EMODNET MedSea Checkpoint

Using ISO quality elements standards to assess the existing monitoring system at the Mediterranean Sea basin level

The EMODNET Mediterranean checkpoint is a wide monitoring system assessment activity aiming to support the sustainable Blue Growth at the scale of the Mediterranean sea by clarifying the observation landscape, evaluating the fitness for use of current observations and data assembly programs towards specific marine applications and prioritizing the needs to optimize monitoring systems.

This project aims to document the reliability and usefulness of the existing monitoring system, by developing fitness-for-use indicators to show the appropriateness and availability of monitoring data for the production of targeted products of seven specific marine applications, defined as “Challenges”: Wind Farm Siting, Marine Protected Areas, Oil spill Platform Leaks, Climate and Coastal Protection, Fisheries, Marine Environment and Rivers.

The assessment help to identify gaps and release recommendations for future developments to better meet the application requirements.

The assessment methodology consists in the following steps:

- establish a framework for information collection related to input data required by each Challenge
- access, catalog and elaborate the input data sets through a metadatabase
- define assessment criteria and indicators, and computing them from above metadata
- analyze the fitness for use of the input data with respect to the end user needs for targeted products.

The assessment criteria and the development of checkpoint information and indicators are derived from the ISO standards for geographical information (ISO 19131, ISO19157 and ISO 19115-3), which concerns 99% of the data needed by the challenges. The fitness for use of input datasets are subdivided into two ‘Territories’ that need to be evaluated in terms of Challenge requirements:

- **Appropriateness** (What is made available to the users?) : spatial extent and resolution, temporal extent and resolution, purpose, lineage, usage, completeness, consistency, accuracy
- **Availability** (How the input data sets are made available to users?) : visibility, accessibility, performance, reliability

The degree of fitness for use of a dataset is represented by a series of indicators directly build from the metadatabase using errors as "distance from compliance" of input data sets and targeted products from specifications
After a quick reminder of the checkpoint concept, the presentation will introduce the methodology of the project and will highlight key achievements by presenting checkpoint services (Metadatabase, ISO quality elements, Dashboard, etc).