EMODnet Checkpoints
The Atlantic Checkpoints methods

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On behalf of the Atlantic Checkpoint team

Steering Committee – Roma – 12 to 14 Sept. 2017

http://www.emodnet.eu/checkpoints

General framework

- Design by DG/MARE of Challenges meant to fully cover the broad scope of marine knowledge
- Atlantic checkpoint based on ISO standards and indicators for geographic information
- Use of SeaDataNet parameter discovery vocabulary

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Methods

- Identification of data sets needed for products
- Data set metadata captured in the Sextant data base (566 for Atlantic,1270 records for Atl.+ Med.+ Black Sea)
- Assessment of data quality in two steps
  - the HOW: availability of services
  - the WHAT: appropriateness of data
- Production of a set of key adequacy indicators (DARs)
- Implementation of services: browser (data base) and dashboard (indicators) accessible to providers and end users

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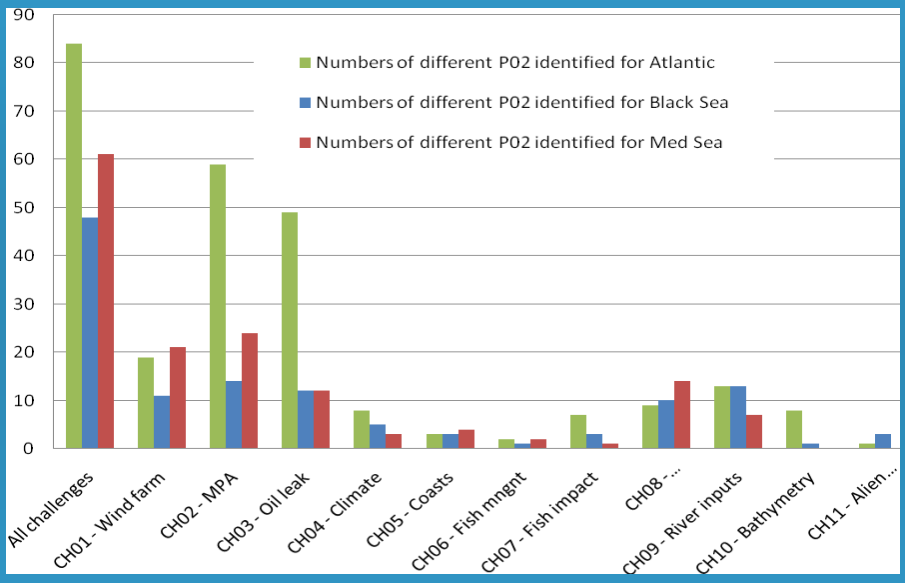
Survey of discovery parameters



Assessment of availability (DAR1)

1) Six availability criteria

- How easy is it to find
- What is the data policy?
- Is this policy visible?
- What are the delivery mechanisms?
- Responsiveness: is it quick?
- Readiness: is the format adequate?

2) Per challenge

3) Per data type

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Delivery mechanisms

For a selection of P02 or P03s

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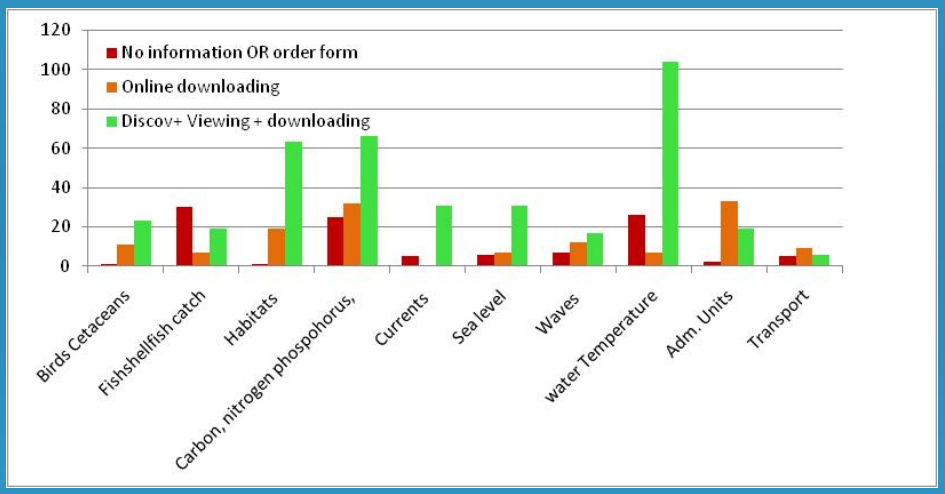

Preliminary conclusions from DAR1

- Assessment is made by users, measurable, systematic and repeatable
- Lack of thesaurus (e.g. on data policy wording), cultural and vocabulary issues (e.g. moratorium, discovery, etc)
- The 3 checkpoints used the same GIS data base, which enabled fast and comparable analysis
- Overall availability is quite generally good, and very good for EMODnet and Copernicus
- The bottleneck is not so much with delivery services but rather with routing people to data sources (internet visibility, master directories...)
- An additional issue is the diversity in types and ergonomies of portals (e.g. in Emodnet) where users may get confused

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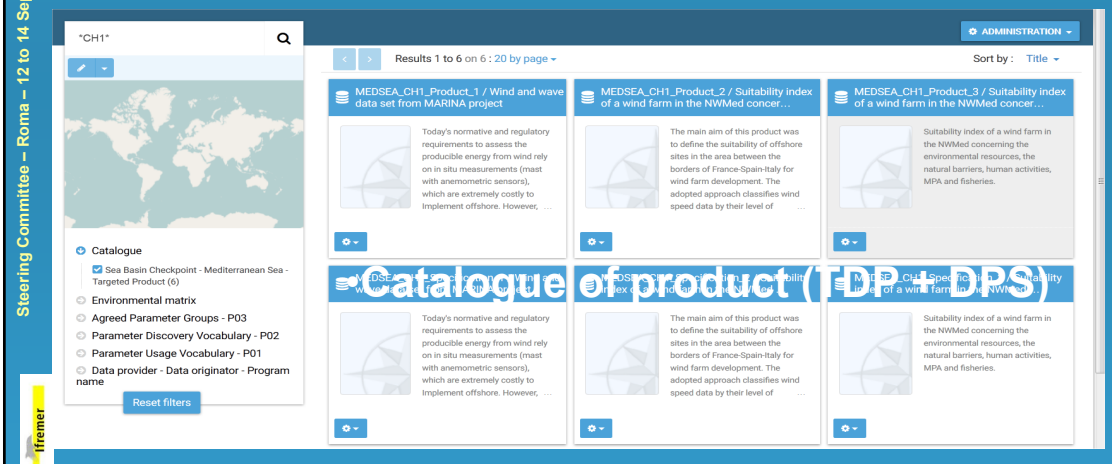
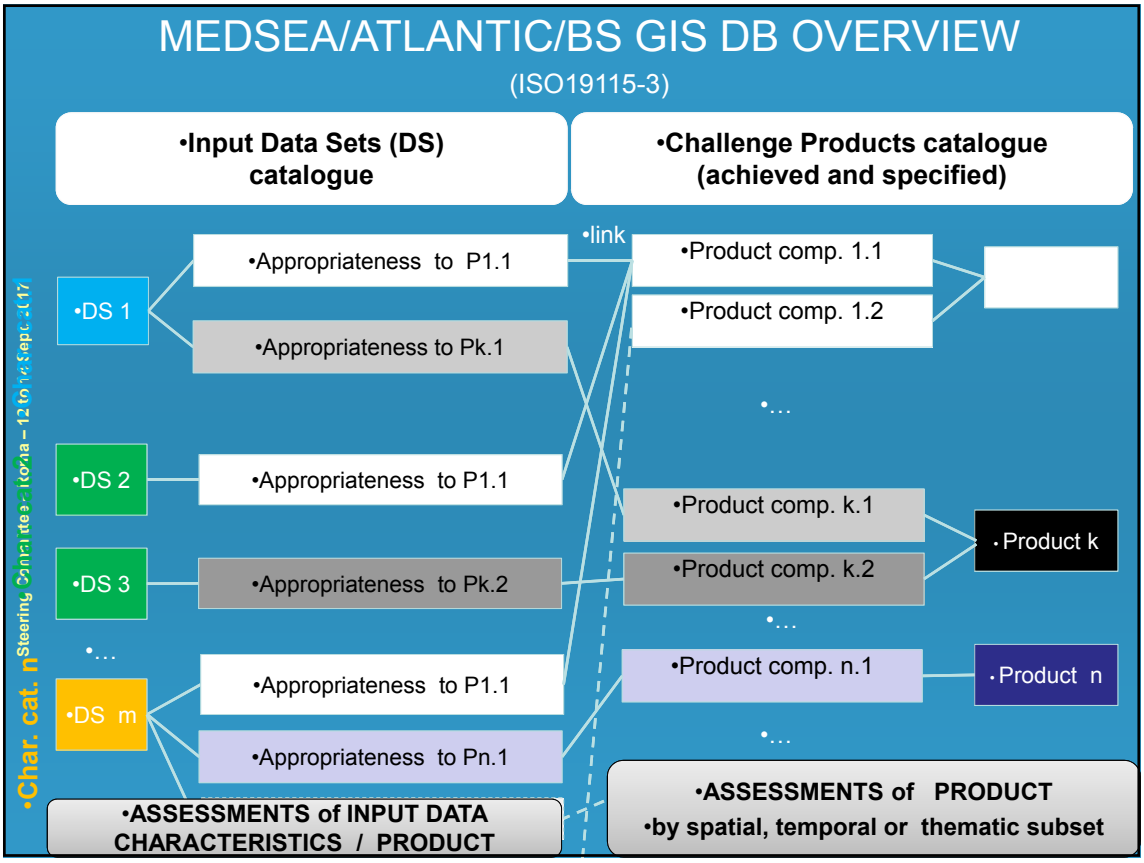
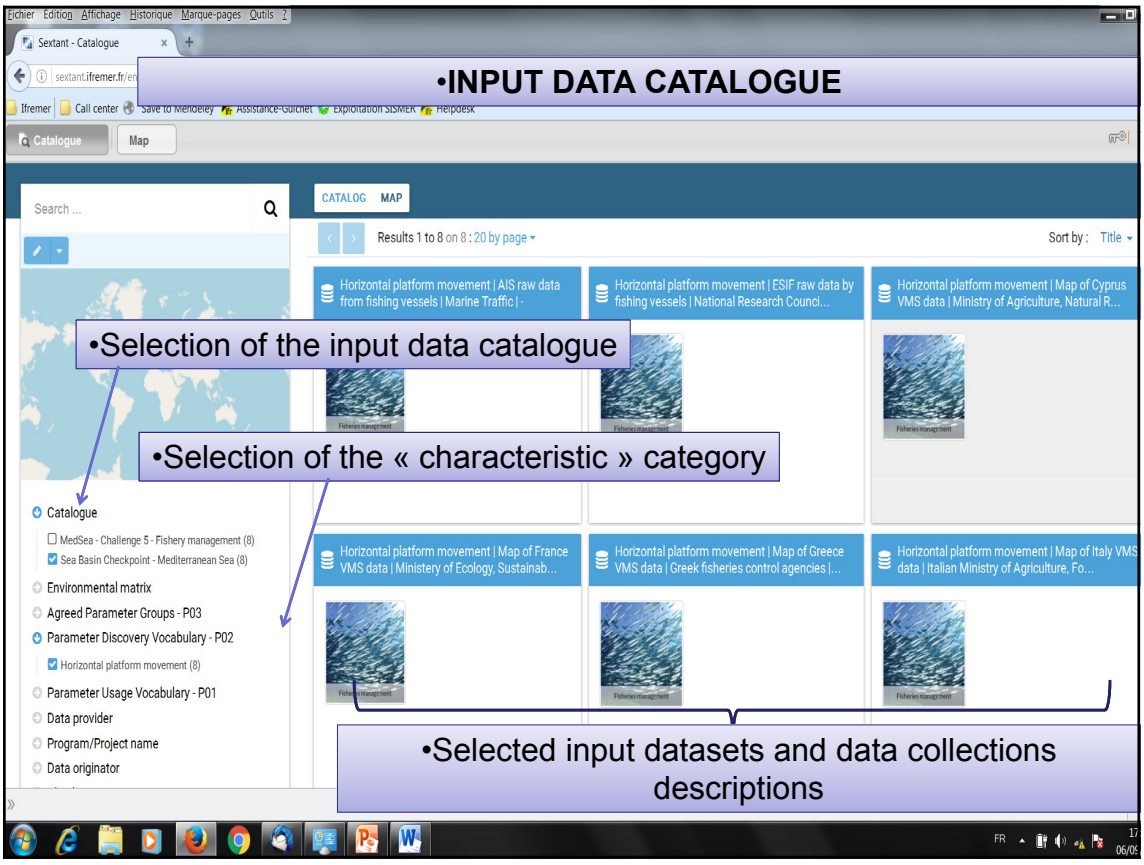
The checkpoint GIS data base

The challenge products (TDP) and their specifications (DPS) as well as the input datasets (UD) used to create them are described respectively in 2 catalogues of the Sextant INSPIRE compliant GIS database

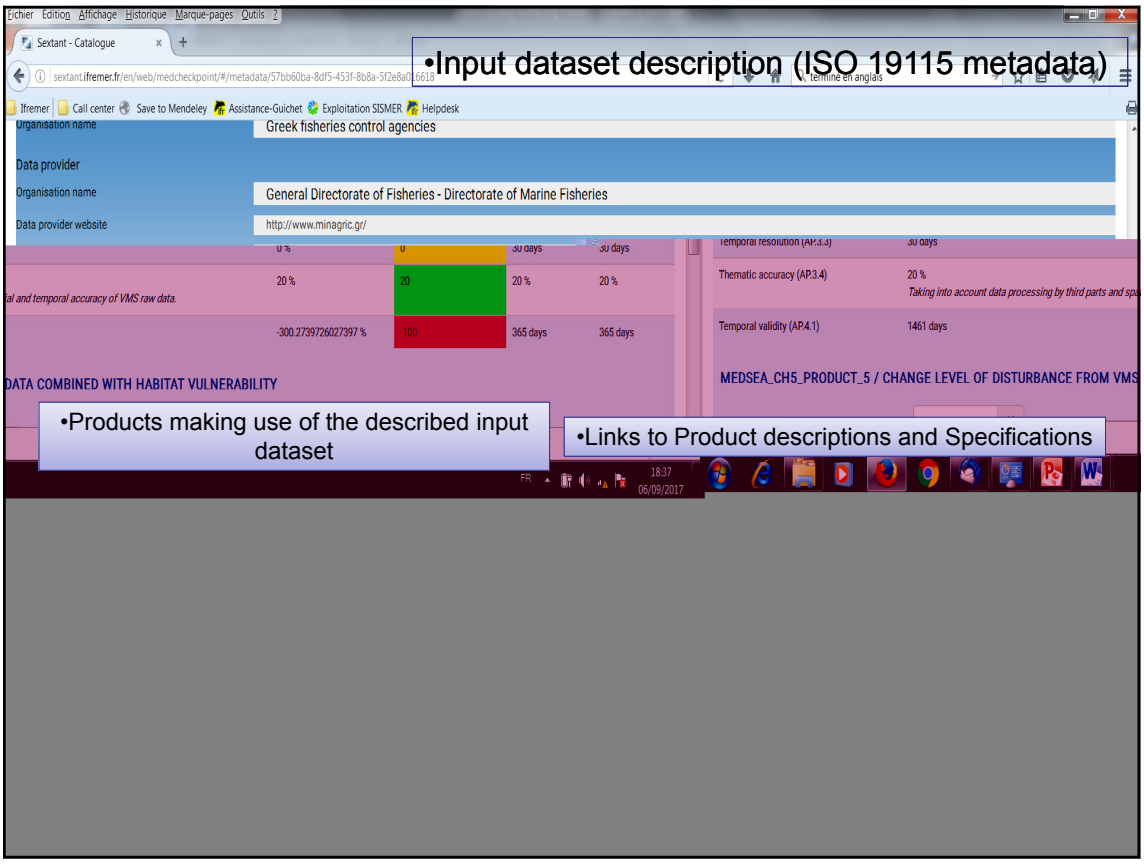



MEDSEA/ATLANTIC/BS GIS DB OVERVIEW
(ISO19115-3)
•Input Data Sets (DS) catalogue
•Challenge Products catalogue (achieved and specified)
•Char. cat. n
•DS 1
•DS 2
•DS 3
•…
•DS m
•Appropriateness to P1.1
•Appropriateness to Pk.1
•Appropriateness to P1.1
•Appropriateness to Pk.2
•Appropriateness to P1.1
•Appropriateness to Pn.1
•link
•Product comp. 1.1
•Product comp. 1.2
•…
•Product comp. k.1
•Product comp. k.2
•…
•Product comp. n.1
•…
•Product k
•Product n
•ASSESSMENTS of INPUT DATA CHARACTERISTICS / PRODUCT
•ASSESSMENTS of PRODUCT
•by spatial, temporal or thematic subset


•INPUT DATA CATALOGUE
•Selection of the input data catalogue
•Selection of the « characteristic » category
•Selected input datasets and data collections descriptions
Catalogue
Map
CATALOG
MAP
Search ...
Results 1 to 8 on 8 : 20 by page
Sort by : Title
Horizontal platform movement | AIS raw data from fishing vessels | Marine Traffic | -
Horizontal platform movement | ESIF raw data by fishing vessels | National Research Counci...
Horizontal platform movement | Map of Cyprus VMS data | Ministry of Agriculture, Natural R...
Horizontal platform movement | Map of France VMS data | Ministery of Ecology, Sustainab...
Horizontal platform movement | Map of Greece VMS data | Greek fisheries control agencies |...
Horizontal platform movement | Map of Italy VMS data | Italian Ministry of Agriculture, Fo...
MedSea - Challenge 5 - Fishery management (8)
Sea Basin Checkpoint - Mediterranean Sea (8)
Environmental matrix
Agreed Parameter Groups - P03
Parameter Discovery Vocabulary - P02
Horizontal platform movement (8)
Parameter Usage Vocabulary - P01
Data provider
Program/Project name
Data originator

• Quality metadata : “availibility” section

•Details “how the input data sets are made available to the challenge ? The information is based on the metadata collected and on the access conditions experienced by the challenge.



Improvements

- *Harmonisation of quality measures and procedures*
- *Include production of spatial quality results (coverages - already ISO compliant)*
- *Improvements to SeaDataNet classification*
  - ✓ Mix of attributes and features
- *Bias in our DPS*
  - ✓ Remedy-able since recorded

Organise and maintain feedback

- The “Virtuous circle”
  - Recommended by Experts panel
  - Initial « client » is DG/MARE whose remit it is to take measures towards providers (gaps, availability) by e.g. launching new calls
  - Need to prompt providers to assess their repositories based of our tools, e.g. by querying sources datasets according to various criteria, by selecting data sets and checking their metadata against their own perception,

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Conclusions

- *Methodology*
  - Well defined process (Specifications, Data quality assessment in line with INSPIRE and supporting standards (ISO9004, ISO 19131, 19157, 19115 1-2-3)
  - Objective, Quantitative, Verifiable information
  - Thematic classification based on the Content governance of the vocabularies (SDN)
- *Information*
  - ✓ **Statistics** and **indicators** available according to various criteria : challenge, characteristic…
  - ✓ **Specifications** by application (challenge) and variables usable for corrective actions
- *Quality management*
  - ✓ Repeatable in space (eg Medsea, BS and Atlantic) and in time
  - ✓ Synoptics to support DARs and comparisons between Ckpts

- Methodology
  - ✓ Request the creation of DOI for data collections and DS for better and easier classification and integration (requires some recommandation to get homogeneous descriptions of collections by group of of data shating the same specification of production) to reduce work load of metadata editing
  - ✓ Consolidate the list and harmonize quality measures and procedures t(sampling) to repeate the process .
  - ✓ Include evaluation results using coverage s as deliverable. For viewing
  - ✓ Consolidate SDN classification.
  - ✓ Too many variable : Checkpoints should identify EOV in function of the EU needs (Blue economy and MSFD et le Spatrial planing)
  - ✓ Not the Inspire feature catalogue containing definitions and descriptions of the spatial object types with their attributes and associated components occurring in one or more spatial data sets (https://inspire.ec.europa.eu/glossary/FeatureCatalogue et http://inspire-twg.jrc.ec.europa.eu/data-model/approved/r937/fc/
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