

Emodnet Atlantic checkpoint : data adequacy to EU challenges

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A Why sea basin checkpoints ?

- People have frustrations with data, so data adequacy is an issue
- For each basin, make thematic products for a number of challenges (figure 1)
- Identify gaps (figure 2) and shortcomings
- Provide improvement guidelines to policy-makers and data providers

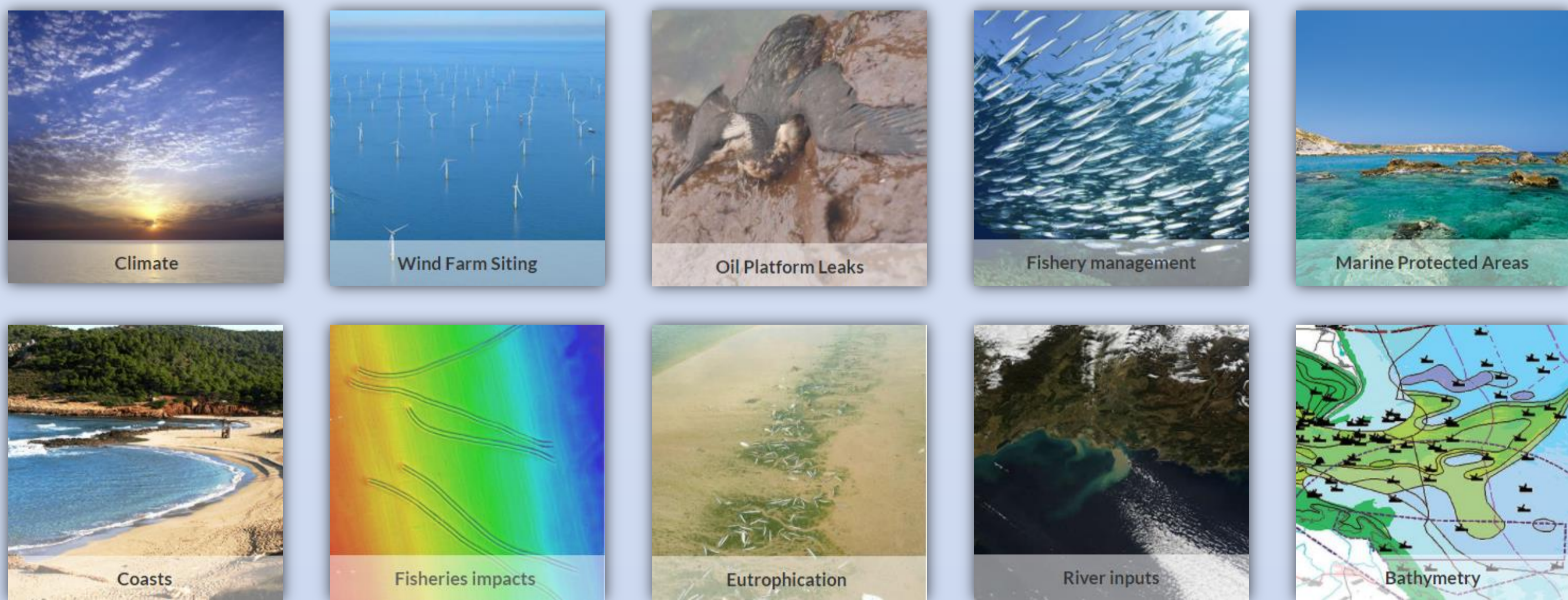
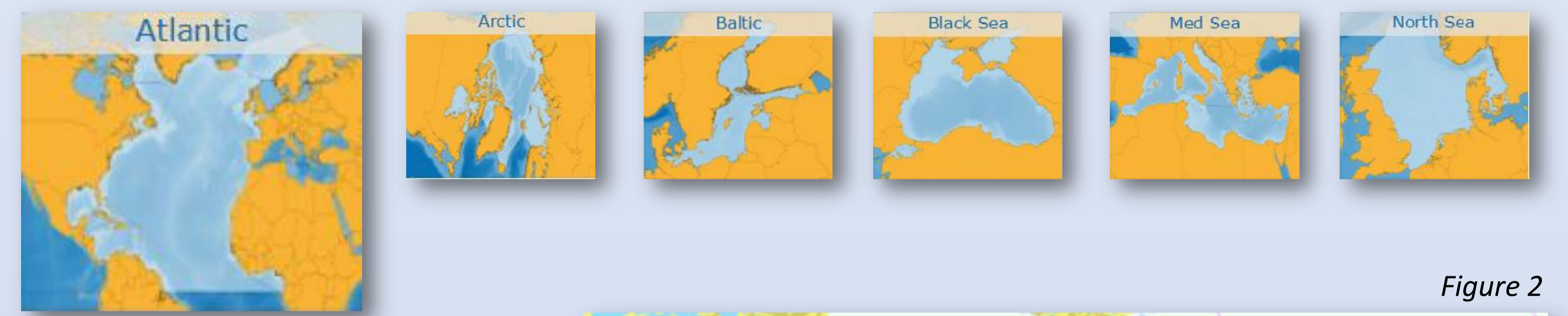


Figure 1

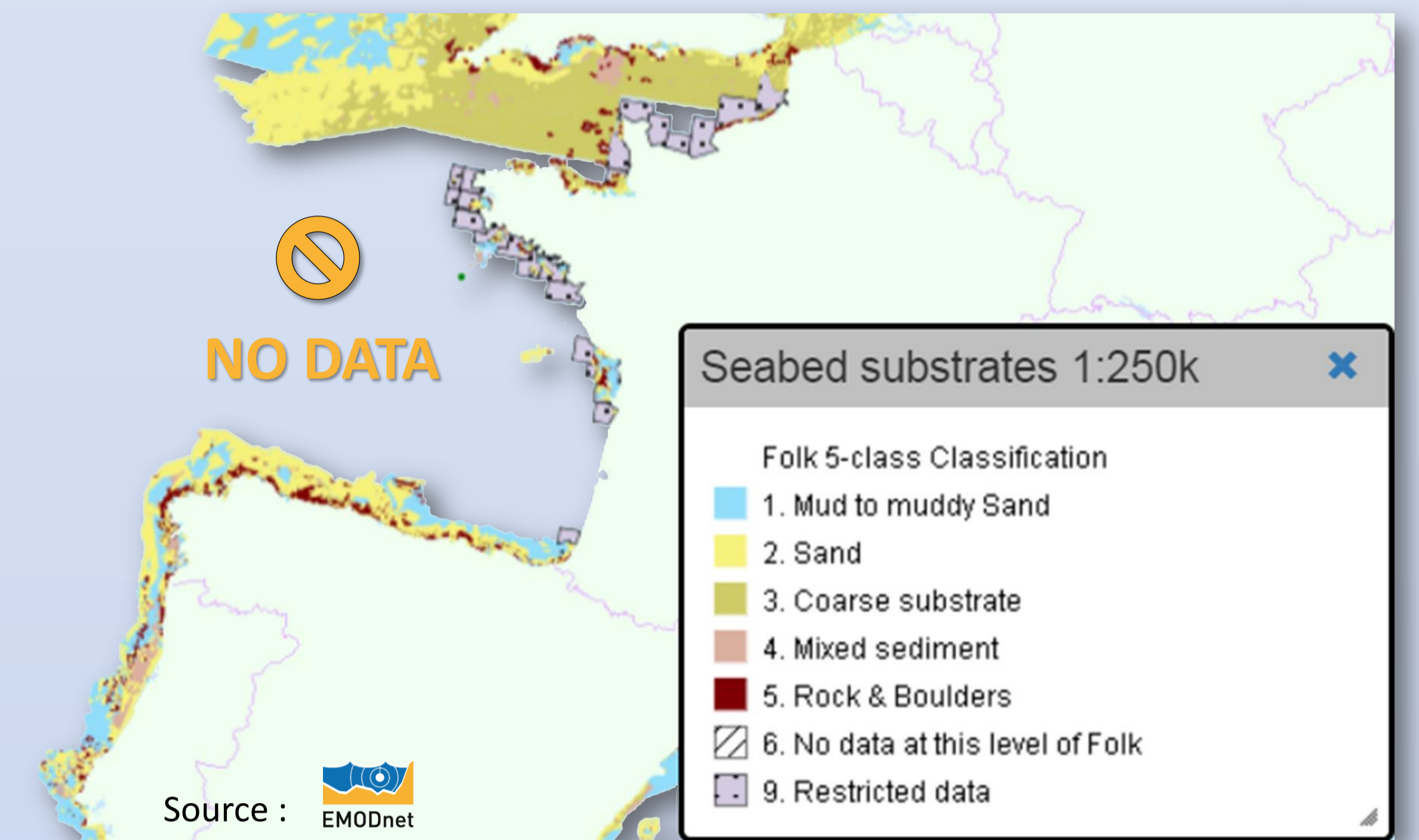


Figure 2

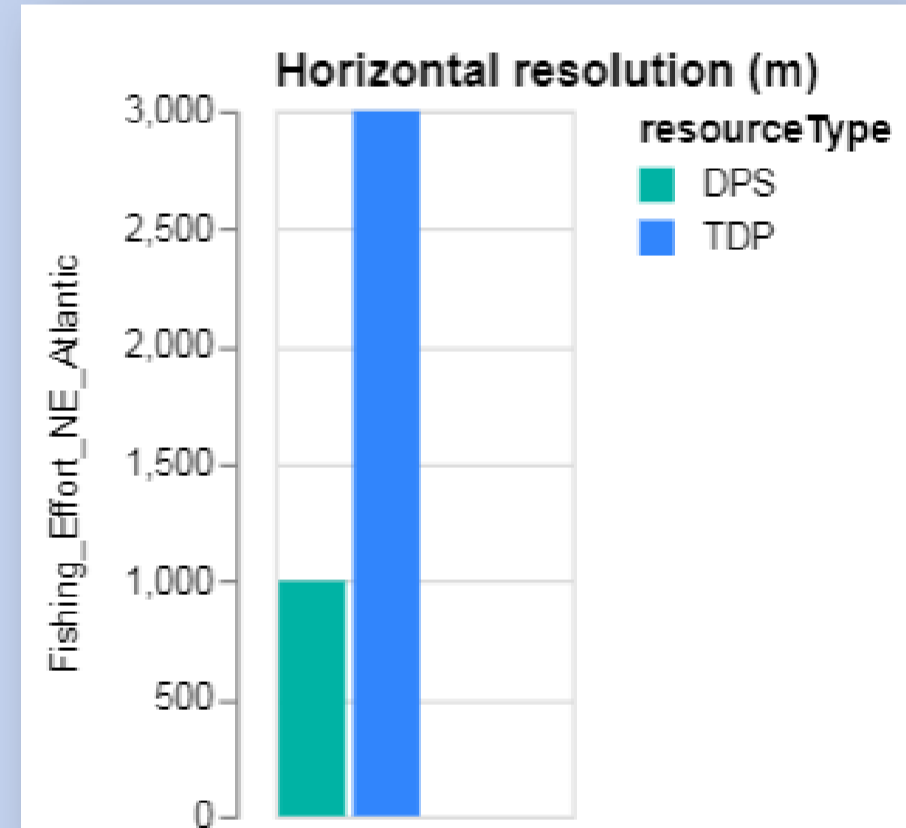
Use of standards



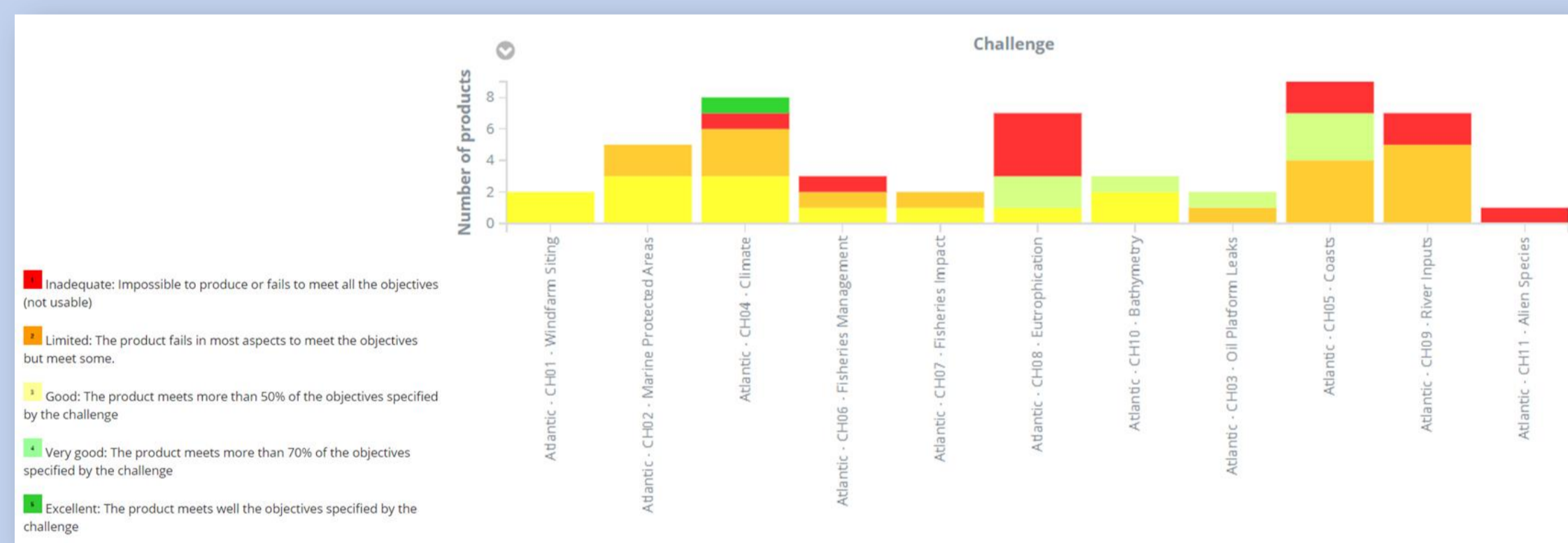
- ISO19115 is the well-known metadata standard for georeferenced data in use in many WDCs/NODCs.
- ISO 19131 relates to "Data product specifications".
- ISO 19157 "Data Quality" is used to assess the quality of the data sets against their specifications.
- The SeaDataNet classification offers different levels of granularity to group parameters and features ("characteristics") from the finer to the coarser: Parameter Usage Vocabulary (P01), Parameter Discovery (P02) and the Agreed Parameter Groups (P03)

Web dynamic Dashboard

for queries and displays of adequacy results in GIS database

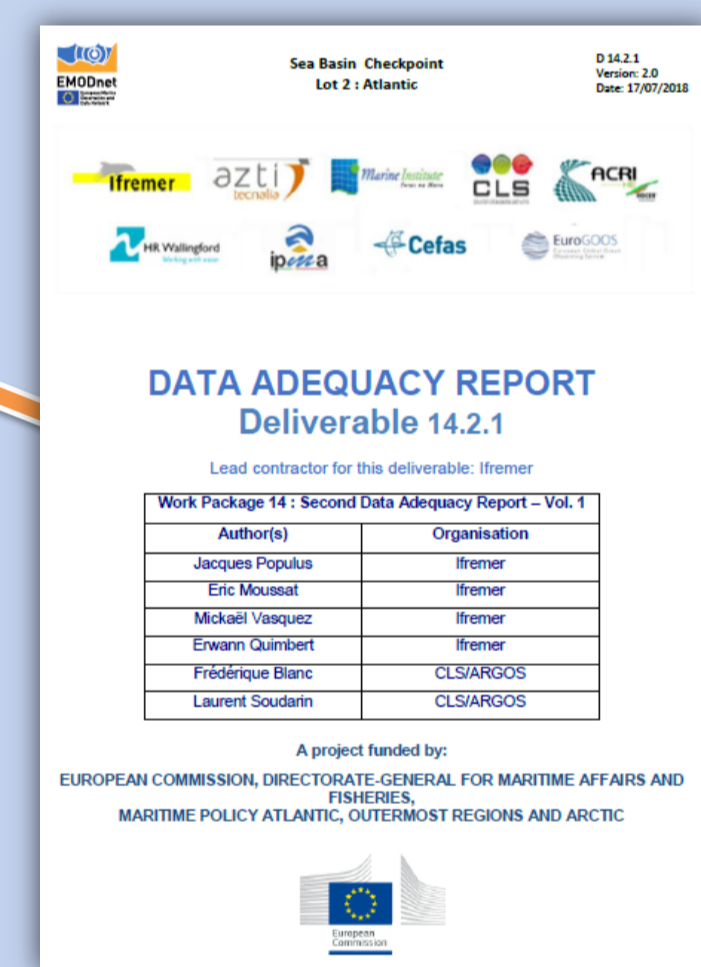


- Example 1 : filtering
- Parameter category (P02): « Fishing effort »
 - Quality measure : horizontal resolution
 - Indicator < 0 (specification not satisfied)
- Green, specified resolution (1000m)
→ Blue, found resolution (3000m)



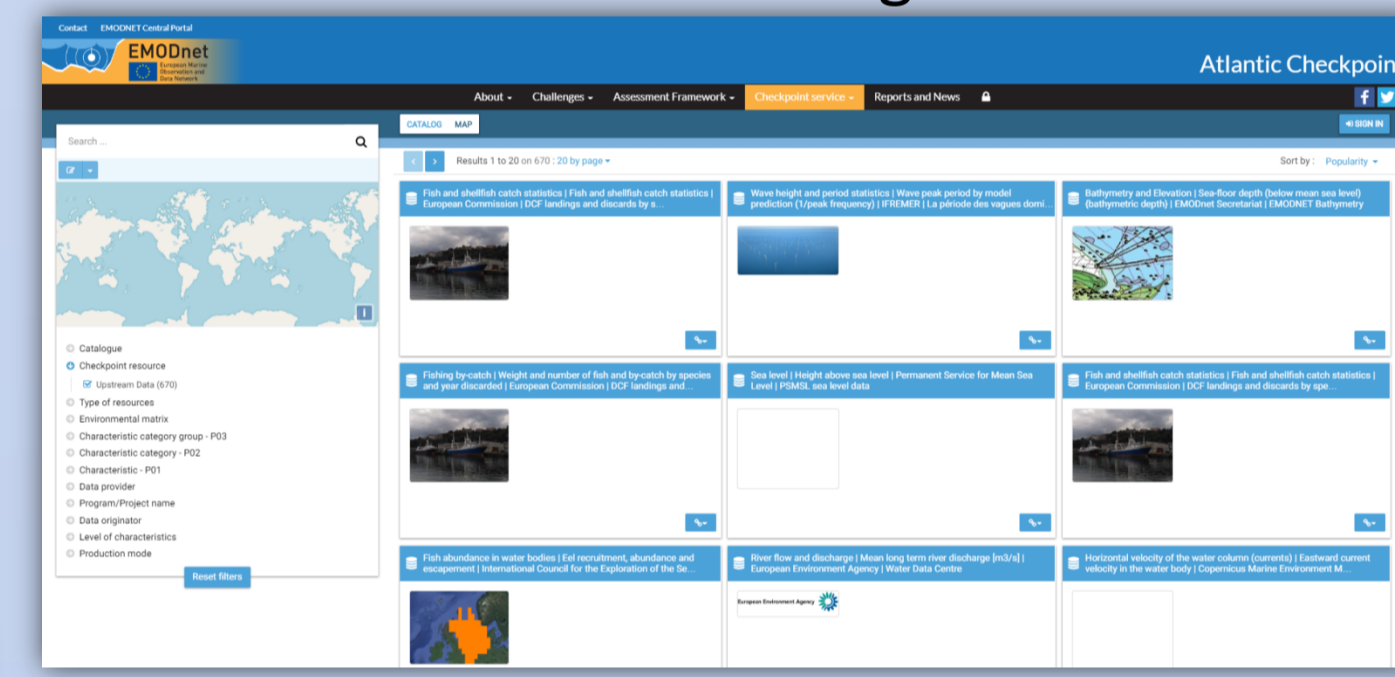
Example 2 : overview of adequacy of products to specifications

Adequacy Report (DAR)



1 - Identification of Upstream Data (UD) of potential interest for the challenges :

→ ISO19115 catalogue of UD

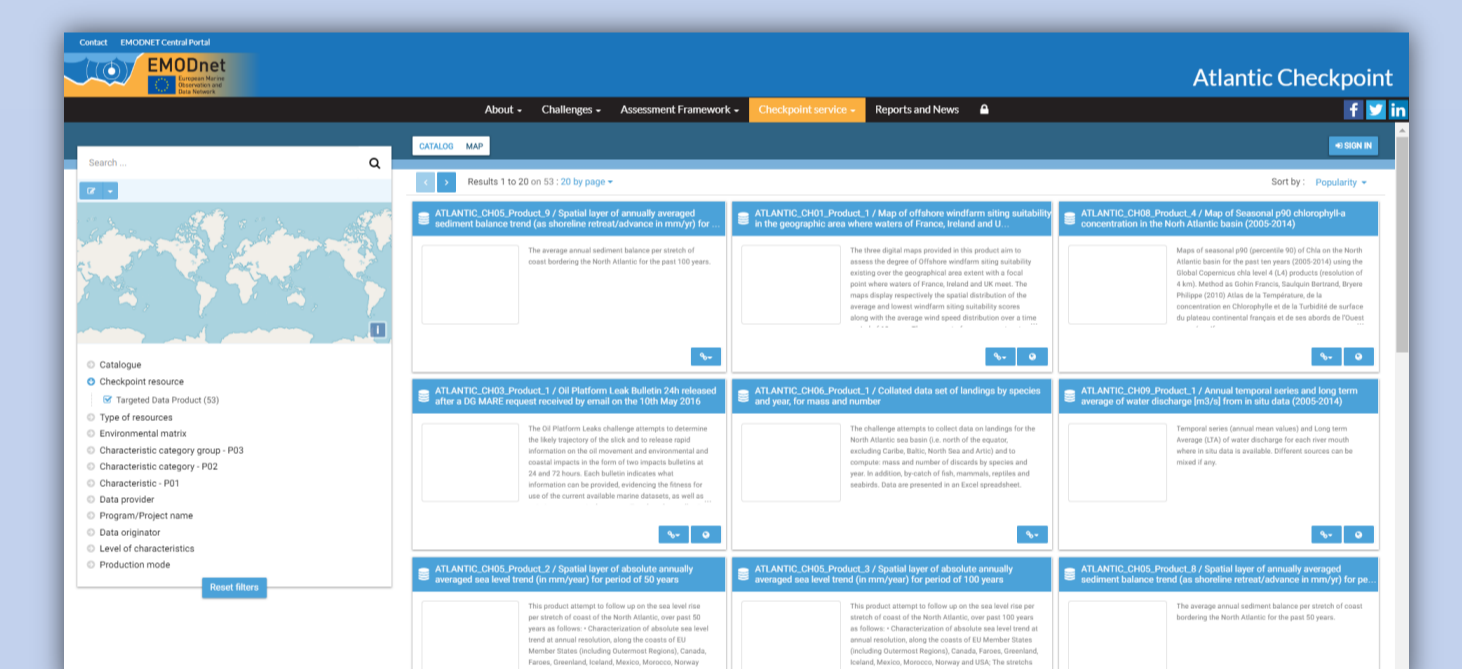


2 - Data Product Specifications (DPS)

including quality measure selection and conformance values (ISO19131 & ISO19157)

3 - Realization of products (TDP) and quality measures

→ ISO19115 catalogue of Products (53 pairs of DPS/TDP)



Indicators of appropriateness

ISO quality element	Metric name
Completeness	Horizontal coverage
	Vertical coverage
	Temporal coverage
Consistency	Number of items
	Number of characteristics
Accuracy	Horizontal resolution
	Vertical resolution
	Temporal resolution
Temporal quality	Temporal validity

4 - Indicators production

difference between expected and obtained results

Indicators of availability

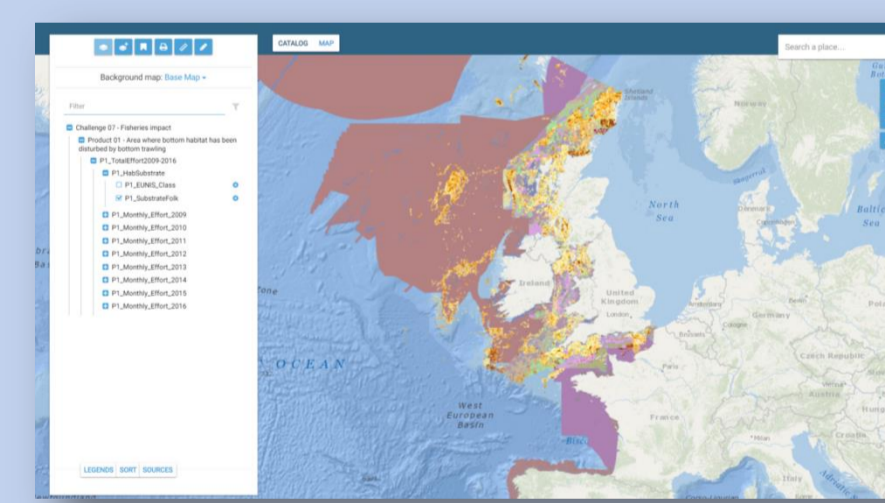
	Indicators
Visibility of data and availability conditions	Ease to find
	Visibility of data policy
Conditions of access	Delivery (services to discover, view and load data)
	Data policy
Performance	Data format (readiness for use)
	Responsiveness (from request to delivery including delays due to policy procedure)

Results

Product Digital Object Identifier (DOI)



Web Map Viewer for data products



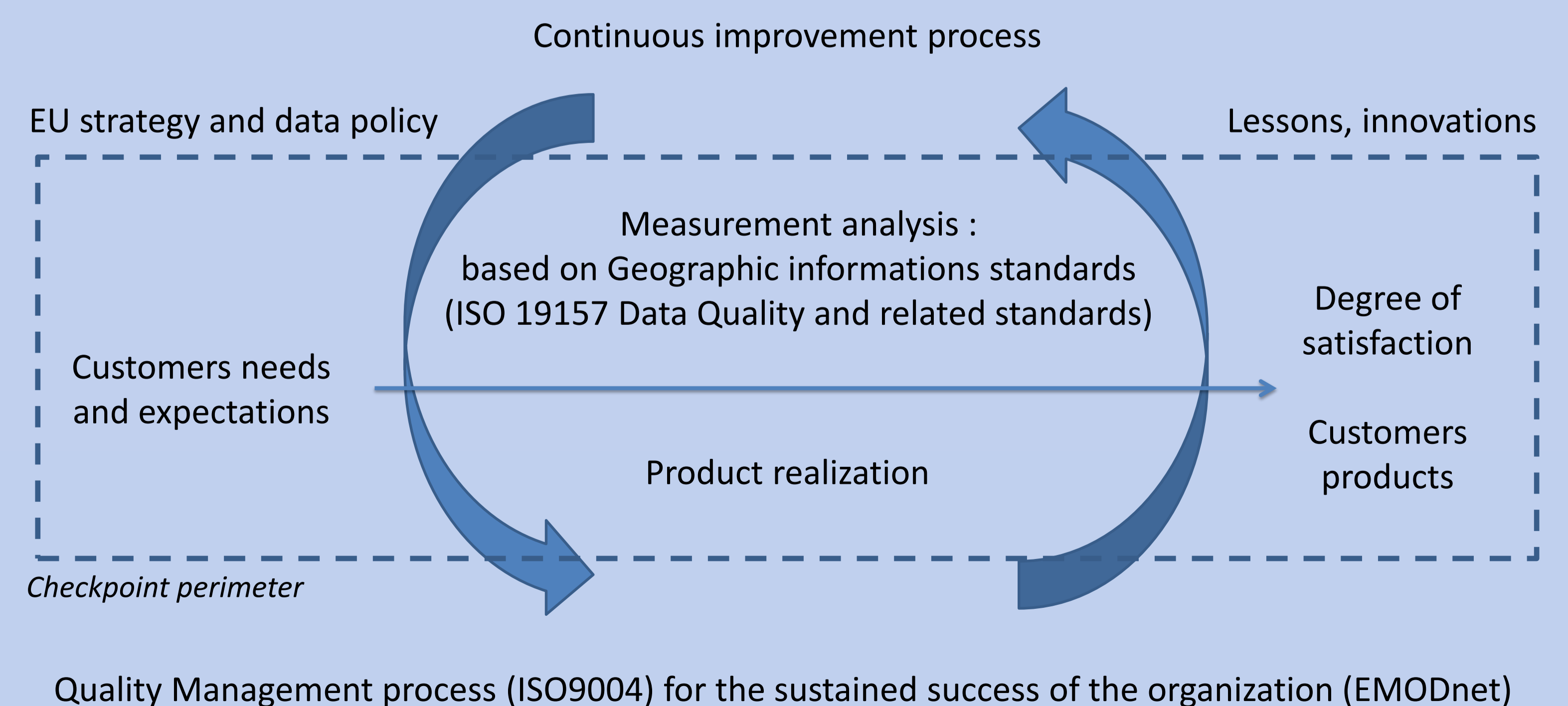
C Recommendations for data adequacy

- Intensify/develop observations tools : wind, currents at the coast, rivers, tidal gauges, seabed composition and biological species abundance
- Create/Strengthen existing TACs (inc. EMOdnet) and address policy issues : marine traffic, AIS and VMS data including small vessels, fishing by-catch and discards, MPA monitoring parameters

D How to follow-on ?

- Create a Quality Management System (QMS) as a common referential
- Involve all EU marine providers and upcoming projects into QMS process
- Adopt common practices across basins
- Regularly update indicators (eg. Marine Strategy Framework Directive cycle)
- Run additional challenges to increase thematic scope

Quality Management System



Go to <http://www.emodnet-atlantic.eu/> for reports, services and further details

IMDIS 2018 - Barcelona, International Conference on Marine Data and Information Systems

