EMODnet for Member State environmental monitoring and reporting obligations: the case of Italy

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Giordano Giorgi

giordano.giorgi@isprambiente.it

ISPRA
Istituto Superiore per la Protezione
e la Ricerca Ambientale

MSFD next steps of implementation:

- **Monitoring programmes: operational by 15th July 2014, to be used for next environmental status assessment and GES update in 2018**

- **Programmes of Measures: reporting March 2016, to address environmental targets to reach GES by 2020**

- **General problem: GES definition and how to assess, reach or maintain it is not yet clear enough to activate a proper regional coordination. At least in the Mediterranean Region every MS is working mostly alone.**

- **To enhance regional coordination, there should be a general agreement on common indicators, i.e.:**

  - **Monitoring sampling methodologies**

  - **Common data collection platforms**

  - **Agreed data elaboration for common data products**

How to develop and use common indicators for MSFD?

- **List of GES common criteria and indicators are set on Commission Decision 1ˢᵗ September 2010 (under revision)**

- **For developing and testing indicators, existing monitoring data as well as new monitoring data have to be used to take into account also present and future trends**

- **Monitoring data have to be aggregated and interpolated to produce homogenous maps across MS in the same region/ subregion. (ex. DIVA interpolation)**

- **In interpolated data products is important to distinguish between monitoring data for:**

  - **Environmental protection ordinary monitoring (fixed stations with long time series)**

  - **Monitoring for research scope (oceanographic campaign, research vessels, changing trips in time and space coverage**

General issues to be addressed:

For monitoring:

• **Determine which, if any, QA/QC procedures are used to produce data as ISO standards or accreditation of laboratories. These QA/QC are different (ex-ante) from QC applied to data for aggregation purposes (ex-post). MSs could agree not to use data that lack some quality standards from the beginning rather than correct or delete some of them for data product.**

For programmes of measures

• **Produce separate aggregated or distributional maps for Coastal and Marine regions, based on distance from the coast and/or depth. Coastal and Marine regions support different dynamical processes and pressures, even if they are strongly linked**

MS Italy has used EMODnet data & data product for MSFD reporting on initial assessment, definition of GES and Targets (2012):

- **Data: Nutrients & Contaminants that will be available on EMODNet Chemistry**

- **Data product: EuSeaMap for Western Mediteranenean Sea from EMODnet Seabed Habitat**

Future use of EMODNet Human Activities lot for Measures and data provisioning for EMODNet Biology

ISPRA, which supports Italian Ministry of Environment for MSFD implementation, is partner of EMODnet for:

- **Chemistry**

- **Seabed Habitat**

- **Geology**

Some issues still to addresses by EMODnet on, for example:

EMODnet Biology

- **In the list, species of interest for MSFD application are present but their distribution appear spatially very limited and focused on very specific areas**

- **Abundance is is often reported as number of individuals per unit of surface. For fish, monitoring methods based on fishing activities are widely used.**

- **Lack of data on size which are very important for MSFD indicators development**

EMODNet Chemistry

- **Data product based on aggregation and interpolation are crucial for Indicators provision.**

- **QA/QC ex-ante information not yet available. QA/QC ex-ante information (ISO standard, accreditation of laboratory, intercalibration procedure) crucial to distinguish level of accuracy of Limit of detection and Limit of quantification**

- **Pay attention to climatology trend based on different monitoring techniques developed during last 30-40 years. Sensitivity on instruments is improved very much meantime, risk to produce false upward trend on marine area**

- **Lack of riverine input load data, very important for Driver-Pressure-Impact-State-Response (DPSIR) paradigm implementation**

Thank You

Giordano Giorgi

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