Cross-border CEA for the north-western Iberian Peninsula: Methodology and lessons learned María da Luz Fernandes CESAM, Universidade de Aveiro



A cross border CEA for the north-western Iberian Peninsula: Methodology and Lessons Learned

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CASE STUDY AREA

to propose a methodology to assess cumulative

AIM

impacts/effects (CEA-Cumulative Effects Assessment) at a transboundary scale.





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Identification of baseline conditions

Spatial distribution of current activities...

- aquaculture
- dredging disposal
- renewable energies
- fishing: bottom and pelagic,
- maritime transport

... and future activities

- aquaculture
- dredging disposal
- renewable energies
- artificial reefs and
 - structures





tlantic

Identification of baseline conditions

Spatial distribution of

functional groups

- cetaceans
- seabirds
- marine turtles







Identification of baseline conditions

Spatial distribution of habitats

• MSFD Broad Habitats





SIMAtlantic

Identification and analysis of pressures

Pressures (MSFD) caused by activities

- physical
- substances, litter, energy
- biological





pressures

Identification and analysis of pressures



1. 4

pressures radius

P1

P2

Рх

Pressures (MSFD) caused by activities

- physical
- substances, litter, energy
- biological

Influence radius

• local to 100 km







local

1 km

100 km

Identification and analysis of pressures

Pressures (MSFD) caused by activities

- physical
- substances, litter, energy
- biological

Influence radius

• local to 100 km

Intensity of the pressures

• low to high







Analysis of the sensitivity to the pressures

Sensitivity of individual taxa

- No response or negligible effect
- Low stress
- Stress with implications for survival or reproduction
- Very severe stress or occasional direct mortality
- Frequent mortality
- Very high mortality

Sensitivity of habitats

- No change or negligible effect
- Low disturbance
- Disturbance with implications for long-term persistence
- Very severe disturbance or occasional direct destruction/change
- Partial destruction/change
- Permanent destruction/change









Cumulative Index (CI)







PRELIMINARY RESULTS

Current Situation







PORTUGAL

SPAIN

PORTUGAL & SPAIN

PRELIMINARY RESULTS

Current and Potential Situation







N

PORTUGAL

SPAIN

PORTUGAL & SPAIN

LIMITATIONS

LESSONS LEARNT

Spatial data	Marine mammals, seabirds marine turtles distributions Data sharing	 Precautionary principle → Homogeneous distribution considered Data sharing protocol
Expert knowledge	Sensitivity and radius	 Improvement of experts involvement strategy Statistically significant number of participants Coherent proportion of experts by ecological component Uncertainty More concrete definition of habitats and pressures Clearer connection of pressures and activities
Methodology	Comparable data Common concepts Considered activities common for MSP processes in both countries	 Use of MSFD habitat classification For activities represented as intensity maps, use of "core areas" More activities, including LSI should be included. For potential future activities construction phases need to be considered





Thank you! ¡Gracias! Merci! Obrigada!

