MEDSEA CHECKPOINT
for Blue Economy efficiency and environment protection

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The concept of sea-basin checkpoints was introduced within the « Marine Knowledge 2020 » communication . Although EU initiatives such as the European Marine Observation and Data Network (EMODnet), Copernicus and the Data Collection Framework for Fisgheries have managed to deliver seamless layers of marine data accross national boundaries, there are still shortcomings with Europe's marine data architecture.
In order to save costs and improve marine knowledge, the EU is now moving to a new paradigm where data must be collected once to satisfy multiple uses to support Blue Growth at the scale of the EU Sea Basins. This has led the Commission to establish a formal way of assessing theses uses by launching the Checkpoint concept.

The EMODnet MEDSEA Checkpoint is an assessment activity aiming to support :

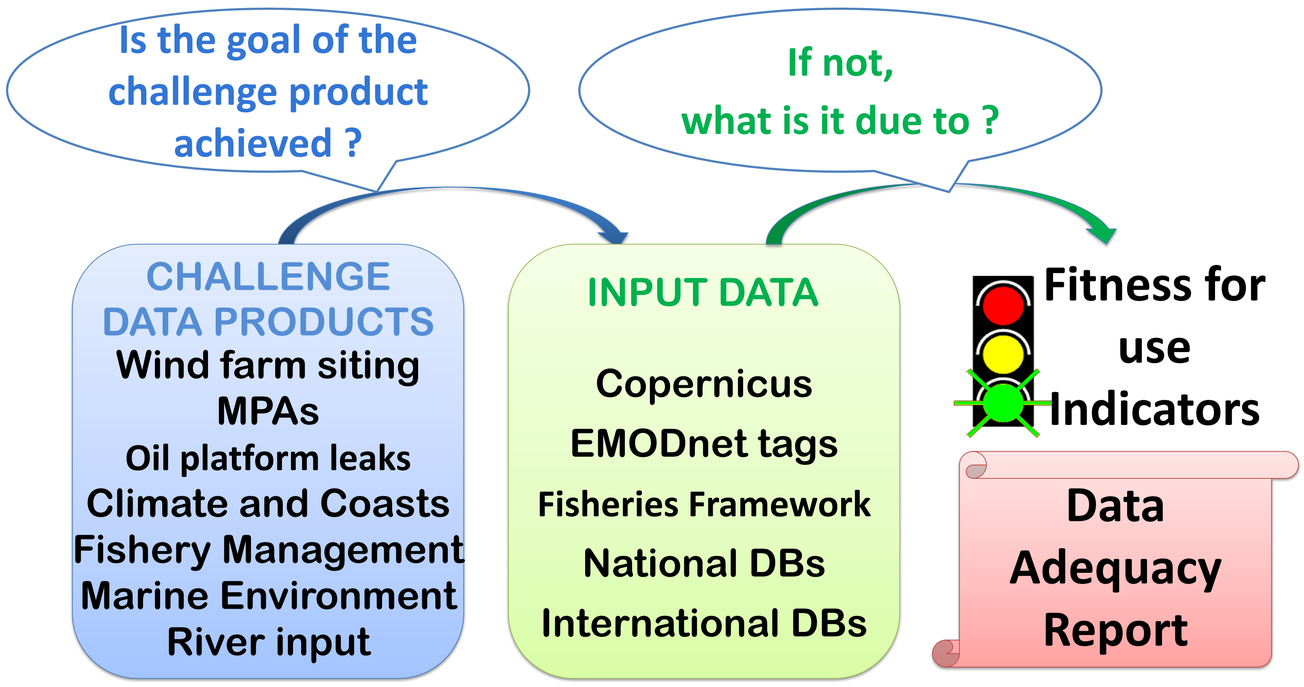
- **the efficient use of the EU monitoring systems**
- **decision making based on factual evidence**
- **focus on user satisfaction**

by :

- ✓ clarifying the landscape of marine environment data collections at national, European and International level
- ✓ evaluating their **fitness for use** building **indicators** of the degree of availibility and of appropriatness based upon applications **(« challenges »)** relevant for the EU maritime strategy
- ✓ Defining priorities to make existing monitoring systems meeting present and future challenge needs.

To produce more objective, quantitative and comparable assessments of data appropriatness, MEDSEA has adopted the ISO standards for Geographic Information (ISO19157 Data Quality, ISO19131 Data Product Specifications, ISO 19115 Metadata). The computation of the **fitness for use indicators** is based on the **comparison of Quality Measures** respectively applied to the **Specified Data Product**, to the **actual Targeted Data Product** and to the **Input Data** sets used to build it. **9 indicators** related to the **completness**, to the **consistency** and to the **accuracy** of the input datasets have been identified as relevant for the Medsea Checkpoint :

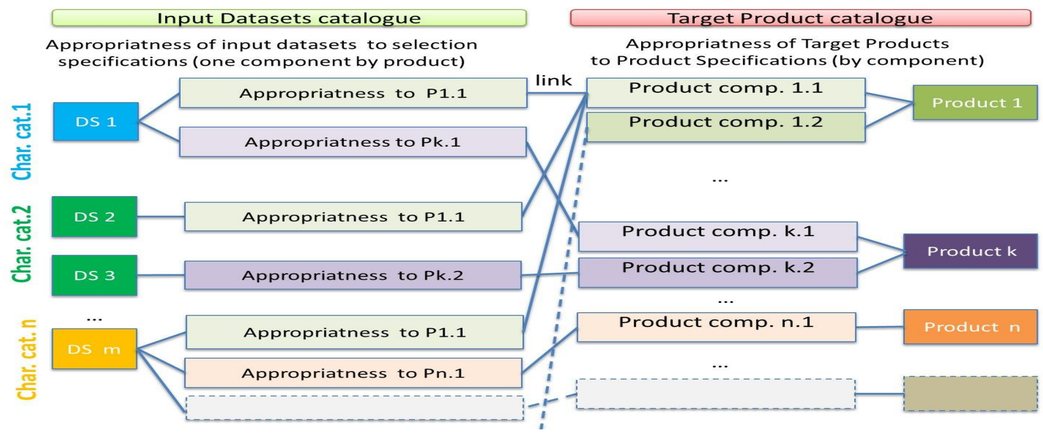
- ✓ **Number of expected parameters available**
- ✓ **Spatial and temporal extent**
- ✓ **Spatial and temporal resolution**
- ✓ **Thematic accuracy**
- ✓ **Temporal validity**



Process to evaluate the adequacy of the existing EU Sea basin data collection and assembly programs to user needs

The main target audience are the institutional stakeholders and policy makers and the data providers but the results will benefit ta a wider public searching information

The specifications and the descriptions of the delivered Products together with Input Data descriptions and evaluations are respectively recorded in 2 catalogues on a GIS platform (Sextant). The evaluations of the Input Data are stored by data quality units (« components ») of the Data Product making use of them, the unit being a subset of the data Product sharing the same quality requirements .



Links between the catalogue of input datasets (DS) classified by SeaDataNet Discovery Parameter Category and the catalogue of products in the GIS Sextant DB.

The Product catalogue contains both the Data Product Specifications (desired product) and the Targeted Product Description (obtained product)

Way forward

Medsea is developping the Checkpoint Service to allow extraction of the evaluations of the input datasets and to provide syntheses by challenge, by product, by SeaDataNet discovery parameter category for Data Adequacy Reports on the Checkpoint Webportal :

The EMODnet Atlantic and the Black-Sea checkpoints have adopted the same methodology and share the same Data Base which paves the way toward harmonized assessments in all basins in Europe.