

Emodnet Chemistry Second Interim Report revision:

Section 2.1. Includes ICES data and other data. Please explain how you avoid duplicates.

The sentence present in the report is here extended and clarified.

For this purpose ICES distributed to all partners in the region a worksheet with the content of the database per submitting institute, per parameter and per matrix in order to determine what additional data had not already been included.

The handling of duplicates in a systematic and operational way is beyond the scope of the EMODNET Chemical pilot and it has been included in the context of the SeaDataNet II proposal, where it is intended to tackle the issue for all nodes in the distributed network.

Section 2.2. In the Black Sea the data is mostly from research agencies. Is it still difficult to collect data from environment agencies, even though they provide them to the Black Sea Commission?

The data collected and used so far for the analyses for the Black Sea region are summarised in the following table (status at November 2010):

Nr00	Partner	Country	Total profiles	Measurements									
				O2	PO4	Total P	PH	Alk	SIO3	NO2	NO3	NH4	Total N
13	RIHMI-WDC	RU	904	5343	3680	3	3404	635	2469	1654	280	33	14
14	SIO-RAS	RU	147	888	837	249	226	286	855	311	361	876	152
15	MHI	UA	2500	16946	877	306	127	839	379	2361	2601	436	488
16	IO-BAS	BG	124	865	277	703	248	0	0	0	0	0	0
17	NIMRD	RO	2268	9995	6548	0	0	0	10207	6892	7729	5275	0
18	TSU-DNA	GE	10	20	25	0	0	0	0	27	30	29	27
	Yug NIRO	UA	215	1265	365	0	0	0	122	39	0	0	0
	Mb UHMI	UA	144	745	214	0	0	64	118	0	0	0	0
	Ukr SCES	UA	1916	3587	1578	819	1456	0	0	1155	549	0	836
	TOTAL		8228	39654	14401	2080	5461	1824	14150	12439	11550	6649	1517

Nr	Partner	Country	Total profiles	Measurements							
				DDT	Pb	Hg	Cd	Cs-137	Cs-134	Sr-90	Heavy metals in sediments
14	RIHMI-WDC	RU	398	98	100	100	100	0	0	0	0
15	MHI	UA	1267	0	0	0	0	422	422	423	75
18	TSU-DNA	GE		0	0	0	0	0	0	0	349
	TOTAL		1665	98	100	100	100	422	422	423	424

This overview lists the data sets that have become available to the central pool for the Black Sea at MHI per November 2010. In the meantime the gathering of data and the population of the SeaDataNet infrastructure with more Black Sea data centres, more data

sets and more CDI metadata continues. This is mostly done in the framework of the Upgrade Black Sea SCENE project that is coordinated by MARIS.

The present CDI inventory for the Black Sea region as included in the Annex illustrates that further progress has been made till February 2011. In a number of cases the data sets are restricted by their data centres. Therefore the data centres will be requested to release these relevant data sets for internal analysis within the EMODNet Chemistry project.

Furthermore the Black Sea Commission Secretariate has been asked to evaluate in how far the inventory for the Black Sea region is now complete. From this evaluation it comes forward that all Black Sea countries are involved with several institutes, but that relevant data sets from the following institutes are still missing in the inventory:

The included data centres IO BAS (Bulgaria), IMS METU (Turkey), UKRSCES (Ukraine), MHI (Ukraine), IFR (Bulgaria) and General Ecology Laboratory (Bulgaria) manage more data for period 2000-2010 and should be urged to bring these forward;

Additional data sources should be found at:

Russia:

Southern Branch of the Shirshov Institute of Oceanology, Gelendzhiko
State Oceanographic Institute – SOI (also UBSS partner but not in Summary)

Turkey:

Istanbul University (is implementing MoE monitoring program in the Black Sea during last 5 years)

Ukraine:

Southern Scientific Research Institute of Marine Fisheries and Oceanography – YugNIRO

Ukrainian Hydrometeorological Institute - Marine Branch - UHI- MB

Romania:

GeoEcomar

Delta Danube Institute

Georgia:

Batumi Institute

Fortunately all these mentioned data centres, except for the Batumi Institute, are partners in the Upgrade Black Sea SCENE project and underway with connecting to the infrastructure and/or with further population of the CDI service.

These institutes will be urged by MARIS as part of the Upgrade Black Sea SCENE project to focus on the EMODNet Chemistry parameters and to complete the Black Sea overview and make their relevant data sets available to MHI for inclusion in the EMODNet analyses and data products.

About the Black Sea data source the situation is the following. For Ukraine, Russia and Georgia we are informed that there is no exact difference between “research” and “environment” agencies. Indeed the data are mostly from “research” agencies because “environment” (non-governmental) agencies have no proper equipment to measure chemical elements and pollutants in seawater.

Specifically about Ukraine only UkrSCES can be considered as environment agency and it is a component of the governmental ecological structure. A part of the Black Sea data are from them. At the moment, as presented during the last meeting in Bruxelles, this data are passing the quality check procedure.

Still in Ukraine there is an ecological station under Odessa National University located on Zmeiny island. It is not a research agency either. Black Sea data pool plan to receive data from it within 2011. Besides this they hope to get some additional data from the institutions participating in BlackSeaScene Upgrade Project in 2011.

Section 2.3. Could you explain what you mean by "seasonal time scale" and provide examples?

This issue was specifically discussed inside data collection and analysis for the Mediterranean region

By seasonal time scale it is meant the division of all available years in four seasons (winter, spring, summer, fall).

As winter are selected the first three months of the year: January, February and March. (and so on for the rest of the seasons).

In the Cyprus case the data are in a synoptic scale e.g. specific cruises in specific months. So, depending on the data density, highlighted by the spatial and temporal analysis, the products are computed on a monthly scale of specific years.

Section 2.4. Could you indicate how much data for each country comes from public authorities, universities or research institutes?

The following table gives an overview of CDI records for EMODNET Chemistry per Data Centre giving the source of data (Originator), the principal activity of the organization and the related legal status. The following codes are used:

Activity Type

REC	Research	organisations only or mainly established for research purposes
EDU	Education	organisations only or mainly established for education/training, e. g. universities, colleges, schools
IND	Industry	industrial organisations private and public, both manufacturing and industrial services – such as industrial software, design, control, repair, maintenance
OTH	Others	
PAU	Public authorities	

Legal Status

GOV	Governmental	local, regional or national public or governmental organisations e. g. libraries, hospitals, schools
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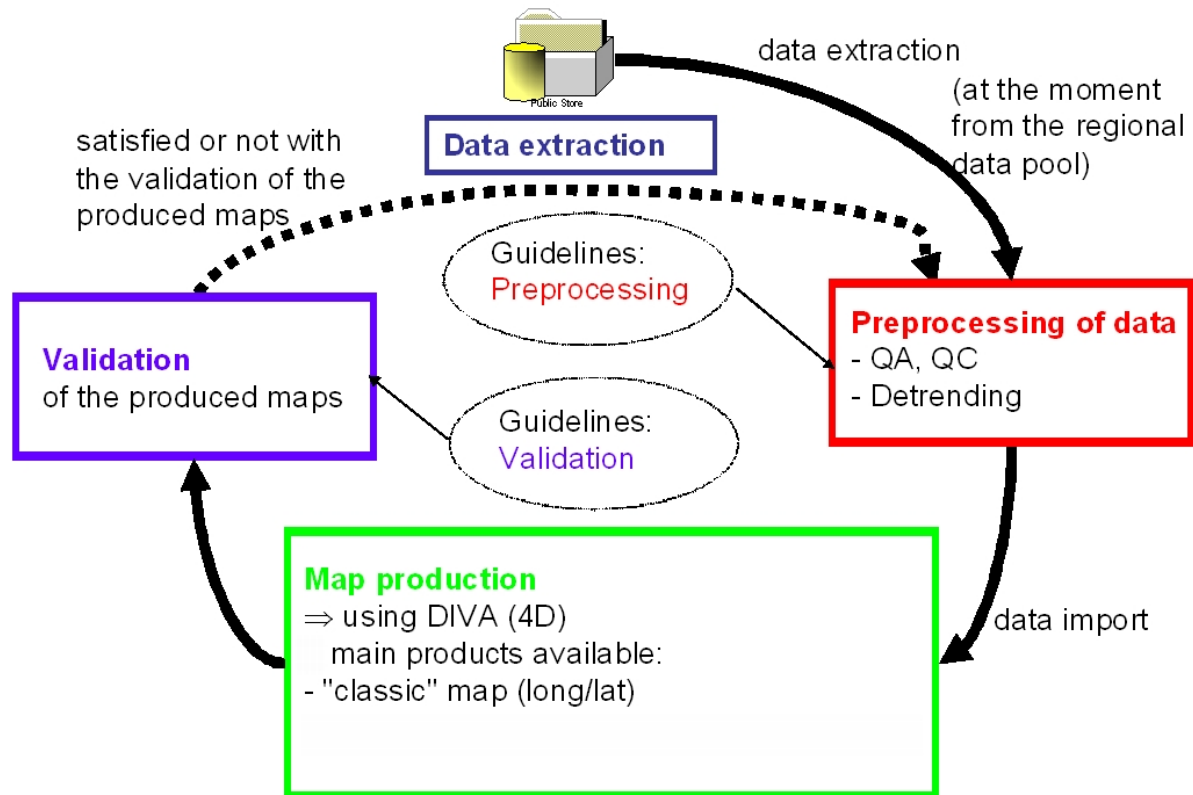
INO	International Organisation	an international organisation established by national governments
EUB	European Body	A European organisation
PUC	Public Commercial Organisation	commercial organisation established and owned by a public authority
PRC	Private Commercial Organisation including Consultant	any commercial organisations owned by individuals either directly or by shares
EEI	European Economic Interest Group	
PNP	Private Organisation, Non Profit	Any privately owned non profit organisation

collator	Per Originator	Country	Datasets	Activity Type	Legal Status
BSH-DOD	Alfred Wegener Institute for Polar and Marine Research (AWI), Geophysics Dep	Germany	3775	REC	GOV
BSH-DOD	Alfred-Wegener-Institute for Polar- and Marine Research	Germany	5271	REC	GOV
BSH-DOD	Baltic Sea Research Institute Warnemuende (IOW)	Germany	1316	REC	GOV
BSH-DOD	Elbe River Water Authority	Germany	715	REC	GOV
BSH-DOD	Federal Institute of Hydrology (BFG)	Germany	10	REC	GOV
BSH-DOD	Federal Maritime and Hydrographic Agency	Germany	3382	REC	GOV
BSH-DOD	Federal Research Centre for Fisheries (Cuxhaven)	Germany	57	REC	GOV
BSH-DOD	Federal Research Centre for Fisheries (Hamburg)	Germany	212	REC	GOV
BSH-DOD	German Hydrographic Institute	Germany	26	REC	GOV
BSH-DOD	GKSS Research Center	Germany	122	REC	GOV
BSH-DOD	Institute of Biochemistry and Food Chemistry, University Hamburg	Germany	27	EDU	GOV
BSH-DOD	Institute of Biogeochemistry and Marine Chemistry (IfBM), University of Hamburg	Germany	80	EDU	GOV
BSH-DOD	Lower Saxony Water Management, Coastal Defense and Nature Conservation A	Germany	341	PAU	GOV
BSH-DOD	Senckenberg by the Sea, Marine Science Department	Germany	157	PAU	GOV
BSH-DOD	State Agency for Environment, Nature and Geology, Mecklenburg-Vorpommern	Germany	1379	PAU	GOV
BSH-DOD	State Agency for Nature and Environment of Schleswig Holstein (LANU)	Germany	2528	PAU	GOV
BSH-DOD	State Office for Agriculture, Environment and Rural Areas of Schleswig Holstein	Germany	209	PAU	GOV
BSH-DOD	State Office for Water Economy and Shore, Schleswig-Holstein, Kiel	Germany	36	PAU	GOV
BSH-DOD	State Office of Ecology of Lower Saxony	Germany	473	PAU	GOV
BSH-DOD	Waterways and Shipping Authority Wilhelmshaven	Germany	26	PAU	GOV
BSH-DOD	Waterways and Shipping Office Cuxhaven	Germany	28	PAU	GOV
BSH-DOD	Weser River Management Bureau	Germany	8	PAU	GOV
FIMR	Finnish Institute of Marine Research (FIMR)	Finland	2104	REC	GOV
GAMMA	Scientific - Research Firm GAMMA	Georgia	308	REC	PUC
HCMR	Hellenic Centre for Marine Research, Institute of Oceanography (HCMR/IO)	Greece	1910	PAU	GOV
IEO	Balears Islands University. Environmental Biology Department. UIB	Spain	223	EDU	GOV
IEO	Centre for Advanced Studies of Blanes (CEAB-CSIC)	Spain	256	REC	GOV
IEO	IEO/ Murcia Oceanographic Centre	Spain	1225	REC	GOV
IEO	IEO/ Balearic Islands Oceanographic Centre	Spain	670	REC	GOV
IEO	IEO/ La Coruna Oceanographic Centre	Spain	658	REC	GOV
IEO	IEO/ Malaga Oceanographic Centre	Spain	1129	REC	GOV
IEO	IEO/ Santander Oceanographic Centre	Spain	1746	REC	GOV
IEO	IEO/ Vigo Oeanographic Centre	Spain	1111	REC	GOV
IEO	Institute of Marine Sciences. Mediterranean Marine and Environmental Research	Spain	509	REC	GOV
IEO	Spanish Oceanographic Institute	Spain	2036	REC	GOV
IFERMER	CEA / INSTITUT DE RADIOPROTECTION ET DE SURETE NUCLEAIRE	France	221	REC	GOV
IFERMER	CEA / LABORATOIRE DES SCIENCES DU CLIMAT ET DE L'ENVIRONNEM	France	282	REC	GOV
IFERMER	CEREGE	France	15	REC	GOV
IFERMER	CNRS / Center of Oceanology of Marseille (COM) La-Seyne-Sur-Mer	France	92	REC	GOV
IFERMER	CNRS / COM - LAB. D'OCEANOGRAPHIE & DE BIOGEOCHIMIE - ENDOUME	France	507	REC	GOV
IFERMER	CNRS / COM - LAB. D'OCEANOGRAPHIE ET DE BIOGEOCHIMIE - TOULON	France	152	REC	GOV
IFERMER	CNRS / LABORATOIRE DE MICROBIOLOGIE MARINE	France	137	REC	GOV
IFERMER	CNRS / LEGOS	France	57	REC	GOV
IFERMER	CNRS / STATION BIOLOGIQUE DE ROSCOFF	France	3	REC	GOV
IFERMER	DEPARTEMENT DE GEOLOGIE ET OCEANOGRAPHIE (UNIV. BORDEAUX 1)	France	268	EDU	GOV
IFERMER	IFREMER	France	1040	REC	GOV
IFERMER	IFREMER / BE-DPT CHEMICAL POLLUTANTS, BIOGEOCHEMISTRY & ECOT	France	72	REC	GOV
IFERMER	IFREMER / CENTRE DE BREST	France	333	REC	GOV
IFERMER	IFREMER / CENTRE MANCHE - MER DU NORD	France	81	REC	GOV
IFERMER	Ifremer / Crela	France	172	REC	GOV
IFERMER	IFREMER / DYNECO-DPT DYNAMIQUES DE L'ENVIRONNEMENT COTIER	France	368	REC	GOV
IFERMER	IFREMER / EEP/LEP-DEEP ENVIRONMENT LABORATORY	France	16	REC	GOV
IFERMER	IFREMER / EMH-DEPARTEMENT ECOLOGIE ET MODELES POUR L'HALIEU	France	388	REC	GOV
IFERMER	IFREMER / GM-MARINE GEOSCIENCES	France	5	REC	GOV
IFERMER	IFREMER / STATION DE LA TREMBLADE	France	273	REC	GOV
IFERMER	IFREMER / STATION DE LA TRINITE	France	26	REC	GOV
IFERMER	IFREMER / STATION DE SETE	France	45	REC	GOV
IFERMER	IFREMER / STH-DEPARTEMENT SCIENCES ET TECHNOLOGIES HALIEUTIQ	France	72	REC	GOV
IFERMER	Ifremer / Tahiti Centre COP	France	105	REC	GOV
IFERMER	IFREMER/EEP/ DEEP SEA ENVIRONMENT DEPARTMENT	France	1	REC	GOV
IFERMER	INSTITUT DE PHYSIQUE DU GLOBE DE PARIS / OBSERVATORIES - IPGP	France	131	REC	GOV
IFERMER	IRD / CENTRE DE CAYENNE- GUYANE	French Guiana	477	REC	GOV
IFERMER	IRD / CENTRE DE MONTPELLIER	France	840	REC	GOV
IFERMER	IRD / CENTRE DE PAPEETE	France	863	REC	GOV
IFERMER	IRD / CENTRE OF ABIDJAN	Cote D'Ivoire	2958	REC	GOV
IFERMER	IRD / CENTRE OF POINTE NOIRE	Congo	725	REC	GOV
IFERMER	IRD / CENTRE TOGA LE HAVRE	France	48	REC	GOV
IFERMER	IRD /CENTRE DE BRETAGNE	France	1815	REC	GOV
IFERMER	IRD ANTENNE INSTITUT OCEANOGRAPHIQUE (IRD)	France	601	EDU	GOV
IFERMER	LABORATOIRE DE PHYSIQUE DES OCEANS/UBO (UNIVERSITE DE BRETA	France	1026	EDU	GOV
IFERMER	LABORATORY OF OCEANOGRAPHY and CLIMATE (LOCEAN)	France	3241	REC	GOV
IFERMER	LABORATORY OF OCEANOGRAPHY of VILLEFRANCHE (LOV)	France	1940	REC	GOV
IFERMER	LABORATORY OF PHYSICAL OCEANOGRAPHY (LPO) UMR 6523 CNRS-IFRE	France	1864	EDU	GOV
IFERMER	METEO FRANCE / CENTRE METEOROLOGIQUE NEVERS	France	65	PAU	GOV
IFERMER	MUSEUM NATIONAL D'HISTOIRE NATURELLE / DEPARTEMENT MILIEUX PE	France	31	PAU	GOV
IFERMER	MUSEUM NATIONAL D'HISTOIRE NATURELLE / LABORATOIRE D'OCEANO	France	760	PAU	GOV
IFERMER	Observatoire Oceanologique De Banyuls (Université de Paris VI)	France	655	EDU	GOV
IFERMER	SHOM (SERVICE HYDROGRAPHIQUE ET OCEANOGRAPHIQUE DE LA MAR	France	401	REC	GOV
IFERMER	Universite D'Angers / Laboratoire Des Bio-Indicateurs Actuels Et Fossiles (Biaf)	France	26	REC	GOV
IFERMER	UNIVERSITE DE BORDEAUX I / IGBA TALENCE	France	19	REC	GOV
IFERMER	UNIVERSITE DE BORDEAUX I / INSTITUT DE BIOLOGIE MARINE	France	27	REC	GOV
IFERMER	Universite de Bordeaux I / Laboratoire De Physico Et Toxico-Chimie Ism	France	19	REC	GOV
IFERMER	UNIVERSITE DE BRETAGNE OCCIDENTALE (UBO) / LAB. D'OCEANO. CHIM	France	150	EDU	GOV
IFERMER	UNIVERSITE DE LA MEDITERRANNEE (U2) / CENTRE D'OCEANOLOGIE DE	France	100	EDU	GOV
IFERMER	UNIVERSITE DE LA MEDITERRANNEE (U2) / COM - LAB. OCEANOLOG. & BIO	France	1469	EDU	GOV

IFERMER	UNIVERSITE DE MONTPELLIER II / LABORATOIRE DYNAMIQUE DE LA LITH	France	73	EDU	GOV
IFERMER	UNIVERSITE DE PERPIGNAN / CEFREM	France	31	EDU	GOV
IFR	Institute of Fishery Resources (IFR)	Bulgaria	138	REC	GOV
IFREMER	IRD / CENTRE DE LA REUNION	Reunion	1549	REC	GOV
IFREMER	IRD / CENTRE OF HANN	Senegal	153	REC	GOV
IFREMER	IRD / CENTRE OF JAKARTA	Indonesia	81	REC	GOV
IFREMER	IRD / CENTRE OF MADAGASCAR	Madagascar	1	REC	GOV
IFREMER	IRD CENTRE DE NOUMEA	New Caledonia	4839	REC	GOV
IMS-METU	Institute of Marine Sciences, Middle East Technical University	Turkey	1507	EDU	GOV
Institute of Oceanography and Fisheries	Center for marine research - Rudjer Boskovic Institute	Croatia	578	REC	GOV
Institute of Oceanography and Fisheries	Institute of Oceanography and Fisheries	Croatia	899	REC	GOV
IO-BAS	Institute of Oceanology, Bulgarian Academy of Sciences (IO-BAS)	Bulgaria	40	REC	GOV
IOLR	Israel Oceanographic and Limnological Research (IOLR)	Israel	3119	REC	GOV
Latvian Institute of Aquatic Ecology	Latvian Institute of Aquatic Ecology	Latvia	134	PAU	GOV
MHI	Institute of Biology of the Southern Seas, NAS of Ukraine	Ukraine	339	REC	GOV
MHI	Marine branch of Ukrainian Hydrometeorological Institute	Ukraine	98	REC	GOV
MHI	Marine Hydrophysical Institute	Ukraine	2050	REC	GOV
MHI	Scientific Research Institute of Ecological Problems (USRIP)	Ukraine	4	REC	GOV
MHI	Ukrainian scientific center of Ecology of Sea (UkrSCES)	Ukraine	4691	REC	GOV
NERC-BODC	Agri-Food and Biosciences Institute (AFBI)	United Kingdom	477	PAU	GOV
NERC-BODC	British Antarctic Survey (BAS)	United Kingdom	27	PAU	GOV
NERC-BODC	Centre for Environment, Fisheries and Aquaculture Science, Lowestoft Laborato	United Kingdom	2215	PAU	GOV
NERC-BODC	Dunstaffnage Marine Laboratory (DML)	United Kingdom	640	PAU	GOV
NERC-BODC	Fisheries Research Services, Aberdeen Marine Laboratory	United Kingdom	196	PAU	GOV
NERC-BODC	Institute of Oceanographic Sciences Deacon Laboratory	United Kingdom	128	PAU	GOV
NERC-BODC	Institute of Oceanographic Sciences Wormley Laboratory	United Kingdom	303	PAU	GOV
NERC-BODC	Institute of Oceanographic Sciences, Bidston Laboratory	United Kingdom	277	PAU	GOV
NERC-BODC	Marine Institute	Ireland	4521	PAU	GOV
NERC-BODC	Marine Scotland Science	United Kingdom	3298	PAU	GOV
NERC-BODC	National Oceanography Centre (NOC), Southampton	United Kingdom	18	PAU	GOV
NERC-BODC	Newcastle University Department of Marine Science and Coastal Management	United Kingdom	1	EDU	GOV
NERC-BODC	Northern Ireland Environment Agency (NIEA), Water Management Unit	United Kingdom	709	PAU	GOV
NERC-BODC	Plymouth Marine Laboratory (PML)	United Kingdom	89	REC	GOV
NERC-BODC	Proudman Oceanographic Laboratory (POL)	United Kingdom	1	PAU	GOV
NERC-BODC	Proudman Oceanographic Laboratory (POL)	United Kingdom	719	PAU	GOV
NERC-BODC	Scottish Association for Marine Science (SAMS)	United Kingdom	110	REC	GOV
NERC-BODC	Scottish Environment Protection Agency (SEPA)	United Kingdom	2089	PAU	GOV
NERC-BODC	Scottish Office Agriculture and Fisheries Department (SOAFD) - Aberdeen Mari	United Kingdom	2302	PAU	GOV
NERC-BODC	Scottish Office Agriculture Environment and Fisheries Department (SOAEFD) -	United Kingdom	275	PAU	GOV
NERC-BODC	Southampton Oceanography Centre	United Kingdom	49	PAU	GOV
NERC-BODC	The Environment Agency (EA)	United Kingdom	3428	PAU	GOV
NERC-BODC	University of Cambridge Department of Earth Sciences	United Kingdom	16	EDU	GOV
NERC-BODC	University of Plymouth, Institute of Marine Studies	United Kingdom	3	EDU	GOV
NERC-BODC	University of Southampton Department of Oceanography	United Kingdom	2	EDU	GOV
NERC-BODC	University of Wales, School of Ocean Sciences	United Kingdom	222	EDU	GOV
NERI-MAR	National Environmental Research Institute, University of Aarhus, Department of	Denmark	116439	EDU	GOV
NIBM	National Institute of Biology - NIBM Marine Biology Station	Slovenia	3242	REC	GOV
NIMH-BAS	Laboratory of Marine Ecology-Central Laboratory of General Ecology	Bulgaria	101	REC	GOV
NIMRD	National Institute for Marine Research and Development Grigore Antipa	Romania	3374	REC	GOV
NODC	Netherlands Institute for Ecology, Centre for Estuarine and Marine Ecology (NIO	Netherlands	7987	REC	GOV
NODC	NIOZ Royal Netherlands Institute for Sea Research	Netherlands	4137	REC	GOV
NODC	Rijkswaterstaat Waterdienst	Netherlands	11132	PAU	GOV
OC-UCY	Cyprus Oceanographic Data Center, Oceanography Center	Cyprus	499	EDU	GOV
OGS	ARPA Emilia-Romagna - Struttura Oceanografica Daphne	Italy	4512	PAU	GOV
OGS	ARPA Toscana, Area tutela ambiente marino	Italy	246	PAU	GOV
OGS	CNR, Istituto di Scienze Marine (Sezione di Ancona)	Italy	2277	REC	GOV
OGS	CNR, Istituto di Scienze Marine (Sezione di Bologna)	Italy	49	REC	GOV
OGS	CNR, Istituto di Scienze Marine (Sezione di La Spezia)	Italy	573	REC	GOV
OGS	CNR, Istituto di Scienze Marine (Sezione di Trieste)	Italy	1853	REC	GOV
OGS	CNR, Istituto di Scienze Marine (Sezione di Venezia - ex IBM)	Italy	3746	REC	GOV
OGS	CNR, Istituto per lo Studio della Dinamica delle Grandi Masse	Italy	900	REC	GOV
OGS	Commissione Permanente per lo Studio dell'Adriatico, Venezia	Italy	106	PAU	GOV
OGS	ICRAM, Chioggia	Italy	283	REC	GOV
OGS	ICRAM, Palermo	Italy	753	REC	GOV
OGS	Istituto Idrografico della Marina, Genova	Italy	599	REC	GOV
OGS	Marine Biology Laboratory of Trieste	Italy	643	REC	GOV
OGS	OGS, National Institute of Oceanography and Experimental Geophysics, Depart	Italy	21142	REC	GOV
OGS	Zoological Station 'A. Dohrn' - Laboratory of Biological Oceanography	Italy	844	REC	GOV
RBINS-MUMM	Management Unit of North Sea and Scheldt Estuary Mathematical Models, dat	Belgium	41	REC	GOV
RBINS-MUMM	Management Unit of the North Sea and Scheldt Estuary Mathematical Models	Belgium	2836	REC	GOV
RBINS-MUMM	Université Libre de Bruxelles, Ecology of Aquatic systems	Belgium	230	EDU	GOV
RBINS-MUMM	Vrije Universiteit Brussel, Laboratory of Ecology and Systematics	Belgium	39	REC	GOV
RIHMI-WDC	Atlantic Scientific Research Institute for Marine Fishery and Oceanography	Russian Federation	48	REC	GOV
RIHMI-WDC	Far Eastern Regional Hydrometeorological Research Institute	Russian Federation	49	REC	GOV
RIHMI-WDC	Odessa Branch of SOI (State Oceanographic Institute)	Ukraine	37742	REC	GOV
RIHMI-WDC	Odessa National I.I.Mechnikov University	Ukraine	324	EDU	GOV
RIHMI-WDC	P.P.Shirshov Institute of Oceanology, RAS	Russian Federation	504	REC	GOV
SMHI	Geological Survey of Sweden, SGU	Sweden	3	PAU	GOV
SMHI	IVL Swedish Environmental Research Institute	Sweden	198	REC	GOV
SMHI	Stockholm Marine Research Centre, SMF	Sweden	821	REC	GOV
SMHI	Swedish Meteorological and Hydrological Institute, SMHI	Sweden	51108	PAU	GOV
SMHI	Umea Marine Sciences Centre, UMF	Sweden	1532	REC	GOV
SNU-FF	Sinop University, Fisheries Faculty	Turkey	183	EDU	GOV
TSU-DNA	Iv Javakishvili Tbilisi State University, Centre of Relations with UNESCO Ocean	Georgia	43	EDU	GOV
University Of Malta	Malta Centre for Fisheries Sciences	Malta	128	REC	GOV
VLIZ	Flanders Marine Institute	Belgium	1362	REC	GOV
	UNKNOWN	Unknown	3359		

Section 3.4 "following figure?" We don't see a figure

The regional task leaders, which are responsible for the regional data pools are recommended to work through the listed processes. The following figure describes the overall concept for the DIVA maps production and is recommended as the working process for the maps production.



Section 3.4. At Venice you mentioned that there was a possibility to do DIVA calculations using time and length along coastline as variables. You should describe this possibility and if you have tried it, give examples, even if it doesn't work

This possibility was suggested for variables located along the coastline but this idea was later dropped for several reasons.

Among others DIVA and the product viewer would need to be adapted to generate and visualize such products. In some cases this would be quite a significant adaptation.

Several questions remain also open: how to avoid an erroneous interpolation between two adjacent bays which are largely disconnected when the problem is reduced to only one spatial dimension? How can data which are not exactly at the coastline be included? They would probably need to be excluded from the analysis.

For the DIVA products we have decided to show only the gridded field where the expected error does not exceed a given threshold. For parameters where data are only available near the coastline, the offshore analysis will be masked. This approach will be quite similar to performing the analysis only at the coastline, but with the benefit that the real topography is taken into account and that all data can be used.

You mentioned in Brussels that it would be difficult to aggregate products and present graphs on demand but will pre-prepare them beforehand. We would like a detailed discussion of this decision.

About this issue the point of view of the coordination group was more focused on consistency of analysis and products meaning than on the difficulty of the technical development.

More than one time was proposed to the Chemistry Lot to provide a "more interactive" approach for users. The proposals were to provide services able to generate "on demand" maps by a free choice of datasets of interest.

Several discussions of the coordination group about this were done. The conclusions were focused on the issue that data managed by the Chemistry Lot are too "sensitive" for this kind of approach. In fact these data are already very much sensitive to analyze and to interpret for the expert that works in the Chemical Oceanography field. Furthermore the feedback from the experts about this was that we must pay attention on the meaning of products that we obtain. One of the benefits of the pre-prepared products approach is the possibility to quality-check them before to let them available.

Talking about the technical point of view the generation of graphics on-the-fly is certainly a desirable capability. It allows close interaction with the underlying data set (for example, adjusting the scale of the time series to make graphs directly comparable to data from another source). This capability would require low-latency machine-to-machine access to the data set. The current system is build on machine-to-human interaction. The SeaDataNet 2 proposal is specifically addresses on this issue. If funded it will provide the machine-to-machine infrastructure which is required to generate aggregated products and graphs on demand. Of course, despite the reachable technical upgrade about on-demand products, we always must find the way to keep the eyes on the quality of possible dynamically generated products. This to prevent wrong or dubious conclusions.