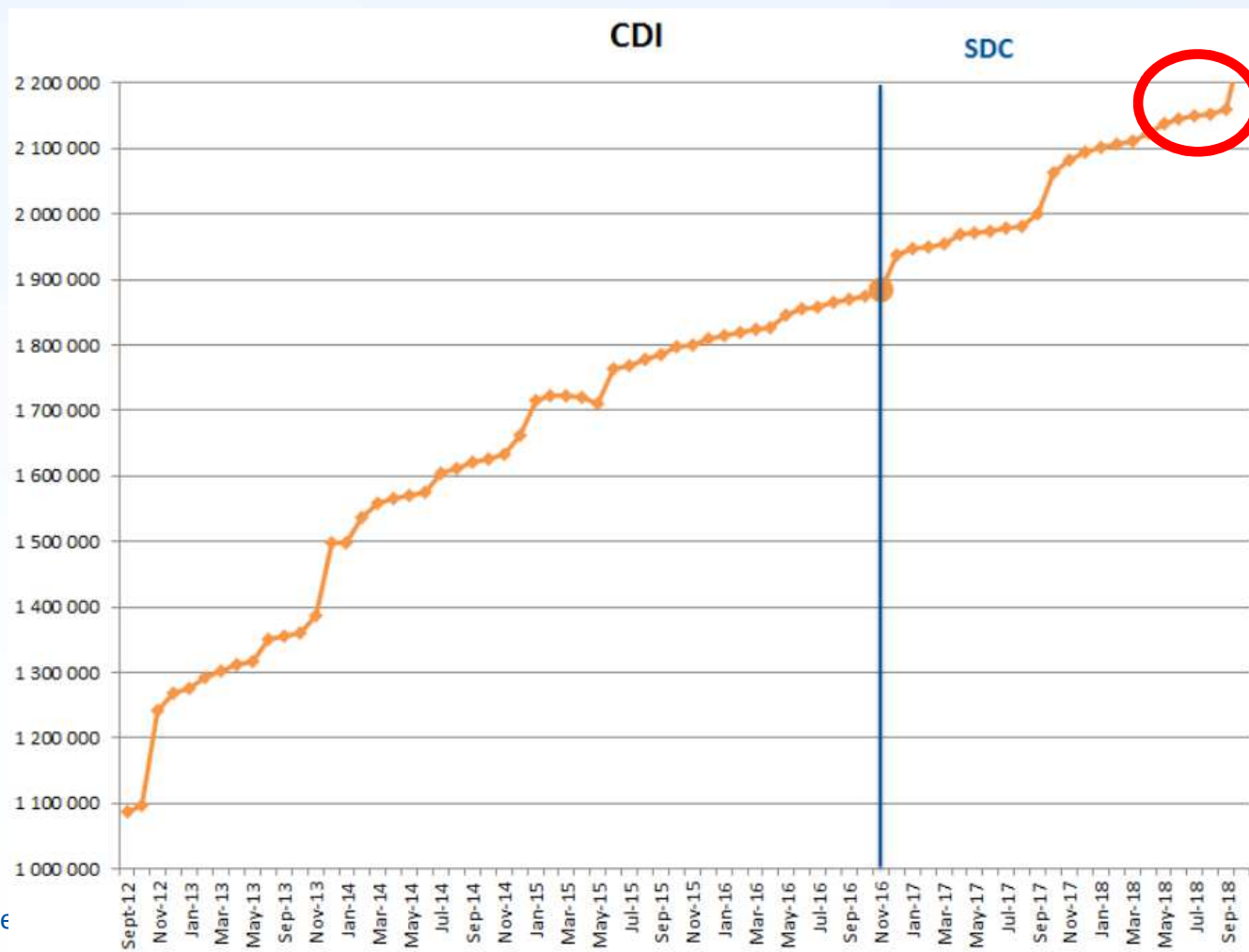
SDC partners	43
Other partners	75
Total connected	122

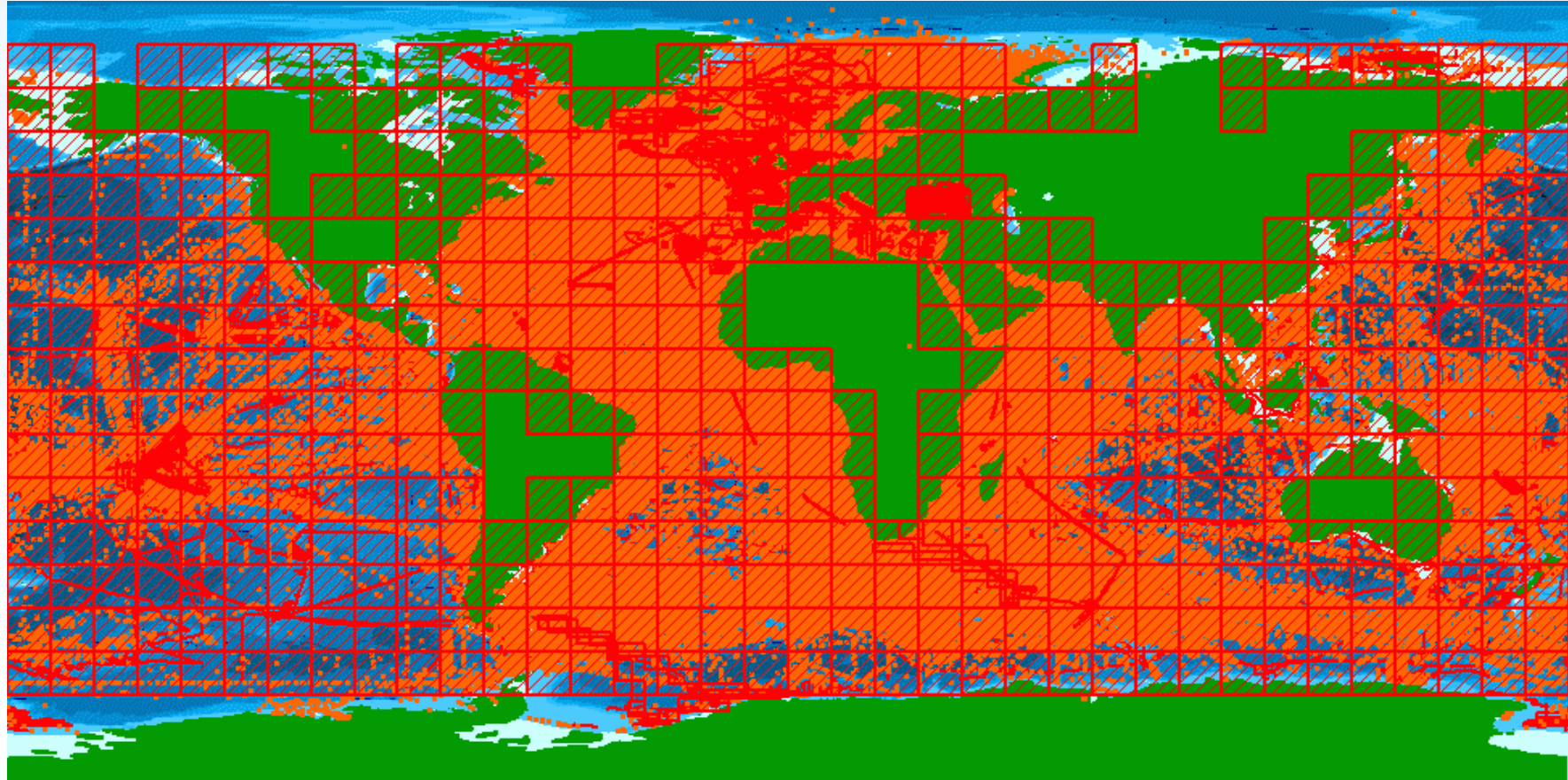
Increasing trends in all catalogues



Monthly distributions per catalogue since September 2012. Blue lines denote the start of SDC Project.

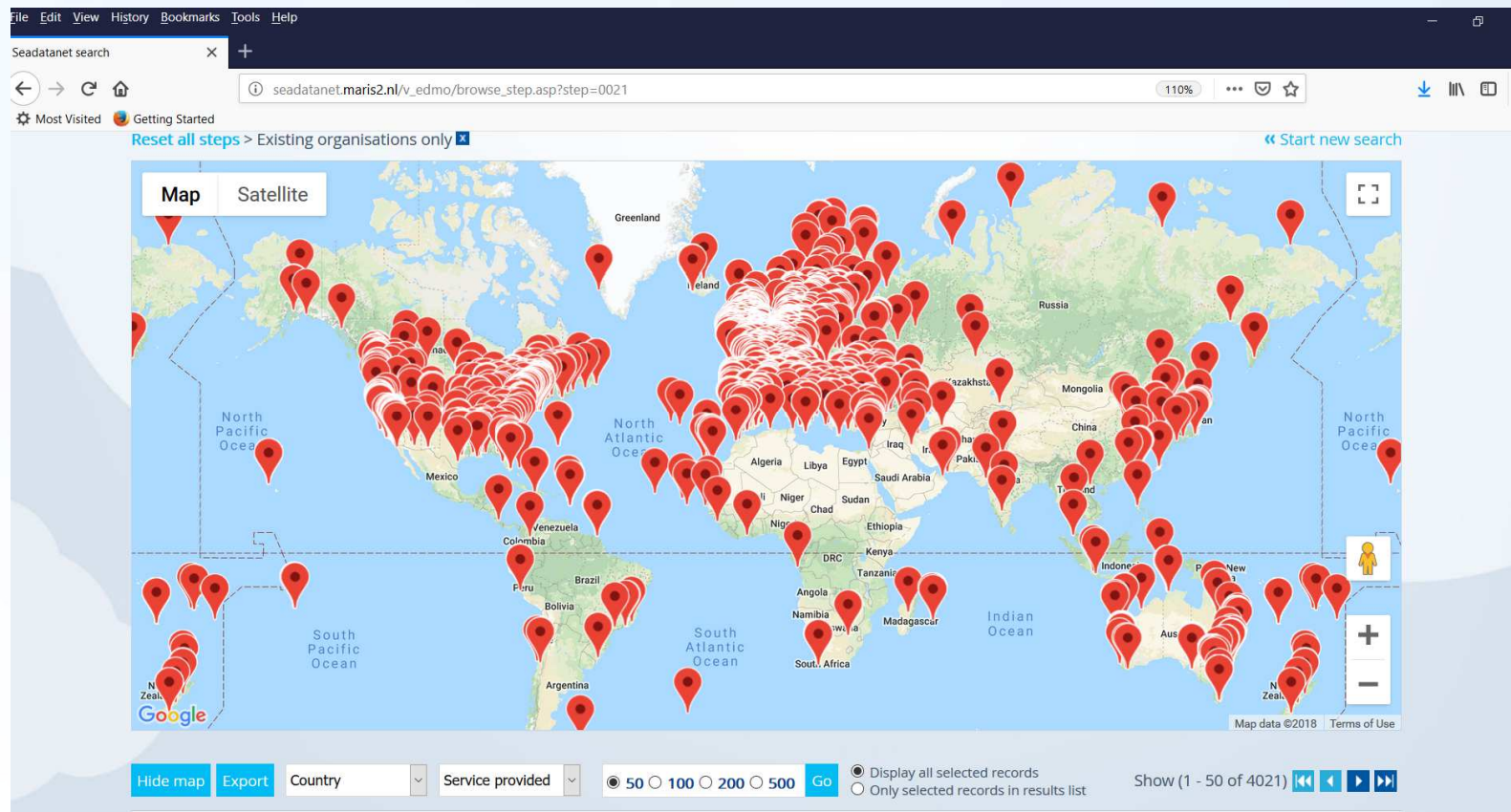
Catalogue content : 2 262 108 CDIs





2.3 million CDI entries from ***34*** countries, ***122*** data centres and ***717*** originators for physics, chemistry, geology, geophysics, bathymetry and biology; from ***1800*** to ***2018***; ***87.7%*** unrestricted or under SDN License

Marine Organizations (EDMO)



Catalogues progress by SDC partners during the first two years

EDMO	SDC start (1/11/2016)	Year1		Year2 (26/10/2018)	
Country	Totals	new	updates	new	updates
Belgium	133	0	4	2	2
Bulgaria	9	8	1	0	1
Croatia	2	0	5	1	1
Cyprus	3	0	4	1	0
Denmark	55	6	5	1	3
Estonia	14	0	2	2	0
Finland	50	12	3	5	8
France	314	19	20	17	7
Georgia	13	0	5	1	6
Germany	241	6	9	15	15
Greece	14	1	5	5	2
Iceland	5	1	0	1	0
Ireland	98	3	9	1	51
Israel	5	1	0	4	1
Italy	57	3	22	10	5
Latvia	10	5	3	0	2
Malta	1	2	1	1	1
Montenegro	8	1	3	0	2
Netherlands	61	2	0	1	5
Norway	61	3	6	2	1
Poland	31	2	5	0	0
Portugal	23	1	2	2	3
Romania	15	0	9	0	1
Russian Fed.	43	0	3	0	1
Slovenia	2	1	0	3	1
Spain	129	3	9	5	104
Sweden	50	32	7	39	71
Tunisia	1	0	0	0	0
Turkey	27	3	2	0	1
Ukraine	14	0	6	0	0
U. Kingdom	654	18	53	31	19
Totals	2143	133	203	150	314

EDMO Progress

- 13,2 % increase since the SDC start (283 new entries)
- 517 updates
- All partners were active

data grouped per country

EDMED progress (1/2)

Institute	EDMO code	Country	SDC start (1/11/2016)	Year1		Year2 (3/11/2018)	
			Totals	new	updates	new	updates
UKRI-BODC	43	U. Kingdom	789	16	97	37	34
BSH-DOD	96	Germany	179	0	0	0	0
OGS	120	Italy	279	12	0	14	0
ENEA	136	Italy	0	0	0	0	0
CNR	149, 134, 227, 2863	Italy	0	0	0	3	0
IMGW	193	Poland	109	0	11	0	0
IOPAN	195	Poland	0	0	0	0	0
HCMR/HNODC	269	Greece	288	22	1	0	0
IEO	353	Spain	355	0	0	0	0
MI	396	Ireland	127	0	10	0	14
VLIZ	422	Belgium	102	0	0	0	0
IFREMER	486	France	237	0	0	2	0
OSU-SBR	521	France	0	0	0	0	0
SHOM	540	France	5	1	0	1	0
SMHI	545	Sweden	100	0	100	0	0
MRI	583	Iceland	12	0	0	0	0
IHPT	590	Portugal	214	0	0	0	0
IMR	612	Norway	41	0	0	0	0
NIOZ/NODC	630	Netherlands	185	0	0	0	0
RIHMI-WDC	681	Russian Fed.	95	0	95	0	0

- 17 active partners
- 26 non-active
- 3,5 % increase
(137 new entries)
- 275 updates

EDMED progress (2/2)

Institute	EDMO code	Country	SDC start (1/11/2016)	Year1		Year2 (3/11/2018)	
SIO-RAS	685	Russian Fed.	37	0	0	0	0
IO-BAS	692	Bulgaria	33	0	0	0	0
TSU-DNA	693	Georgia	416	0	0	0	0
METU-IMS	696	Turkey	53	7	1	0	0
NIMRD	697	Romania	68	7	1	0	0
LHEI	698	Latvia	28	0	0	0	0
IOF	700	Croatia	12	0	0	0	0
UOM	708	Malta	29	0	0	5	0
MSI	713	Estonia	16	0	0	0	0
NERI/AU-DMU	729	Denmark	35	0	0	0	0
ICES	730	Denmark	21	0	0	0	0
ISRAMAR/IOLR	963	Israel	6	0	0	0	0
SYKE	1104	Finland	0	0	0	0	0
<u>UkrSCES</u>	1167	Ukraine	0	0	0	0	0
NIB	1229	Slovenia	1	0	0	0	0
INSTM	1232	Tunisia	1	1	1	0	0
RBINS-BMDC	1578	Belgium	100	0	0	0	0
FMI	1725	Finland	0	0	0	0	0
IBMK	2432	Montenegro	2	0	0	2	0
UTM-CSIC	2489	Spain	0	0	0	0	0
GEOMAR	2947	Germany	0	0	0	0	0
CNRS/MIO	3078	France	0	5	0	2	5
ORION	4537	Cyprus	0	0	0	7	0
Total			3975	71	222	66	53

- 17 active partners
- 26 non-active
- 3,5 % increase since the SDC start (137 new entries)
- 275 updates

data grouped per Institute 12

EDMERP	SDC start (1/11/2016)	Year1		Year2 (26/10/2018)	
Country	Totals	new	updates	new	updates
Belgium	337	0	0	1	5
Bulgaria	58	6	0	0	1
Croatia	17	0	0	0	0
Cyprus	11	0	0	0	0
Denmark	53	0	0	0	0
Estonia	46	4	0	12	0
Finland	41	0	0	1	0
France	162	9	15	3	1
Georgia	142	1	0	1	0
Germany	128	6	1	25	2
Greece	111	1	0	0	0
Iceland	8	0	0	0	0
Ireland	220	1	0	0	1
Israel	4	0	0	0	0
Italy	96	1	5	9	2
Latvia	31	0	0	0	0
Malta	32	1	0	0	0
Montenegro	6	1	4	0	1
Netherlands	199	0	3	1	0
Norway	59	0	0	0	0
Poland	54	0	0	0	0
Portugal	40	0	0	0	0
Romania	46	1	2	0	1
Russian Fed.	158	0	0	0	0
Slovenia	11	0	0	0	0
Spain	247	0	0	2	0
Sweden	23	0	0	3	2
Tunisia	31	0	0	0	0
Turkey	115	15	4	0	0
Ukraine	179	0	0	0	0
U. Kingdom	315	1	1	6	2
Totals	2980	48	35	64	18

EDMERP Progress

- 3,7 % increase since the SDC start (137 new entries, from 19 countries)
- 53 updates

data grouped per country

EDIOS progress

Institute	EDMO code	Country	SDC start (1/11/2016)		01/11/2016-29/10/2018			Comments
			Programmes	Series	new Programmes	new Platforms	new Series	
UKRI-BODC	43	United Kingdom	275	15103	0	0	0	updates
BSH-DOD	96	Germany	1	10	0	0	0	no updates
OGS	120	Italy	3	10	0	0	0	no updates
ENEA	136	Italy	26	28	0	0	0	updates
CNR	149, 134, 227, 2863	Italy	2	6	1	7	6	updates, 7 new platforms
HCMR	269	Greece	1	8	0	0	0	updates
IEO	353	Spain	4	43	0	0	0	updates
MI	396	Ireland	12	73	0	1	0	updates, 1 new platform
IFREMER	486	France	27	991	0	0	0	updates
SMHI	545	Sweden	2	25	0	0	0	1 programme, 2 platforms, 1 series awaiting database load
IHPT	590	Portugal	1	14	0	0	0	no updates
IMR	612	Norway	4	279	0	0	0	no updates
MSI	713	Estonia	2	2	0	0	0	no updates
NIB	1229	Slovenia	1	4	0	0	0	no updates
IBMK	2432	Montenegro	1	2	0	0	0	yes updates
Totals			362	16598	1	8	11	

- 8,2 % increase (3 611 new entries)
- 3 716 updates

CSR progress (1/2)

CSR				Year1		Year2 (26/10/2018)	
Institute	EDMO	Country	SDC start (1/11/2016)	new	updates	new	updates
UKRI-BODC	43	U. Kingdom	11842	0	0	5	1
BSH-DOD	96	Germany	8596	119	19	230	55
OGS	120	Italy	329	29	3	1	5
IMGW-NRI OM	193	Poland	105	6	1	6	0
IOPAN	195	Poland	789	0	0	0	0
HCMR	269	Greece	260	52	0	65	0
IEO	353	Spain	854	120	422	754	279
MI	396	Ireland	755	50	0	35	11
VLIZ	422	Belgium	686	0	0	173	0
IFREMER	486	France	6022	283	1489	344	1178
OSU-SBR	521	France	0	0	0	36	0
SMHI	545	Sweden	1677	34	0	47	27
MRI	583	Iceland	489	5	0	8	7
IHPT	590	Portugal	136	1	1	3	4
IMR	612	Norway	3398	70	12	144	19
NIOZ/NODC	630	Netherlands	1795	8	8	11	4
RIHMI-WDC	681	Russian Fed.	1263	2	2	46	3
SIO-RAS	685	Russian Fed.	130	0	0	0	0
IO-BAS	692	Bulgaria	148	32	95	21	8

data grouped per Institute

CSR progress (2/2)

- 8,2 % increase (3611 new entries)
- 3 716 updates

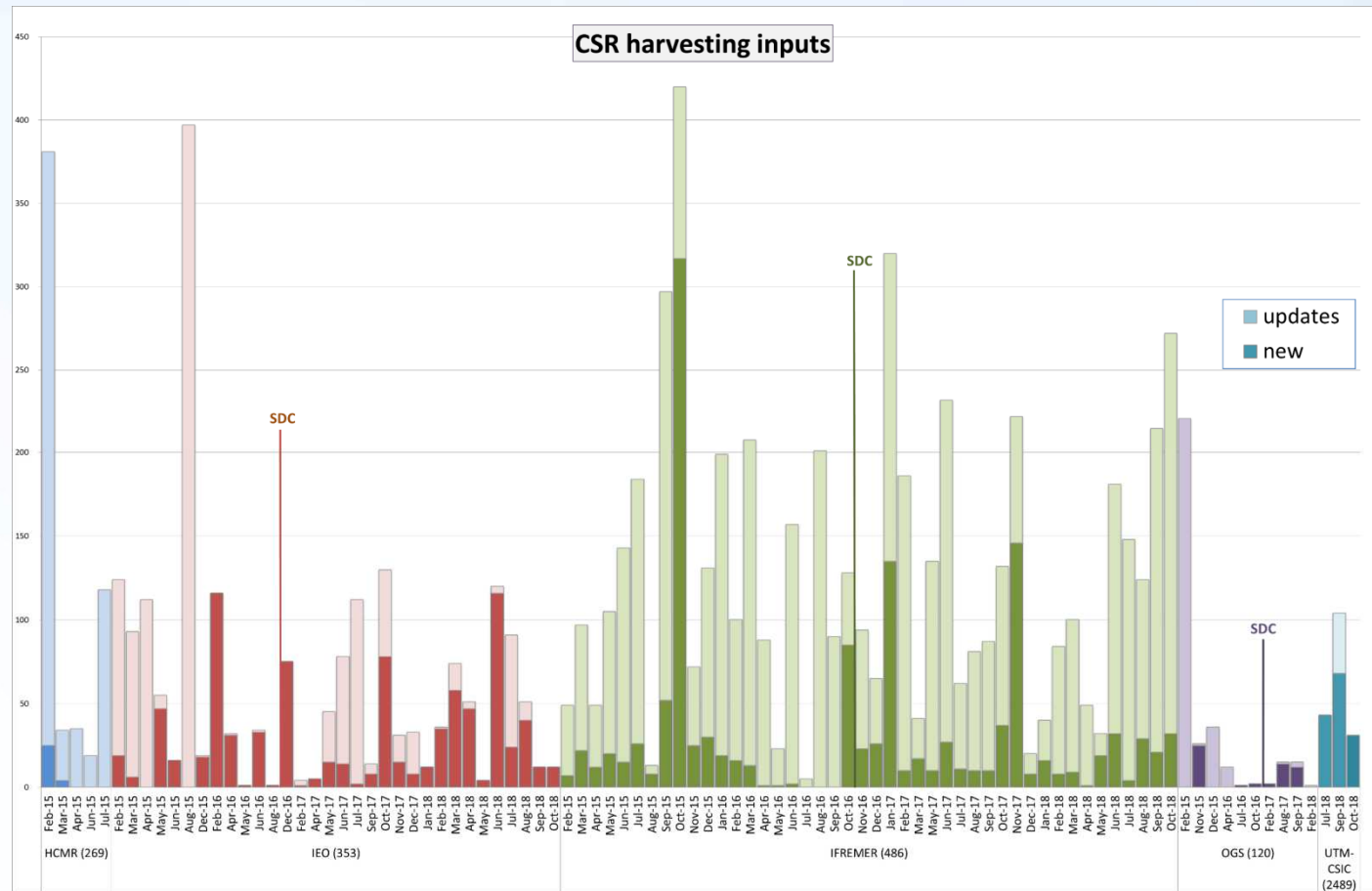
CSR				Year1		Year2 (26/10/2018)	
Institute	EDMO	Country	SDC start (1/11/2016)	new	updates	new	updates
TSU-DNA	693	Georgia	75	0	0	1	1
METU-IMS	696	Turkey	348	42	2	16	1
NIMRD	697	Romania	110	5	9	0	0
LHEI	698	Latvia	201	5	0	3	1
IOF	700	Croatia	328	0	0	50	0
UOM	708	Malta	-13	0	0	68	16
MSI	713	Estonia	288	21	5	35	2
NERI/AU-DMU	729	Denmark	135	4	0	4	0
ISRAMAR/IOLR	963	Israel	45	0	0	0	0
SYKE	1104	Finland	10	0	0	0	0
<u>UkrSCES</u>	1167	Ukraine	24	270	0	0	0
NIB	1229	Slovenia	307	0	0	76	0
INSTM	1232	Tunisia	96	0	0	3	3
RBINS-BMDC	1578	Belgium	2088	0	0	20	1
FMI	1725	Finland	547	0	0	0	0
IBMK	2432	Montenegro	1	147	5	6	6
UTM-CSIC	2489	Spain	252	0	0	95	11
Totals			44116	1305	2073	2306	1643

data grouped per Institute

CSR Harvesting status

- Since the beginning of 2015, an **automatic transfer** of updated and new CSRs has been implemented between the central BSH portal and the distributed data centres
- Partners using this service:
 - IFREMER (France)
 - OGS (Italy)
 - IEO (Spain)
 - HCMR (Greece)
 - UTM-CSIC (Spain, connected this year)

CSR harvesting inputs since beginning of 2015



No change for HCMR since the beginning of SeaDataCloud (and since 2015)

New connections since the beginning of SDC

CDI partner	EDMO code	Country	Date	Project
Swedish Maritime Administration	1215	Sweden	1-Nov-2017	EMODnet HRSM*
CONISMA , National Interuniversity Consortium for Marine Science	239	Italy	7-Nov-2017	EMODnet HRSM
CNR, Institute for the Marine and Coastal Environment (IAMC) – Napoli (CNR-IAMC)	252	Italy	9-Nov-2017	EMODnet HRSM
Marum - Center for Marine Environmental Sciences, University of Bremen (MARUM)	1568	Germany	30-Nov-2017	EMODnet HRSM
Maritime Administration of Latvia (MAL)	4665	Latvia	30-Nov-2017	EMODnet HRSM
Norwegian Hydrographic Service (NHS)	543	Norway	15-Dec-2017	EMODnet HRSM
Geodetic Institute of Sloveniac (GIS)	4666	Slovenia	30-Jan-2018	EMODnet HRSM
Stockholm University, Department of Geological Sciences (IGV)	2210	Sweden	6-Feb-2018	EMODnet HRSM
Mediterranean Institute of Oceanography - LUMINY (MIO) - UMR 7294 / 235 / 110	3078	France	1-Mar-2018	SeaDataCloud
Roscoff Marine Station, UPMC University Paris 06 and CNRS (OSU-SBR)	521	France	18-Apr-2018	SeaDataCloud
CSIC-UTM/ Marine Technology Unit	2489	Spain	1-Jul 2018	SeaDataCloud

CDI progress (1/2)

CDI		SDC start (1/11/2016)		Year1		Year2 (26/10/2018)	
Institute	EDMO code	Country	Totals	new	updates	new	updates
UKRI-BODC	43	U. Kingdom	111102	4455	5358	8281	0
BSH-DOD	96	Germany	42012	0	0	1133	259
OGS	120	Italy	111221	4907	4949	3506	305
ENEA	136	Italy	9099	190	190	0	0
CNR	149	Italy	264	299	299	322	0
IMGW	193	Poland	13194	0	0	0	0
IOPAN	195	Poland	18	0	0	0	0
HCMR/HNODC	269	Greece	50790	1341	3022	2187	54
IEO	353	Spain	41472	1177	1618	8534	1883
MI	396	Ireland	8630	1314	9547	4163	1624
VLIZ	422	Belgium	3799	0	0	99	0
IFREMER	486	France	335523	27957	196965	101230	107890
CNRS/OSU-SBR	521	France	0	0	0	2	0
SHOM	540	France	178272	3112	3122	3687	7187
SMHI	545	Sweden	113687	1163	1163	0	0
MRI	583	Iceland	5914	1420	1420	631	0
IHPT	590	Portugal	6864	0	0	220	853
IMR	612	Norway	111898	15892	33130	1091	0
NIOZ/NODC	630	Netherlands	6175	0	1	257	95
RIHMI-WDC	681	Russian Fed.	132759	582	747	4218	3322
SIO-RAS	685	Russian Fed.	39665	30	30	154	0
IO-BAS	692	Bulgaria	3866	327	327	764	1328

- 39 active partners
- 4 non-active
- 16 % increase
(304 038 new entries)
- 685 152 updates

data grouped per Institute

CDI progress (2/2)

CDI		SDC start (1/11/2016)		Year1		Year2 (26/10/2018)	
Institute	EDMO code	Country	Totals	new	updates	new	updates
TSU-DNA	693	Georgia	1142	42	122	81	0
METU-IMS	696	Turkey	28115	516	26299	1965	130
NIMRD	697	Romania	7004	1198	3538	176	1
LHEI	698	Latvia	3493	421	421	563	0
IOF	700	Croatia	2265	0	0	251	8
UOM	708	Malta	1031	2	5	406	143
MSI	713	Estonia	28213	460	900	53	6
NERI/AU-DMU	729	Denmark	388197	15364	15364	2704	0
ICES	730	Denmark	35229	55499	75400	7756	2845
ISRAMAR/IOLR	963	Israel	5872	0	0	1634	0
SYKE	1104	Finland	6207	5291	5291	3049	0
<u>UkrSCES</u>	1167	Ukraine	13599	279	5829	451	298
NIB	1229	Slovenia	7662	354	666	274	1
INSTM	1232	Tunisia	1131	8	8	10	8
RBINS-BMDC	1578	Belgium	15661	0	0	399	12
FMI	1725	Finland	13500	0	0	0	0
IBMK	2432	Montenegro	706	0	0	83	703
UTM-CSIC	2489	Spain	6	22	28	8	22
GEOMAR	2947	Germany	0	0	0	0	0
CNRS/MIO	3078	France	0	0	0	67	0
ORION	4537	Cyprus	0	0	0	7	0
Totals			1885257	143622	395759	160416	128977

- 39 active partners
- 4 non-active
- 16 % increase
(304 038 new entries)
- 685 152 updates

data grouped per Institute¹

Mid-term review, 6 December 2018

We should not report **non active partners**, otherwise the project will have **budget allocation problems**