EMODnet
European Marine Observation and Data Network

Your gateway to marine data in Europe

Updates from EMODnet Chemistry

9th EMODnet Steering Committee Meeting, Mallorca

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The European Marine Observation and Data Network (EMODnet) is financed by the European Union under Regulation (EU) No 508/2014 of the European Parliament and of the Council of 15 May 2014 on the European Maritime and Fisheries Fund.

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Work programme (2017-2019)

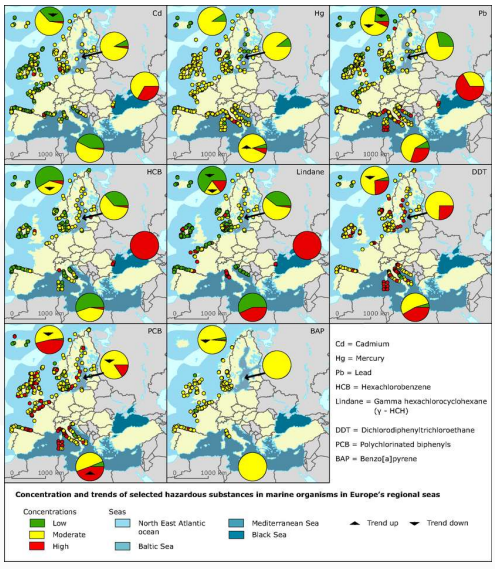
- YEAR 1
  - **Data collection** for Eutrophication + Marine litter data sets
  - Meetings of Board of MSFD experts - Eutrophication (M10)
  - First version of maps for marine litter (M12)
- YEAR 2
  - Meetings of Board of MSFD experts – Contaminants (M13)
  - Updated DIVA **maps** for eutrophication (M14)
  - Data collection for **contaminants** (M15-May 2018)
  - Dedicated maps for **contaminants** (M20-October 2018)
  - Higher resolution DIVA maps **near major river mouths** (M22)

One of the main achievement

- Interaction with TG DATA, developing recommendations for MS for **Accessing data and information** according to **MSFD Art. 19(3)** …
- EMODnet Chemistry use case mapping **INSPIRE** data models for D5C1 "Nutrients concentrations in water"
- Both EMODnet and SeaDataNet **standards** feature heavily in the 'art 19.3 recommendations on publication of datasets'

Interaction with EEA

- The beginning of the end? of the EIONET dataflow and shift to EMODnet/ICES dataflow for EEA indicators



Interaction with EEA - II

Proof of concept:

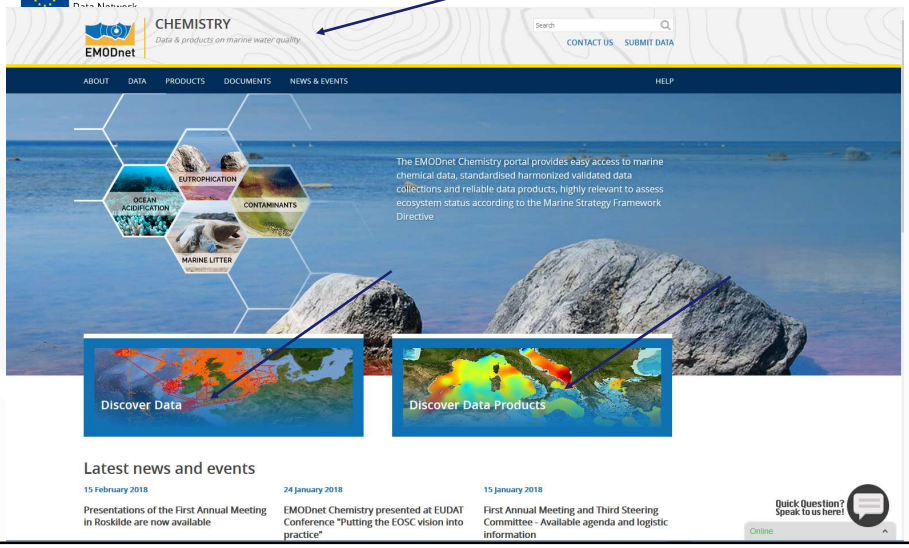
- End April 2018 – deadline to release eutrophication dataset to EEA
- Followed by contaminants dataset

- Task 1 (access data) + Task 2 (products) : dialogue with EEA for tuning access methods
- Task 3 (machine-to-machine) : APIs tuned for querying regional aggregated and validated datasets are under development

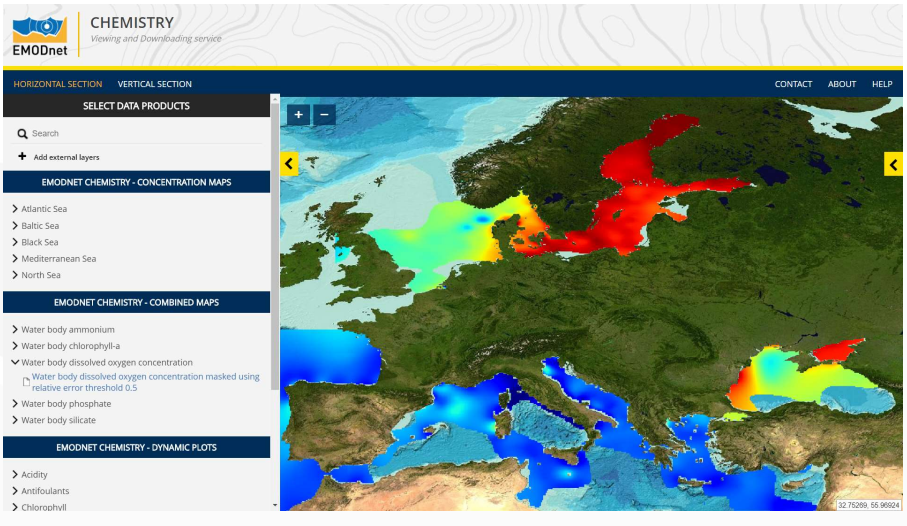
New portal launched – Task 4

- EMODnet Chemistry web portal has been completely restyled (launched Nov 2017). New features:
  - Direct link to Data and Products
  - Latest news and events
  - Following pages with side menu on the left and a presentation page to explain the topic

EMODnet Chemistry portal



Discover Data Products

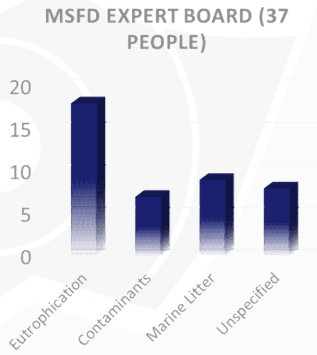


Involvement of RSCs – Task 5

- Open dialogue with OSPAR for beach litter data exchange
- Attended ICG EUT meeting to discuss the potential for EMODnet to provide specific products to their assessment
- UNEP/MAP and BSC subcontractors
- Meeting with INFO/RAC
- Set-up MSFD board of experts

Expectations:

- 'Advise' on (suitable) products
- Monitor development of services
- Continuous dialogue



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Involvement of RSCs – MSFD Experts

- Eutrophication Online Workshop (27th November 2017)
  - Focused on ass
  - Used pre-questi
    Chemistry produ
  - Looked for spec
  - Recorded

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Involvement of RSCs – MSFD Experts

- Contaminants Online Workshop (16th March 2018)
  - Looked for specific feedback on selection of substances and planed dedicated maps
  - Major changes
  - Feedback from RSCs, JRC and Ifremer
  - Recorded
  - New edition when ready

Interoperability with non-EU – Task 6

- EMODnet Chemistry includes several non-EU members from eastern countries and north Africa
- EMODnet Chemistry is linked to ODIP (Interoperability platform with Australia, Canada, USA)
- EMODnet Chemistry contributes to IODE ODIS
- EMODnet Chemistry potentials for UN SDG 14.3 (Ocean Acidification)… IAEG (Inter-agency Expert Group)
  - Methodology fact sheet to be submitted to the next IAEG-SDG meeting in October 2018

User feedback and help desk – Task 7 and 8

- Dedicated WP coordinated by ICES
- Help desk active (chat, e-mail and phone)
- Focus on MSFD stakeholders
- EMODnet promoted to private sector (in synergy with Data Ingestion) – Adriatic LNG

Use cases for EMD Chemistry

A series of MoUs are discussed **to formalise data exchange mechanisms** and cooperation:

- With BSCS and UNEP/MAP (involved as subcontractors)
- With EEA for Data supply to Eutrophication and Contaminants thematic assessments (2017)
- With INFO-RAC for synergy between information systems
- With OSPAR/MCS and ICES for marine litter data exchange
- With the Copernicus Marine Environment Monitoring Service - IN Situ Thematic Assembling Centre

Cooperation with Copernicus

- **CMEMS INSTAC** started preparing **global biochemical data collections** (oxygen, chlorophyll and nutrients) as input for the CMEMS modelers and to be published for downloading at the CMEMS user portal.
- **EMODnet Chemistry** has already been working since 2009 on gathering biochemical data and metadata, and generating aggregated, validated and harmonised data collections for e.g. eutrophication.
- At present EMODnet Chemistry has brought together **more than > 0.5 million eutrophication data sets** over a large time period **from > 50 data providers**.

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Data exchange from EMODnet Chemistry to CMEMS

- CMEMS, SeaDataNet and EMODnet Chemistry are infrastructures aiming to become **sustainable**.
- Cooperation and exchange between the infrastructures must be **2-way oriented**, well balanced, providing a win-win situation, providing **complementarity**, and preventing mutual competition.

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Marine Litter

- Currently gathering data for generating data products on a European scale on:
  - **Beach** litter (modelled after the OSPAR-MCS, TG ML and UNEP/MAP approach)
  - **Seafloor** litter (modelled after the ICES-DATRAS, TG ML and MEDITS approach)
  - **Micro** litter (SeaDataNet infrastructure with CDI metadata and ODV data standards proposed approach)

Marine Litter - II

- **Central submission facilities** for relevant regional systems + organizations outside existing systems
- Digital layers maps of **beach and seafloor litter** are made available
- Approach discussed at TG ML
- **Cooperation with JRC** for ML Baselines (beach, macro items, regional, sub-regional, national, 2012-2016)
  - 19 different formats
  - large heterogeneity in sampling method (50m – 3km)
  - high spatial-temporal heterogeneity

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Present situation – **beach litter**

- **OSPAR-MCS** dataset includes 58 beaches from 2000 to 2010 plus 91 beaches from 2011 to 2015 (survey at 100 m)
- JRC collected data from 23 Member States
  - Permission to provide all available data for future accessibility through EMODnet by 31-03-2018
- EMODnet data received from TSU (Georgia)
- Dialogue open with EEA (Marine Litter Watch)
- Next steps: **DeFishGear** (Adriatic-Ionian region)

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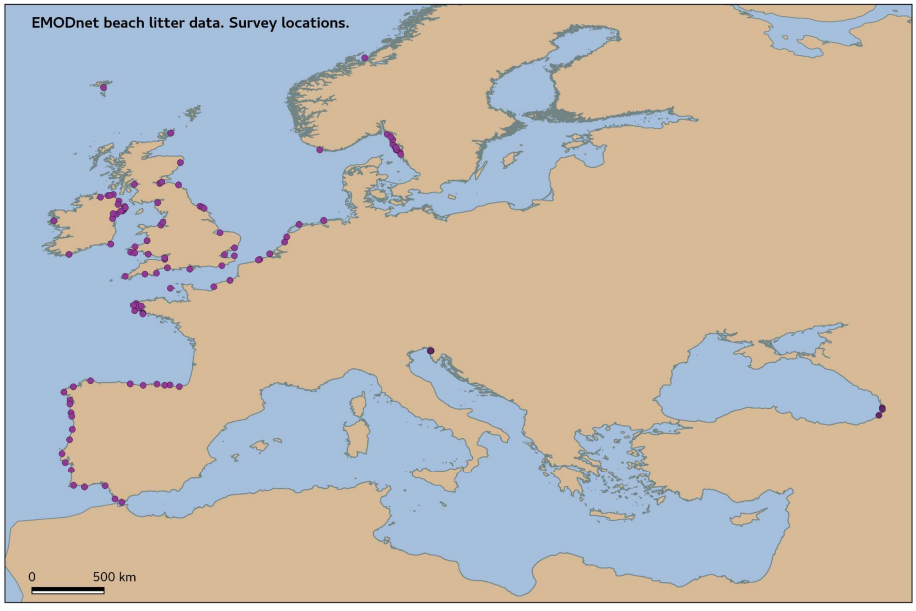

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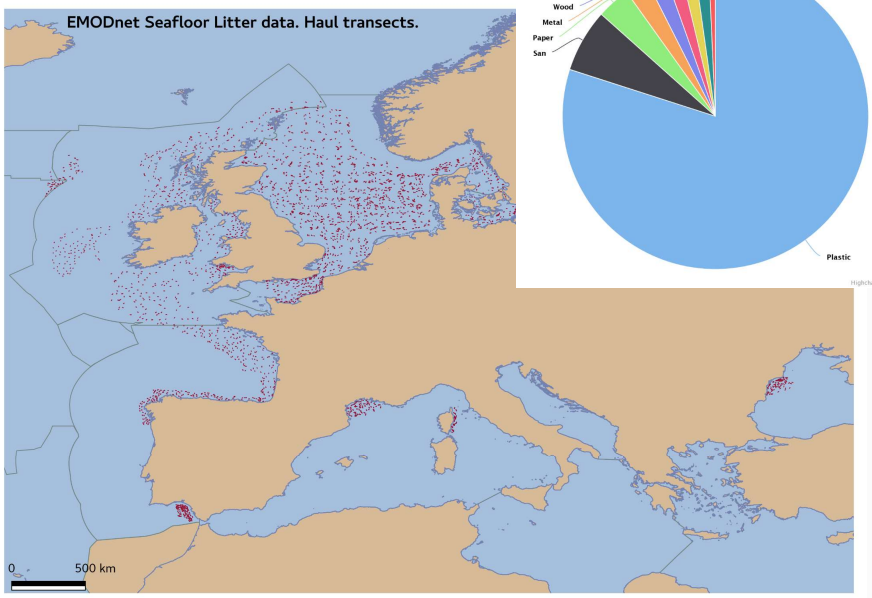
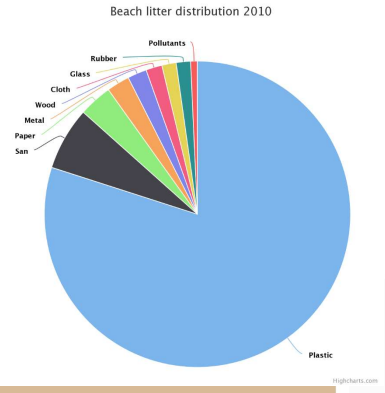
Present situation – **seafloor litter**

- **ICES-DATRAS** dataset includes 5,415 hauls
- EMODnet will be presented to **2018 MEDITS Coordination Meeting**, 18-19-04-2018
- EMODnet data received from Ifremer, NIMRD
- Next steps: **DeFishGear** (Adriatic-Ionian region)

http://europa.ogs.trieste.it/litter/





Present situation – **micro litter**

- The **approach** for marine micro litter data gathering, including metadata/data **formats** is under endorsement by TG ML
- **EMODnet** data received from Ifremer, METU (Turkey), TU (Estonia)