

EMODnet Thematic Lot n° 1 - Bathymetry

3rd Bi-monthly Report

Reporting Period: 01/05/2014 - 30/06/2014

Date: 07/07/2014



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1. Highlights in this reporting period

Provide a short summary of the key achievements and/or events of interest to a wider audience within this reporting period you wish to highlight – this can be based on the indicators or any other of the reporting sections.

- EMODNet Bathymetry project meeting in Hamburg Germany, 26 27 May 2014, to discuss progress and finetune workplan for 1st release of new EMODNet DTM for all European regions
- EMODNet Bathymetry service and results presented at 8TH GEO EUROPEAN PROJECTS WORKSHOP, 12 – 13 June 2014, in Athens – Greece and at Shell, 30th June 2014, in Rijswijk – The Netherlands;
- Upgraded releases V1.3.7, V1.3.8, V1.3.9, V1.4.0, and V1.4.1 of GLOBE software by IFREMER for generating DTMs following the upgraded EMODNet methodology following suggestions and remarks from data providers;
- Very good progress by various data providers with preparing and submitting new entries for bathymetric surveys in the CDI service and composite DTMs in the SEXTANT catalogue service.
- Good progress by regional coordinators with preparing for the Regional DTM compilations
 using the pre-processed data (subDTMs) and composite DTMs from data providers as input
- New GEBCO_2014 (still to be released) incorporated as base file in GLOBE software for completing gaps in regional DTMs by regional coordinators.
- EMODNet 2013 integrated into new release of GEBCO 2014 giving extra quality.



2. Meetings held since last report

List here the meetings held since the last bi-monthly report, if relevant add short description

[Provide information in table - Maximum 1 page]

| Date | Location | Topic | Short Description |
|------------------|-------------------|----------------------|--|
| 26 – 27 May 2014 | Hamburg - Germany | Projectgroup meeting | To discuss progress and finetune Workplan for 1 st release |
| 4 – 5 June 2014 | Rome - Italy | EMODNet SC meeting | Presenting progress and planning |
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3. Work package updates

Using the work package as a header list here the activities that occurred since the last bi-monthly report. If there was no activity to report leave the section blank.

[Provide information - Maximum 1/2 page per workpackage]

WP0 - Project Management:

The 2nd Progress Meeting was held end May 2014 in Hamburg – Germany with nearly all partners present to monitor progress, to discuss possible issues and to finetune the further planning of activities for the 1st year release of the new EMODNet DTMs. Following the meeting partners are reminded regularly by email of the overall planning for the 1st year. From feedback it appeared that a number of partners were getting in delay with the planning due to more work for preparing the data sets and related CDI entries, and issues with the GLOBE processing software. Therefore end June 2014 a revised planning has been agreed as follows:

- New survey data sets to be included in the CDI service, including connection of new data centres to SeaDataNet CDI infrastructure as part of WP1: ultimately 12 July 2014
- New composite DTMs to be included in Sextant service as part of WP1: ultimately 12 July 2014
- Regional groups preparing and delivering 1st release of regional DTMs as part of WP2: end July
 2014
- Integration of new regional DTMs, including CDI and Sextant references, and publication via portal as part of WP3: end August 2014
- Regional leaders to prepare standard QA-QC report on their Regional DTM: before end August
 2014
- Preparing of 1st Annual report by Coordinator and invoice to EU as part of WPO: mid-September 2014

Participation by Coordinator in the EMODNet Steering Committee meeting, 4 – 5 June 2014, at CNR in Rome – Italy with presentation of EMODNet Bathymetry progress.



WP1 – Data collection and metadata preparation for all marine basins:

All existing partners, incl the 2 new partners from Romania, have made very good progress with expanding their data collections in the CDI and SEXTANT catalogue services. Only 3 partners still are working on their CDI compilation, but are confident to meet the new deadline for the 1st year production. MARIS and IFREMER provide support to guide partners where needed and to handle new submissions. Contacts with the new Black Sea data providers from Turkey, and Germany (MARUM) have a slow start and full use of their data contributions will come to effect in the second year release for the Black Sea region. For the North Sea – Baltic sea regions there is still no signing of the subcontract by the Danish hydrography service (GST) despite their participation to the Hamburg meeting and the following constructive discussion.

WP2 - QC/QA and producing Digital Terrain Models for the basins:

Document with specifications of upgraded QA/QC and DTM generation methodology is available for all partners. Five more updates of the GLOBE software have been released by IFREMER to data providers for pre-gridding their survey data sets and for preparing the Regional DTMs, reacting to extra requirements and bugs as reported by partners. Most partners have now adopted the GLOBE software and are active with processing their data sets while regional coordinators are preparing for the regional DTMs according to the EMODNet Bathymetry specifications.

WP3 - Integration and inclusion of the DTMs in the portal:

This will take place during August 2014, based upon the submissions of Regional DTMs by the Regional leaders. Earlier in the project already a precise schema had been made of the boundaries of each regional DTM and who is in charge and who is contributing. This has been circulated to all partners a number of times in order to prevent any misunderstandings. It also includes further precisement of the delivery formats and definitions of grid.

WP4 - Technical development and operation of portal:

Nothing to report. The EMODNet Secretariate Secretariat has prepared and delivered a document with user observations and suggestions. These will be analysed in the coming period and implemented, where possible and reasonable.

WP5 - Analysis and evaluation:

Nothing to report.



4. Specific challenges or difficulties encountered during the reporting period

Please list specific problems you have encountered during this period, including related to technical and data provision issues

Making sure that all partners - data providers and regional coordinators – adopt the planning and undertake their activities as agreed. Also all partners, old and new, have to understand the overall approach in detail to provide high quality and integrity of the data, metadata and data products. This is encouraged by sending out reminder emails to all partners, bilateral emails to check individual status, and by having the 2nd Progress Meeting on 26 – 27 May 2014.

There is still an ongoing negotiation with the Geodata Agency from Denmark (GST) that has not yet signed their contract. This implicates that there is not yet official agreement on use of their data (composite DTMs) for the new EMODNet Bathymetry product, while it has been used earlier for the present DTMs.

5. User Feedback

List any useful feedback you received on your portal, your activities or those of other EMODnet projects/activities. Also provide any suggestions you have received for EMODnet case studies and/or future products/activities/events.

[Provide information in table - attach the documentation/full user feedback to the report]

| Date | Name | Organization | Type of user feedback (e.g. technical, case study etc) | Response time to address user request |
|--------------------|--------------------|--------------|--|--|
| 23 June 2014 | Hannes Swiegers | Shell | Invitation to discuss possible use of the EMODnet service for bathymetry | Meeting with Shell staff 2nd July 2014 |
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In general the portal and its product receive good feedback.



6. Outreach and communication activities

Please list all the relevant communications activities or products you have developed/executed during this period (including presentations, lectures, trainings, demonstrations and development of communication materials such as brochures, videos, etc.). Relevant scientific and/or popular articles you know have been published using/referring to EMODnet should be reported under indicator 11 in Section 7.

[Provide information in table - Maximum 1 page]

| Date | Media | Title | Short description and/or link to the activity |
|-------------------|------------|-------------------|---|
| 12 – 13 June 2014 | Conference | 8TH GEO EUROPEA | N Presentation by MARIS |
| | | PROJECTS WORKSHOP | |
| | | | |
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7. Updates on Progress Indicators

Using the indicator as a header list the metrics collated and the time interval. If there was no activity to report leave the section under the indicator header blank.

Indicator 1 - Volume of data made available through the portal

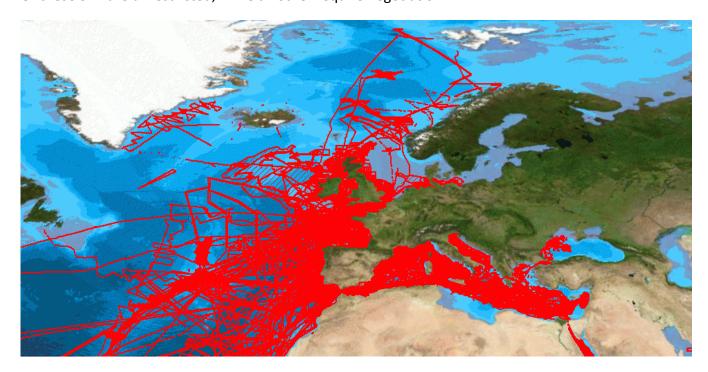
The total number of CDIs for bathymetric survey data sets has increased from: 9333 to 10543

Moreover in the import system there are new entries underway: 2364

The total in production covers the whole globe. Specifically relevant for European waters has increased from: **6471 to 7671**

Lat Long box: N80, W-30; N20, E45

Of these **327** are unrestricted, while all other require negotiation.



Regional DTMs are available at present for the following sea regions:

- the Greater North Sea, including the Kattegat and stretches of water such as Fair Isle, Cromarty,
 Forth, Forties, Dover, Wight, and Portland
- the English Channel and Celtic Seas



- Western Mediterranean, the Ionian Sea and the Central Mediterranean Sea
- Iberian Coast and Bay of Biscay (Atlantic Ocean)
- Adriatic Sea (Mediterranean)
- Aegean Levantine Sea (Mediterranean).
- Madeira and Azores (Macaronesia)

Indicator 2 - Organisations supplying each type of data based on (formal) sharing agreements and broken down into country and organisation type (e.g. government, industry, science).

| Per CDI Partner | Country | Datasets |
|---|----------------|----------|
| SHOM (SERVICE HYDROGRAPHIQUE ET | | |
| OCEANOGRAPHIQUE DE LA MARINE) | France | 4128 |
| OceanWise Limited | United Kingdom | 1955 |
| IFREMER / IDM/SISMER | France | 712 |
| IHPT, Hydrographic Institute | Portugal | 274 |
| Geological Survey of Ireland | Ireland | 132 |
| Management Unit of North Sea and Scheldt | | |
| Estuary Mathematical Models, Belgian Marine | | |
| Data Centre | Belgium | 93 |
| Hellenic Centre for Marine Research, Hellenic | | |
| National Oceanographic Data Centre | | |
| (HCMR/HNODC) | Greece | 76 |
| IEO/Spanish Oceanographic Institute | Spain | 66 |
| Institute of Marine Science (ISMAR) - Bologna | Italy | 65 |
| British Oceanographic Data Centre | United Kingdom | 50 |
| NIOZ Royal Netherlands Institute for Sea Research | Netherlands | 30 |
| Hydrographic Institute of the Navy | Spain | 23 |
| Bulgarian National Oceanographic Data | | |
| Centre(BGODC), Institute of Oceanology | Bulgaria | 16 |
| German Oceanographic Datacentre (NODC) | Germany | 15 |
| OGS (Istituto Nazionale di Oceanografia e di | | |
| Geofisica Sperimentale), Division of | | |
| Oceanography | Italy | 10 |
| UNEP/GRID-Arendal | Norway | 6 |
| Marine Technology Unit. Mediterranean Marine | | |
| and Environmental Research Centre | Spain | 6 |
| OGS (Istituto Nazionale di Oceanografia e di | | |
| Geofisica Sperimentale), Infrastructures Division | Italy | 4 |
| Institute of Marine Sciences. Mediterranean | | |
| Marine and Environmental Research Centre | | |
| (CMIMA-ICM-CSIC). Department of Marine | Snain | 4 |
| Geology | Spain | 3 |
| National Laboratory of Energy and Geology | Portugal | 3 |



National Institute of Marine Geology and

Geoecology Romania 2
Portuguese Institute of Ocean and Atmosphere Portugal 1

These centres are government and research institutes. No industry (yet).

Indicator 3 - Organisations that have been approached to supply with no result, including type of data sought and reason why it has not been supplied.

Nothing to report.

Indicator 4 - Volume of each type of data and of each data product downloaded from the portal

Time period 1 May 2014 – 30 June 2014:

CDIs:

No of CDI basket transactions: 1

No of CDIs requested: 1

Different users: 1

Different data centres: 1

<u>Data products – DTMs:</u>

| Tile | Downloads |
|---------------------------------------|-----------|
| Adriatic-Ionion Sea - C.Meditarrenean | 770 |
| Greater North Sea | 711 |
| Celtic Seas | 689 |
| Aegean-Levantine Sea | 677 |
| West Mediterranean | 654 |
| Madeira | 619 |
| Azores | 605 |
| Bay of Biscay - Iberian Coast | 93 |
| | |

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| Format | Downloads |
|---------|-----------|
| ESRI | |
| ASCII | 1145 |
| XYZ | 1202 |
| GeoTiff | 1118 |
| NetCDF | 619 |
| CSV | 495 |
| SD | 239 |

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Indicator 5 - Organisations that have downloaded each data typeBSH, Germany

Indicator 6 - Using user statistics to determine the main pages utilised and to identify preferred user navigations routes

Time period 1 January 2014 – 30 April 2014:

Bathymetry main portal:

| Month | Unique visitors | Number of visits | Pages | Hits | Bandwidth |
|----------|--------------------|------------------|--------|--------|-----------|
| Jan 2014 | 932 | 1,569 | 17,827 | 52,468 | 3.95 GB |
| Feb 2014 | 931 | 1,579 | 22,536 | 60,710 | 3.82 GB |
| Mar 2014 | 1,039 | 1,713 | 19,840 | 56,544 | 3.19 GB |
| Apr 2014 | 984 | 1,659 | 20,766 | 54,708 | 2.91 GB |
| May 2014 | 1,002 | 1,760 | 18,063 | 53,529 | 3.46 GB |
| Jun 2014 | 995 | 1,784 | 17,402 | 51,169 | 2.67 GB |

Visitors in June 2014:



| Hosts | | | | |
|--|-------|-------|-----------|---------------------|
| Total : 709 Known, 473 Unknown (unresolved ip) - 995 Unique visitors | Pages | Hits | Bandwidth | Last visit |
| 84.41.108.220 | 1,504 | 1,508 | 18.00 MB | 30 Jun 2014 - 10:25 |
| 82.116.76.84 | 849 | 1,232 | 6.89 MB | 30 Jun 2014 - 14:21 |
| a83-163-127-252.adsl.xs4all.nl | 604 | 2,108 | 11.81 MB | 27 Jun 2014 - 07:07 |
| cable-77-221-25-240.dynamic.vinet.ba | 562 | 562 | 6.72 MB | 30 Jun 2014 - 20:20 |
| 247-232.noc.soton.ac.uk | 544 | 763 | 67.23 MB | 26 Jun 2014 - 12:00 |
| unknown.shom.fr | 342 | 812 | 9.30 MB | 27 Jun 2014 - 11:02 |
| 141.17.83.11 | 326 | 2,808 | 199.90 MB | 20 Jun 2014 - 07:01 |
| dias1.ath.hcmr.gr | 323 | 518 | 144.36 MB | 27 Jun 2014 - 16:56 |
| 178.16.165.22 | 317 | 571 | 12.68 MB | 27 Jun 2014 - 09:59 |
| host81-145-104-87.range81-145.btcentralplus.com | 267 | 405 | 3.29 MB | 11 Jun 2014 - 15:52 |
| 193.150.120.14 | 254 | 254 | 735.28 KB | 30 Jun 2014 - 20:26 |
| 193.191.138.240 | 243 | 457 | 2.18 MB | 23 Jun 2014 - 12:43 |
| host86-182-150-216.range86-182.btcentralplus.com | 190 | 257 | 3.46 MB | 20 Jun 2014 - 12:04 |
| sol-fttb.144.115.119.46.sovam.net.ua | 179 | 179 | 0 | 30 Jun 2014 - 18:54 |
| 193.105.210.226 | 171 | 171 | 1.70 MB | 01 Jun 2014 - 12:47 |
| a82-95-67-170.adsl.xs4all.nl | 150 | 258 | 2.05 MB | 30 Jun 2014 - 13:33 |
| sol-fttb.207.120.119.46.sovam.net.ua | 143 | 143 | 0 | 30 Jun 2014 - 02:41 |
| br148-029.ifremer.fr | 138 | 464 | 3.50 MB | 27 Jun 2014 - 07:15 |
| 192.171.135.36 | 138 | 251 | 1.46 MB | 18 Jun 2014 - 14:32 |
| 146.133.255.196 | 136 | 228 | 1.24 MB | 04 Jun 2014 - 10:18 |
| dnv-gw.dnv.com | 133 | 236 | 1.63 MB | 24 Jun 2014 - 21:59 |
| sol-fttb.40.155.118.46.sovam.net.ua | 126 | 126 | 0 | 29 Jun 2014 - 22:11 |
| cable-77-77-245-49.dynamic.telemach.ba | 119 | 119 | 1.42 MB | 06 Jun 2014 - 13:46 |
| lp-193-33-2-113.mde.es | 118 | 231 | 2.14 MB | 23 Jun 2014 - 07:54 |
| 119-224-29-14.callplus.net.nz | 115 | 221 | 4.38 MB | 14 Jun 2014 - 02:52 |
| 141.17.83.10 | 113 | 777 | 100.86 MB | 18 Jun 2014 - 08:05 |
| 195.10.221.34 | 101 | 403 | 102.06 MB | 19 Jun 2014 - 09:03 |
| host81-152-147-179.range81-152.btcentralplus.com | 91 | 187 | 1.04 MB | 27 Jun 2014 - 08:10 |
| rhodes.unice.fr | 90 | 174 | 1.60 MB | 27 Jun 2014 - 10:33 |
| lp-193-33-2-114.mde.es | 88 | 166 | 1.02 MB | 03 Jun 2014 - 09:28 |
| 193.146.131.132 | 88 | 203 | 16.53 MB | 25 Jun 2014 - 11:13 |

Bathymetry DTM viewer service:

| Month | Unique visitors | Pages | Hits | Bandwidth |
|--------|-----------------|-------|-------|-----------|
| Mar-14 | 1.397 | 1,794 | 2,395 | 25,59 GB |
| Apr-14 | 1.423 | 1,846 | 2,671 | 29,01GB |
| May-14 | 1.413 | 1.894 | 2.863 | 69,78GB |
| Jun-14 | 1.362 | 1.785 | 2.835 | 75,40GB |



| _ | |
|-----|-------|
| IOD | Hosts |

| | Top Hosts | | | | | | | |
|----|---|----------------|------|----------|----------------|--|--|--|
| | Host | Country | Hits | Visitors | Bandwidth (KB) | | | |
| 1 | ptr.cnsat.com.cn | China | 541 | 496 | 5,060,203 | | | |
| 2 | 119.63.193.130 | Japan | 98 | 97 | 806,371 | | | |
| 3 | 119.63.193.132 | Japan | 103 | 97 | 2,402,830 | | | |
| 4 | 119.63.193.194 | Japan | 94 | 90 | 658,888 | | | |
| 5 | 119.63.193.131 | Japan | 76 | 76 | 836 | | | |
| 6 | 119.63.193.195 | Japan | 75 | 71 | 919,289 | | | |
| 7 | 119.63.193.196 | Japan | 68 | 66 | 855,030 | | | |
| 8 | ec2-50-18-216-148.us-west-1.compute.amazonaws.com | United States | 68 | 30 | 1,702,841 | | | |
| 9 | google-proxy-66-249-81-3.google.com | United States | 28 | 28 | 308 | | | |
| 10 | google-proxy-66-249-81-183.google.com | United States | 28 | 28 | 308 | | | |
| 11 | unknown.shom.fr | France | 37 | 21 | 606,122 | | | |
| 12 | google-proxy-66-249-93-183.google.com | United States | 17 | 17 | 187 | | | |
| 13 | google-proxy-66-249-93-3.google.com | United States | 19 | 17 | 23,180 | | | |
| 14 | br148-029.ifremer.fr | France | 17 | 15 | 316,017 | | | |
| 15 | user.vliz.be | Belgium | 20 | 12 | 729,503 | | | |
| 16 | 178.16.165.22 | France | 16 | 12 | 914,300 | | | |
| 17 | 62.1.135.13.dsl.dyn.forthnet.gr | Greece | 25 | 12 | 176,958 | | | |
| 18 | mail1.linksmt.it | Italy | 25 | 12 | 164,894 | | | |
| 19 | 199.19.249.196 | United States | 13 | 11 | 311,631 | | | |
| 20 | nat.bo.ismar.cnr.it | Italy | 36 | 10 | 1,465,684 | | | |
| 21 | 195.10.221.34 | United Kingdom | 24 | 9 | 198,880 | | | |
| 22 | 195.59.221.4 | Unknown | 10 | 9 | 110 | | | |
| 23 | 192.Red-80-36-114.staticIP.rima-tde.net | Spain | 12 | 9 | 132 | | | |
| 24 | 77-23-210-41-dynip.superkabel.de | Germany | 17 | 8 | 30,417 | | | |
| 25 | msnbot-131-253-38-67.search.msn.com | Canada | 8 | 8 | 88 | | | |
| 26 | 212.205.83.18 | Greece | 20 | 8 | 315,144 | | | |
| 27 | host81-145-104-87.range81-145.btcentralplus.com | United Kingdom | 11 | 8 | 121 | | | |
| 28 | 247-232.noc.soton.ac.uk | United Kingdom | 13 | 8 | 108,973 | | | |
| 29 | gateway.an.ismar.cnr.it | Italy | 18 | 8 | 260,642 | | | |
| 30 | geo-mac69.leeds.ac.uk | United Kingdom | 19 | 8 | 755,550 | | | |
| 31 | ArcNat-67-229.bologna.enea.it | Italy | 8 | 8 | 88 | | | |
| 32 | 139-63-121-34.nodes.tno.nl | Netherlands | 18 | 7 | 1,334,928 | | | |
| 33 | 194.75.138.93 | United Kingdom | 18 | 7 | 580,463 | | | |
| 34 | 84.45.106.162 | United Kingdom | 22 | 7 | 1,001,074 | | | |
| 35 | 193.136.242.251 | Portugal | 18 | 7 | 67,752 | | | |
| 36 | 17/1 123 27 77 dunamic mundo r com | Spain | 13 | 7 | 2 140 166 | | | |

Indicator 7 - List of what the downloaded data has been used for (divided into categories e.g. Government planning, pollution assessment and (commercial) environmental assessment, etc.)

Nothing to report.



Indicator 8 - List of organisations that have downloaded data from more than one portal in a given space of time e.g. 2 weeks (assumed to be for a single project).

Nothing to report.

Indicator 9 - Interoperability of data of different types and from different portals

Nothing to report.



Annex X

Nothing to annex.