CUMULATIVE IMPACT TOOLS
The Portuguese Case Studies

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CUMULATIVE IMPACT TOOLS EXPERT ROUNDTABLE - VENICE

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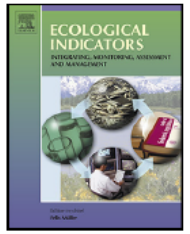
Work Done

Ecological Indicators 73 (2017) 189–202

Contents lists available at ScienceDirect

Ecological Indicators

journal homepage: www.elsevier.com/locate/ecolind



How does the cumulative impacts approach support Maritime Spatial Planning?

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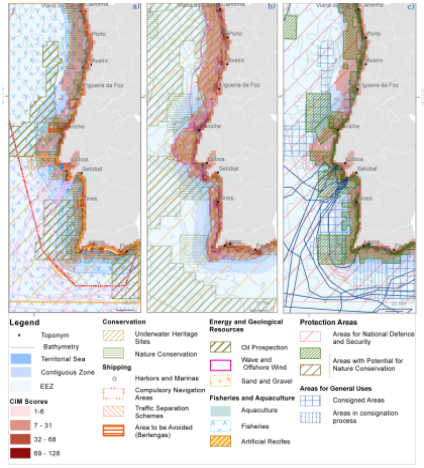
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ARTICLE INFO

Article history:
Received 22 June 2016
Received in revised form 6 September 2016
Accepted 10 September 2016

Keywords:
Ocean activities and uses
Conflicts
Ecosystem based management
Ocean management
Portugal

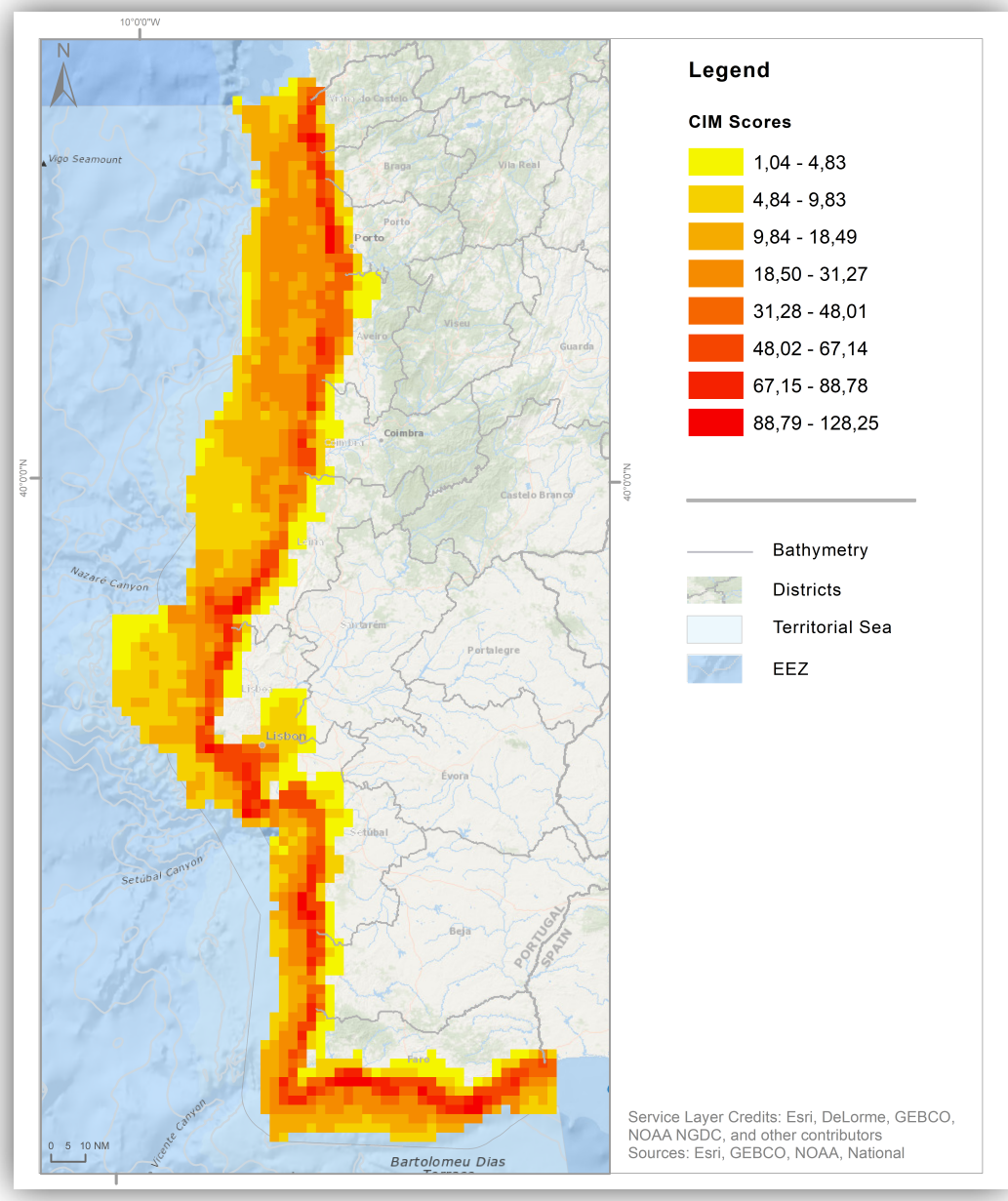
http://dx.doi.org/10.1016/j.ecolind.2016.09.014



METHOD

- ✓ Adapting a CIM approach (Halpern *et al.*,2008)
  - Mapping Activities and Uses - Di
  - Mapping Ecosystems - Ei
  - Weighting values (Activity-Ecosystem) - Uij

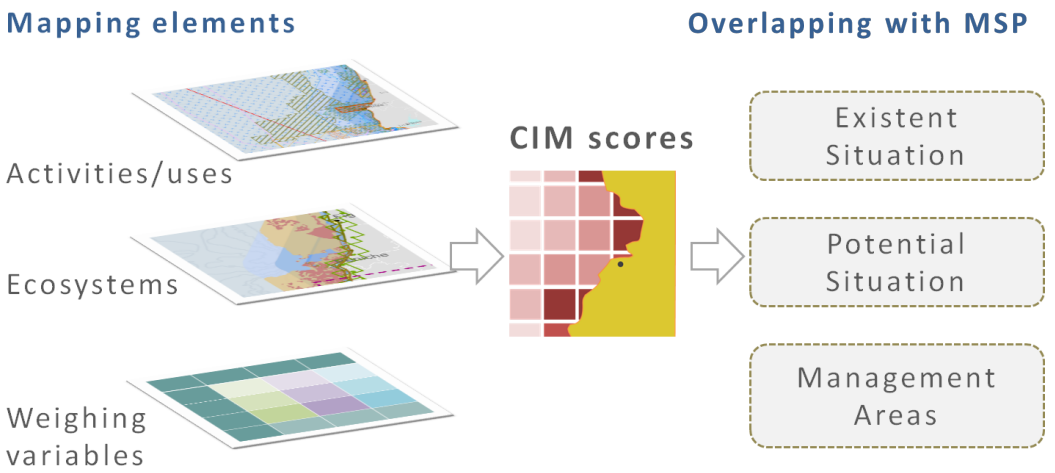
$$Ci = \sum_{i=1}^{i} \sum_{j=1}^{i} Di * Ei * Uij$$



METHOD

✓**Overlapping of the CIM scores with the POEM**

- Existent Activities and uses a)
- Potential Activities and uses b)
- MSP Proposal c)

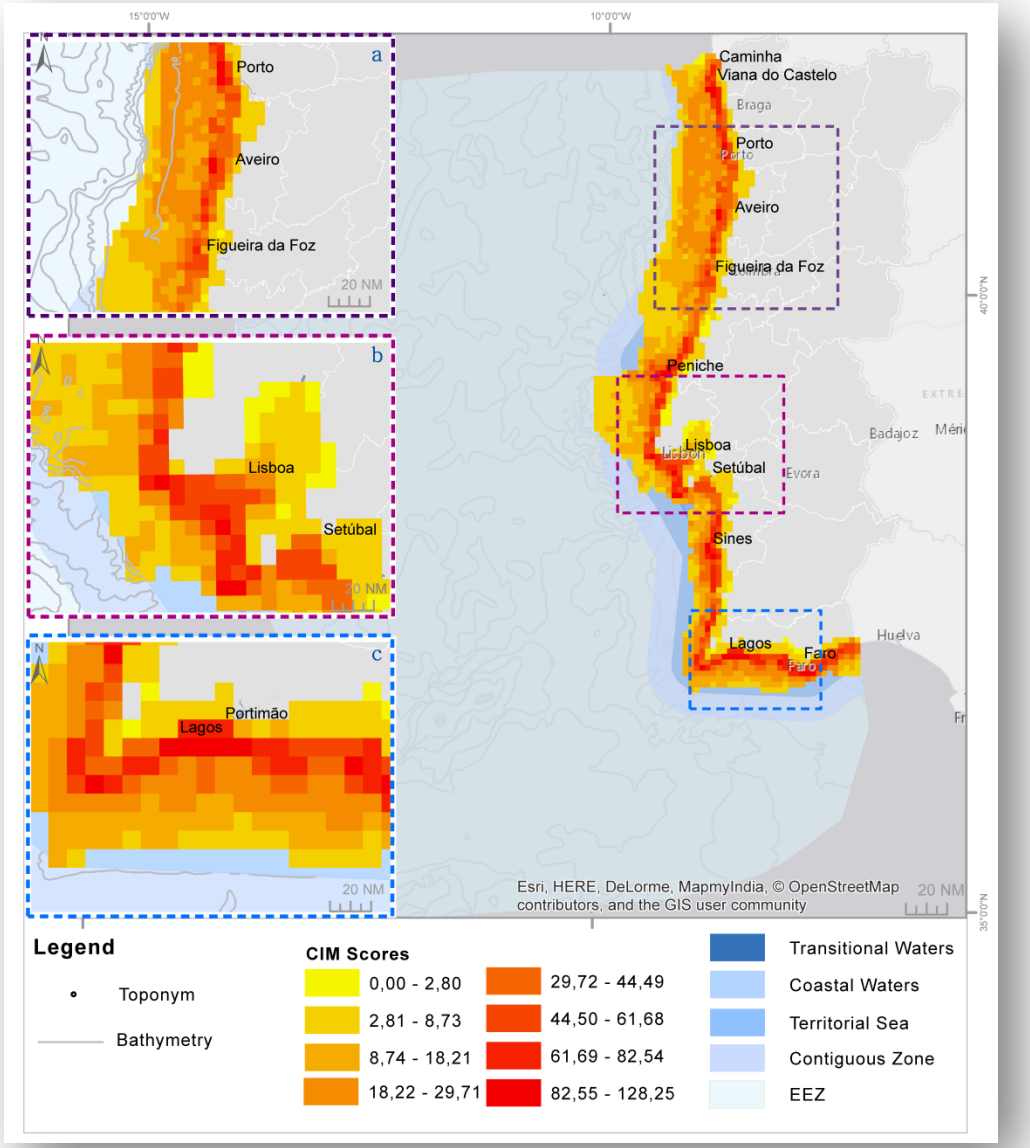


RESULTS

- ✓ **Cumulative impacts model (CIM)**

  Higher CIM values in:

  - ✓ Viana do Castelo/Figueira da Foz
  - ✓ Peniche/Setúbal
  - ✓ Lagos /Faro



IMPORTANCE FOR MSP

- ✓ Informing patterns of impacts in particular areas;
- ✓ Providing inputs on the carrying capacity of the ecosystems;
- ✓ Important tool to support decisions, identifying those ecosystems that are most impacted overall;
- ✓ In combination with SEA, provides insights on specific management measures for potential activities and uses;
- ✓ Inform where reductions in anthropogenic pressures should be an explicit goal;
- ✓ Flexible tool that can be used for managing and monitoring the measures already in place;
- ✓ Improves the ability to make more informed management decisions;

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The Future….

SIMNORAT involves public authorities in charge of MSP, in Northern Atlantic Member States. The action focuses on two key objectives:

- To Support the implementation of the Directive on Maritime Spatial Planning in Member States marine waters;

- To Launch and carry out concrete, cross-border MSP cooperation between Member States in the Northern Atlantic region, involving three Member States and the relevant authorities responsible for MSP in the area.

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The Future….

Both SIMWESTMED and SIMNORAT projects contain a component and some case studies dedicated to evaluate the interactions between uses/activities and environment (CEA) and between uses/activities.

Each project partner have significant experience on this topic and are a good opportunity to exchange information and methodology, associating with the transboundary dimension of MSP.

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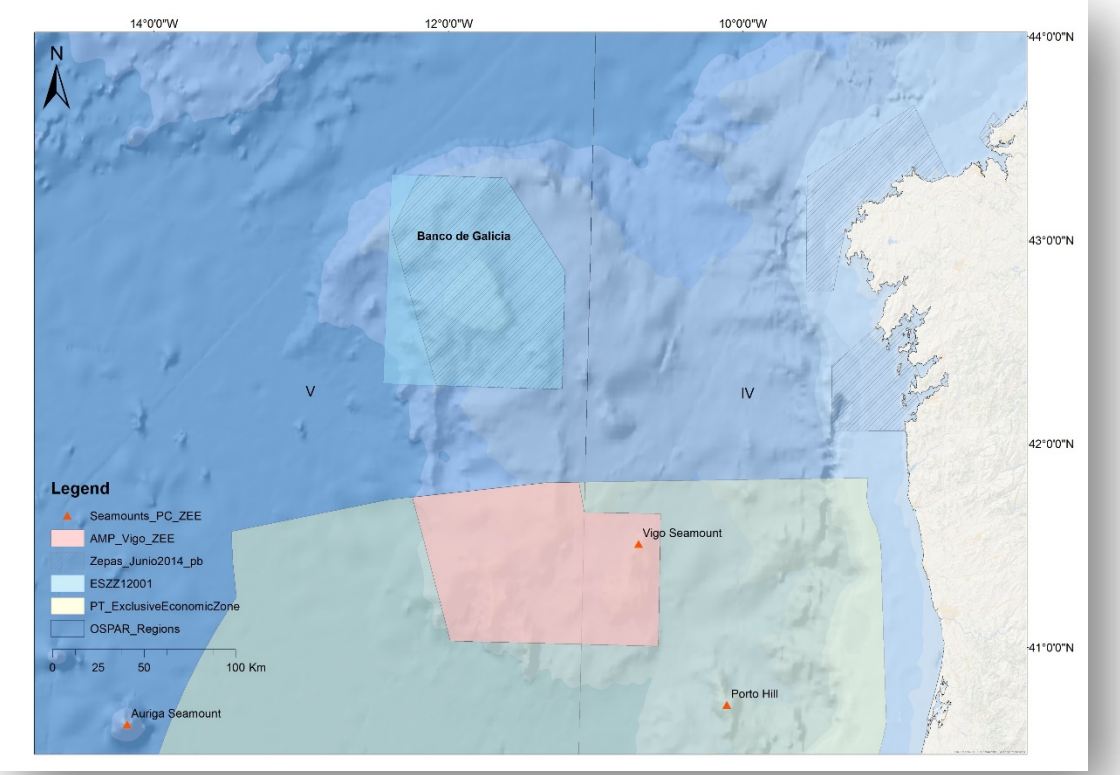
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CASE STUDY: NORTH WESTERN MARINE WATERS OF IBERIAN COAST



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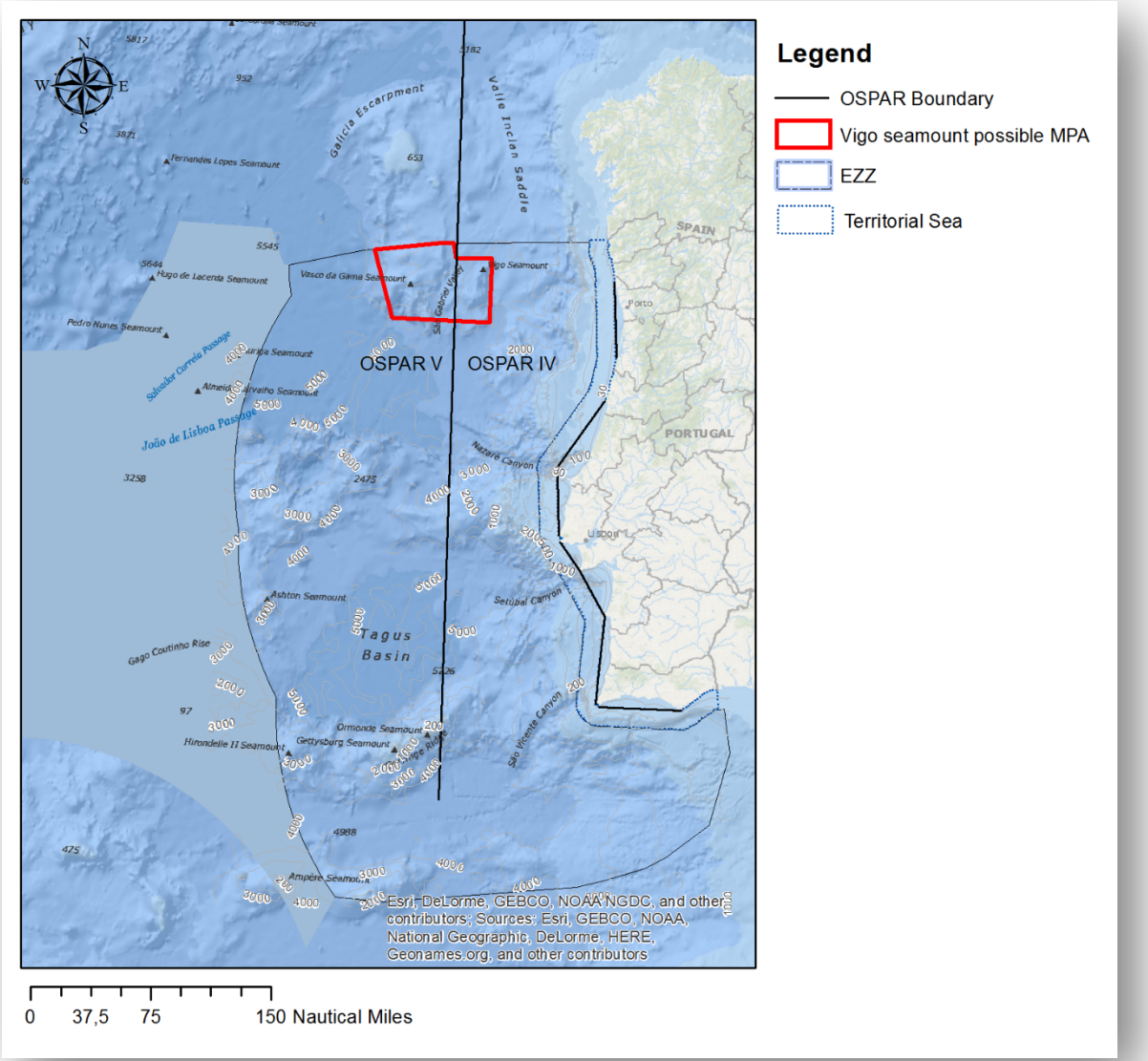
SUMMARY KNOWLEDGE OF INTEREST IN THE AREA

- **EEUSeaMap 2016: Marine Strategy Framework Directive MSFD Benthic Broad Habitat classification**

Lower bathyal sediment or Lower bathyal rock and biogenic reef - GUI EUSM16aa

- **Main habitats:**

- Seamounts
- Rocky bottom of the continental platform and incoherent soft sediments



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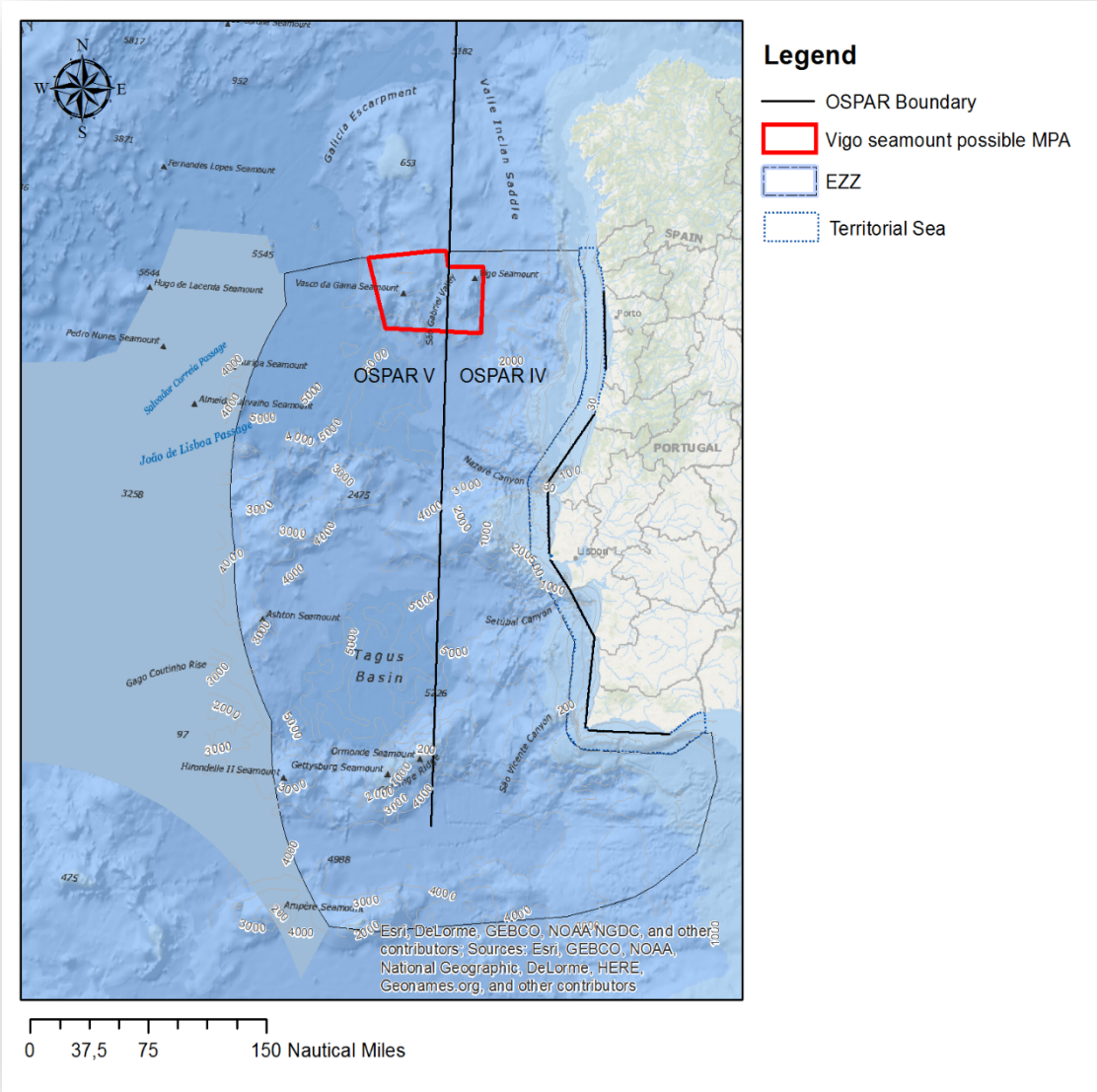
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SUMMARY KNOWLEDGE OF INTEREST IN THE AREA

- **Uses and activities**

According to the data, from the geoportal of the reference situation of the Portuguese MSP the uses and activities presently occurring in the area:

- Nautical Tourism
- Submarine cables
- Fisheries
- Navigation (Particularly Sensitive Maritime Area of Western Europe)



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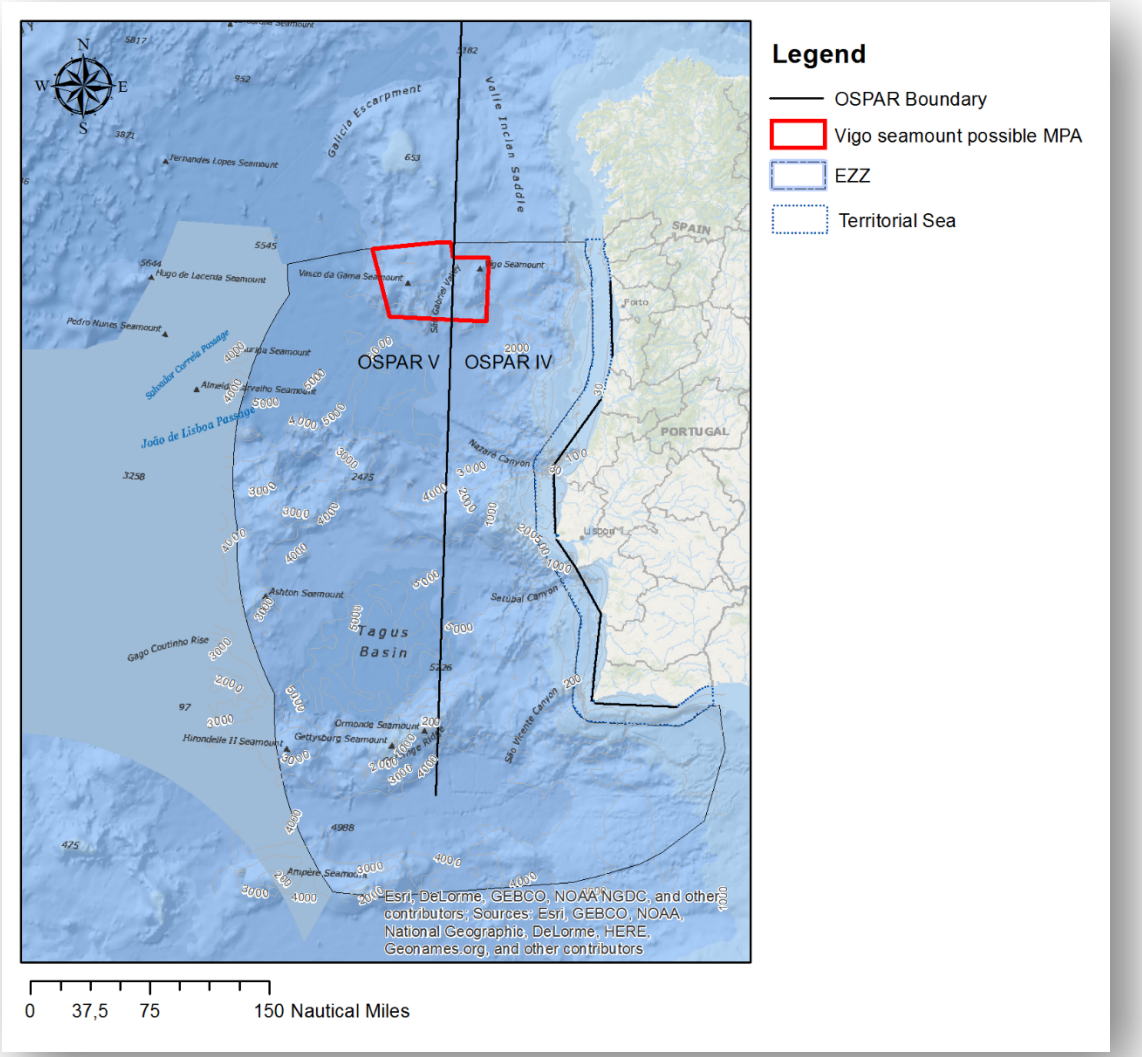
SUMMARY KNOWLEDGE OF INTEREST IN THE AREA

- **Existing pressures and future threats**

(E- Existing pressure; P-Potential pressure):

- Illegal and not reported fishing (E)
- Marine litter (E)
- Navigation (E)
- Seismic surveys (P)
- Sea bed mining (P)

- **Current interdict activities**
- Fishing activity under the general sectorial legislation



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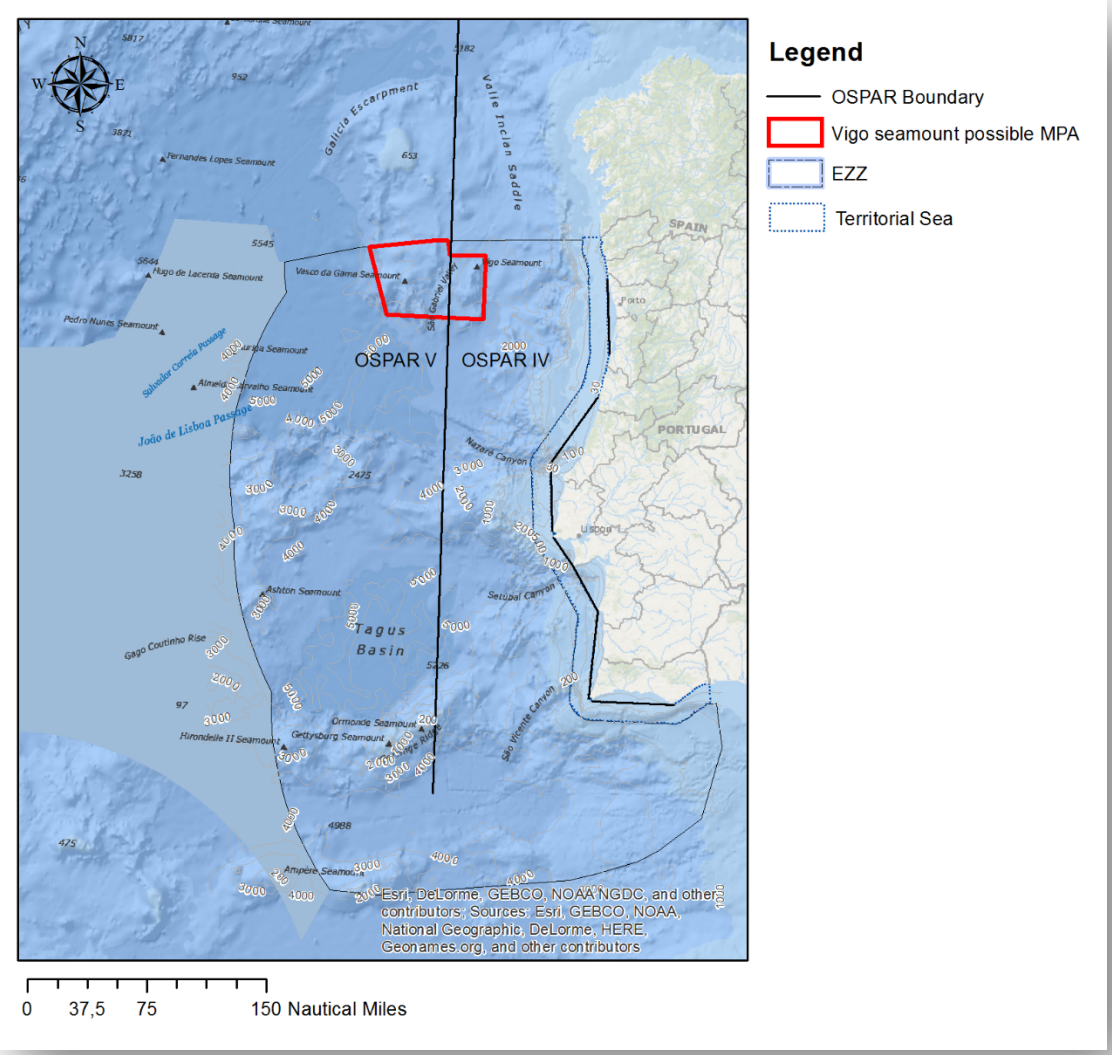
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SUMMARY KNOWLEDGE OF INTEREST IN THE AREA

- **MPA management goals**

- Promote scientific knowledge of offshore marine ecosystems
- Promote the stakeholder's involvement
- Develop, test and disseminate management measures of oceanic MPA's
- Reinforce international cooperation with Spain
- Promote the achievement of conservation goals



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A Task Group was created between the 2 projects. The first discussion of this group would help to define more precisely the work that could be undertaken though the "interaction components" (C.1.3.4.1) and through the case studies (Gulf of Lion, Bay of Biscay, North Western Marine Waters of Iberian Coast (C.1.3.6)

The First Training School about CEAs for Marine Ecosystems organized by WG1 of **MarCons.**

THANK YOU

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