Mapping Between INSPIRE and Community Data Specifications
An example of the EMODNet Community

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Stimulating innovation
Supporting legislation
Context

- Mapping between a data specification used by the EMODNET community and the equivalent Inspire Data Specification.
- Guidance on approaches that can be taken to address the problem of poor matching between dataset features.

During 2015-2016, the work of the marine and atmospheric Inspire thematic clusters has highlighted the largest challenge faced by data providers in complying with Inspire is understanding how to map their data specification to an equivalent Inspire specification.
Issues and Considerations

• Issues
  ▪ Matching the scope to an equivalent Inspire scope, especially when the source datasets map to more than one Inspire Theme.
  ▪ Matching features and attributes to Inspire equivalents, especially when the source dataset contains features and attributes that extend the Inspire data model; or are defined differently.

• Considerations
  ▪ The role of Inspire in solving issues of data interoperability. Inspire is not a ‘one size fits all’ solution for data interoperability, but part of wider framework for the management of environmental data.
  ▪ As such data policy decisions as well as technical considerations feature in developing an optimal data mapping strategy.
EMODNET

- Physics
- Chemistry
- Bathymetry
- Geology
- Habitats
- Biology
- Human Activities
- Coastal Mapping
More than marine

<marineObject
  purpose='navigation'>

Or

<navigationObject
  location='sea'>
Example Human Activities Dataset

**EMODNET**

- Marine borehole used for selecting windfarm site
- Plus custom attributes

- Energy (PF)
- Offshore Windfarm Site (AM)
- Depth (EL)

- Borehole (GE)
- Marine (SR)
Inspire v EMODNet

Inspire Data Model
- Relationship model of features with associated attributes
- One feature is a geometry

Does not yield very clean results

EMODnet Data Model
- Geometry with thematic attributes
EMODNet and Inspire Boundaries

Communities such as MSFD have consistent supply of data for their reporting.

Public Bodies

Other Inspire Services

Data

Products

EMODNET

Marine Community

MSFD (Use Case)

Products and data should always be Inspire compliant where they are input to reporting.

Partial Compliance

Inspire Compliant

Existing Services

Some harmonised data can only be partially inspire compliant due to their unique structure or representation.
Conclusions

- Inspire and Emodnet have similar aims
- EMODNet would like to ensure their data services are Inspire compliant
  - but this is not straightforward in all cases
- Technical approaches to publishing multi-annex datasets are not straightforward
- The challenge of multi-annex data mapping not unique to EMODNet
- The TC have debated how best to do this, and feel some concrete guidance should be offered as best practice.
  - We have proposed solutions for this
Questions?