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# TPEA: GIS & GEOPORTAL

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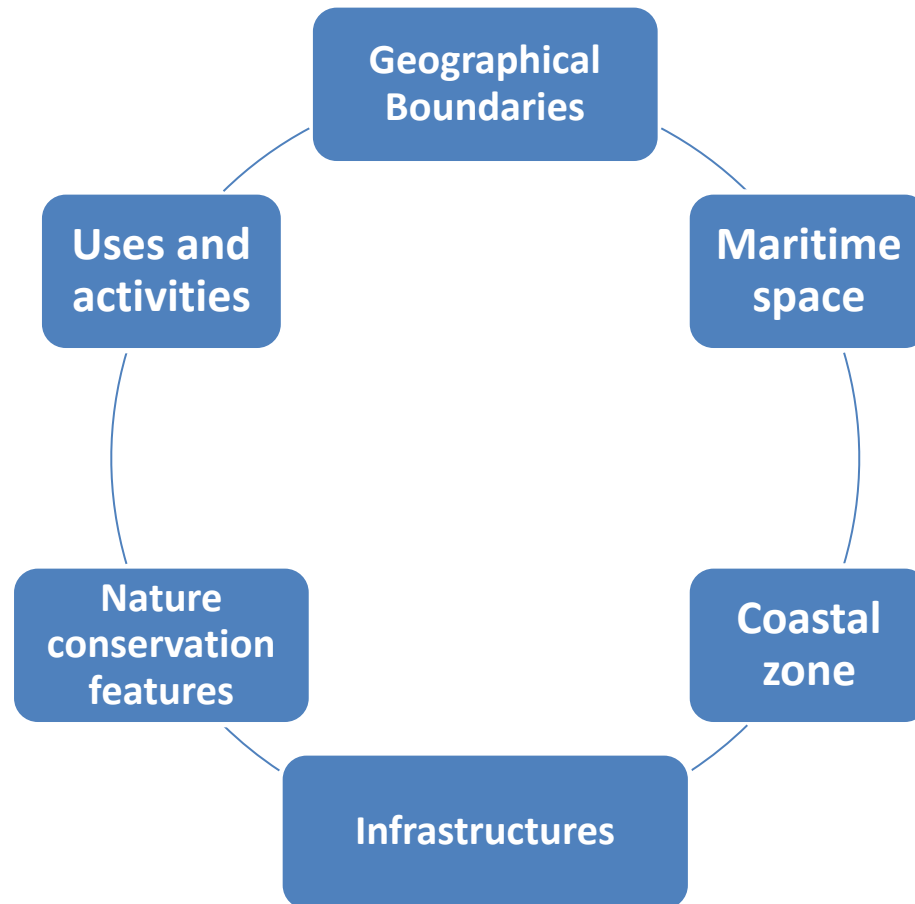
- One of the fundamental task in the TPEA project has been the development of a Geographical Information System (GIS).
- The GIS technology plays an important role in geospatial data representation, analysis and mapping => This is fundamental in transboundary MSP.
- GIS is an advanced technology that allows storing, integrating, displaying and analyzing all information about marine environment, marine resources and human activities. It lets us working with continuous and harmonize layers for transboundary countries.

- In a Transboundary Marine Spatial Planning (TMSP) process the existence of a common system of information is key to develop of TMSP.
- A common system allow the cooperation between countries, the combination of information layers and join to observation and analysis of conflicts and advantages.
- The Geographical Information System (GIS) is the basis of the common system of information

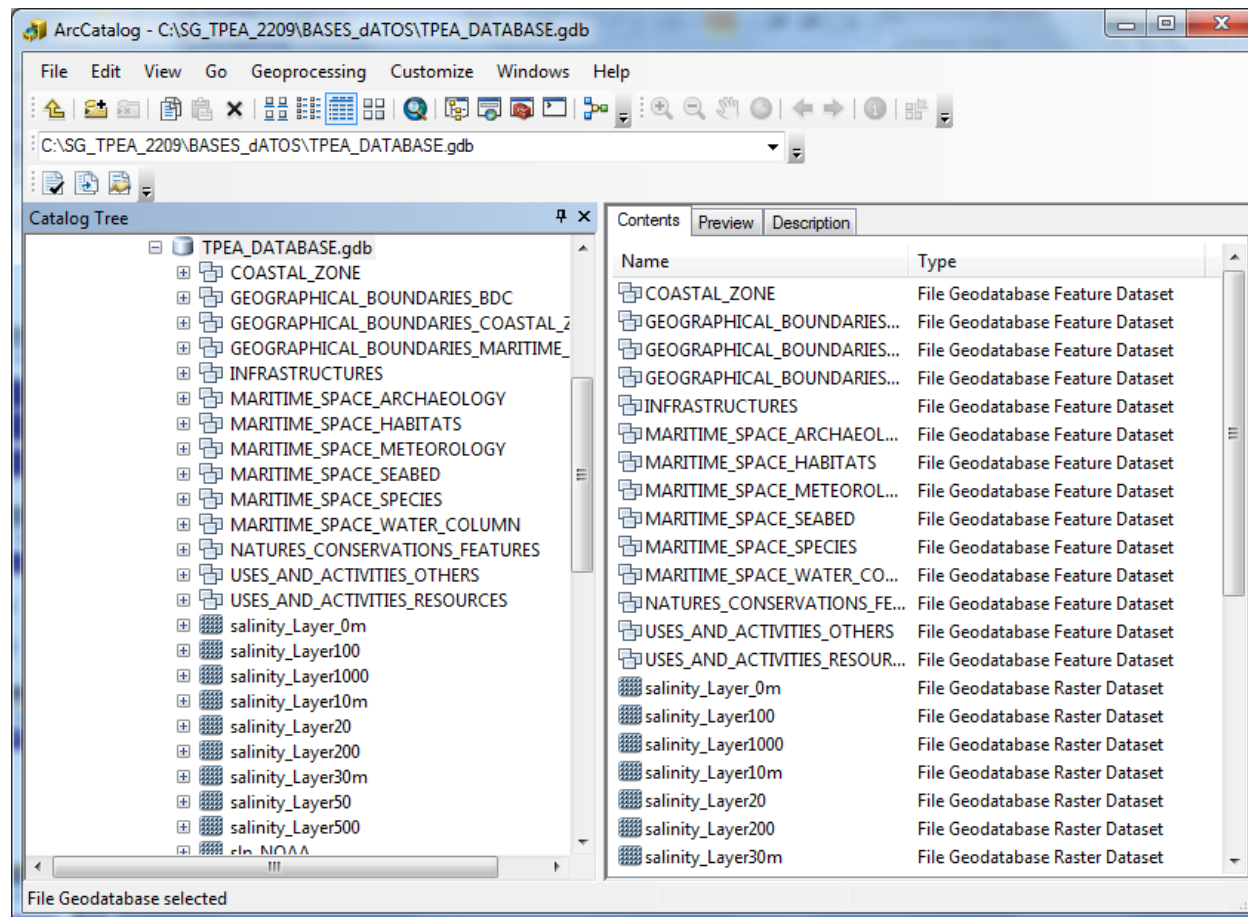
### Steps performed in the development of TPEA GIS

1. Establishment of working methodologies and protocols to data standardisation between borders: Geographical reference system, units of work, scales, exchange formats.
2. Definition of required geographical entities.
3. Definition of conceptual and logical GIS data models.

Within conceptual model we have established 6 conceptual groups



Logical model: data are included in a File Geodatabase (Esri format) and 14 Dataset have been established for the vector information



### 4. Data gathering

- ### 5. Harmonization of data collected in transboundary countries in north pilot area and south pilot area
- Same scale for the same topic
  - Same variables definitions and its classification

In some layers the harmonization of data was a complex task due to a great difference between the data of transboundary countries, for example in layers as physheries, habitats, etc.

6. Data integrating in the GIS databases

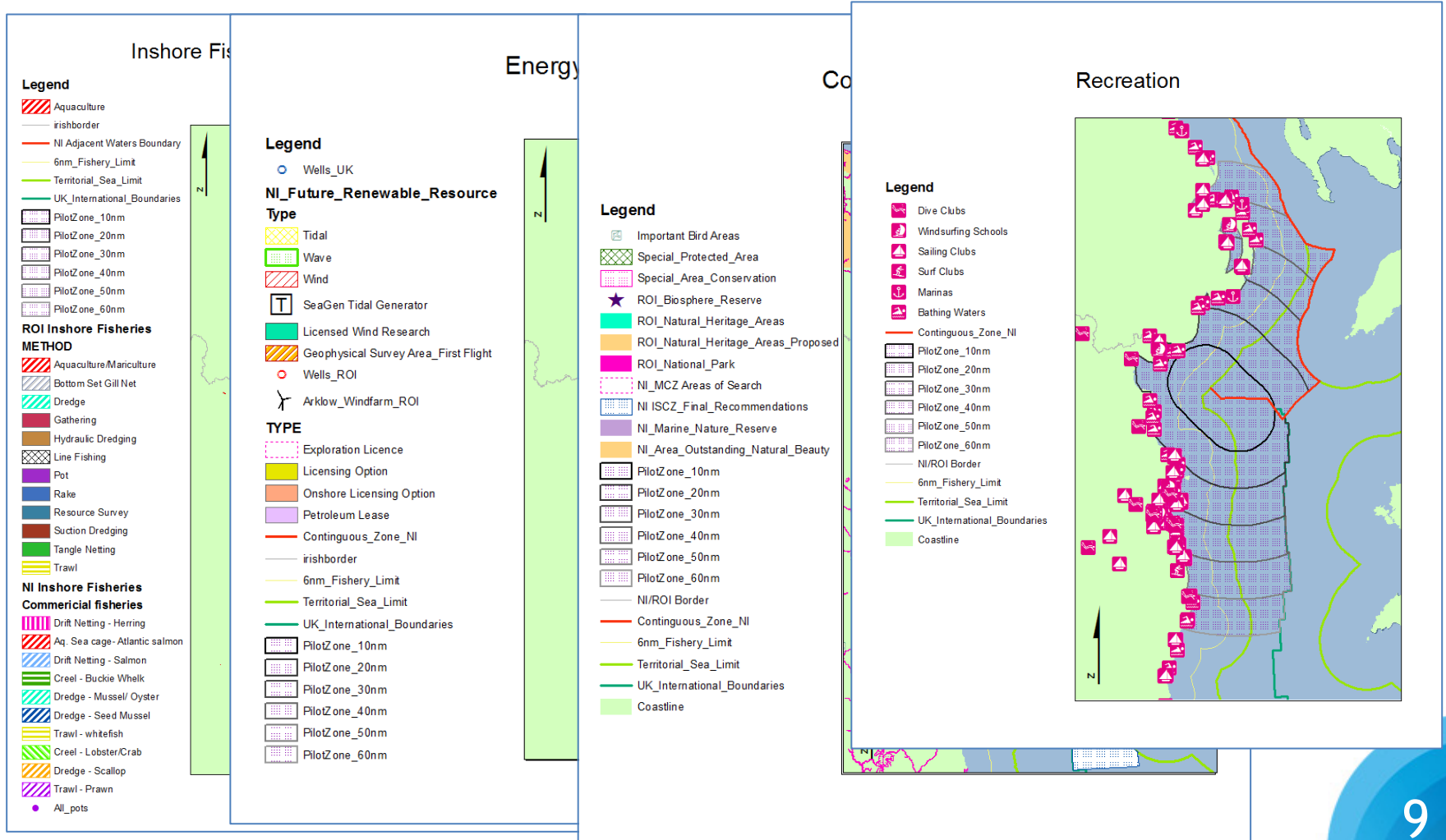
7. Merge in continuous thematic layers for the pilot areas

8. Metadata development

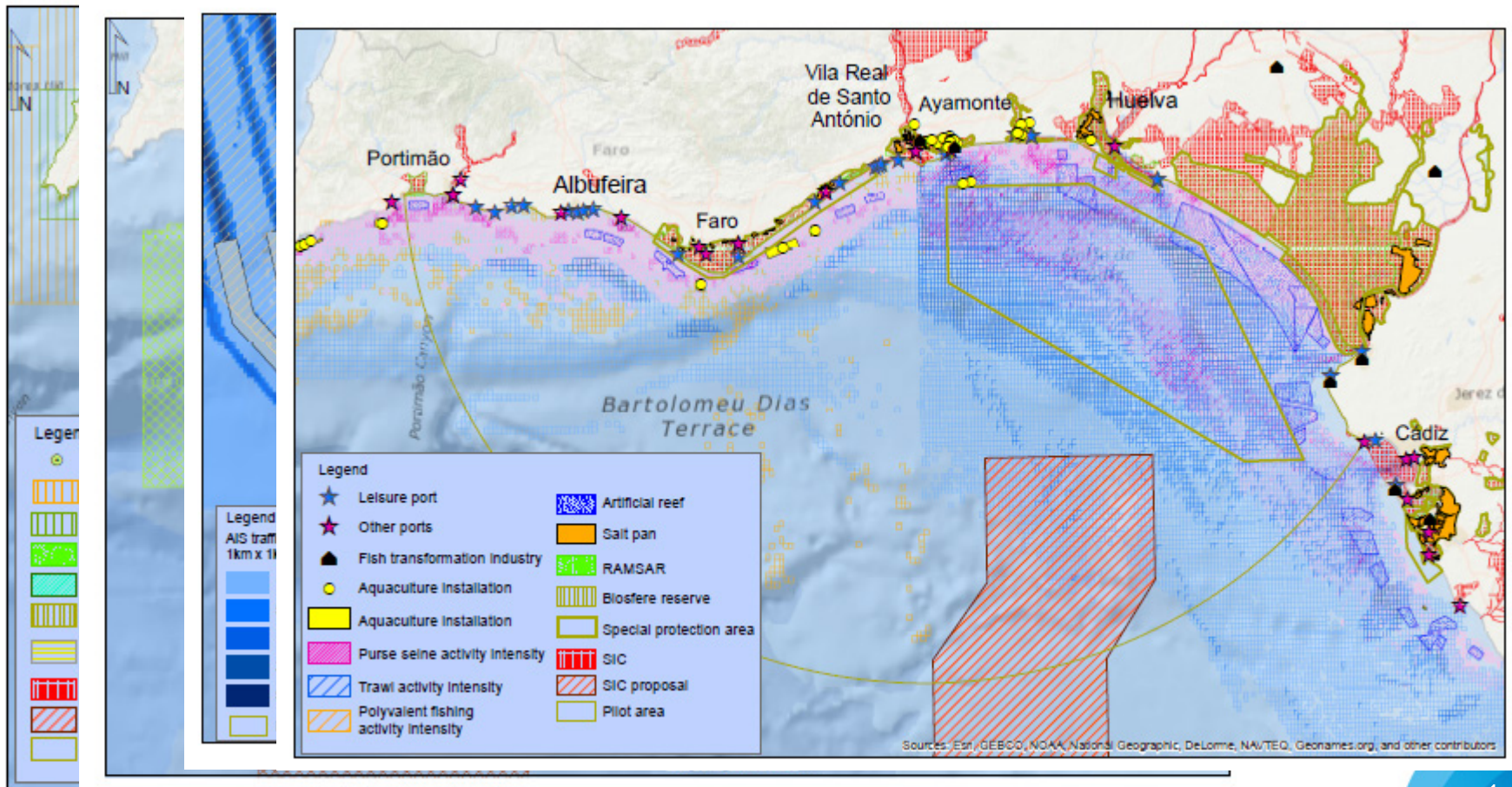
TPEA Metadata: following the INSPIRE standard for geographic metadata set by INSPIRE Directive 2007/2/CE, based on EN ISO 19115 and EN ISO 19139



## 9. Mapping



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## 10. Geoportal (MapGallery and Data Viewer)

<http://barreto.md.ieo.es/tpeaviewer/>

<http://barreto.md.ieo.es/tpeagallery/>

Thank you for your attention

