INSPIRE as a link between marine & maritime planning
Andrej Abramić, Emanuele Bigagli, Paul Smits and Carmelo Attardo

Research and Technology to enhance excellence in Aquaculture development under an Ecosystem approach
Maritime/Marine Spatial Planning Framework

Methodology

Legislation

Tools & Data

Monitoring

MSP process
Superposition INSPIRE and Maritime Spatial Planning process & Directive 2014/89/EU implementation:

1. **Data collection** – marine data, maritime activities, reference layers
2. Applying INSPIRE interoperable data model:
   - solutions for Cross-border MSP
   - Land sea interactions analysis
3. (Re)Using already operational (N)SDI:
   - stakeholder process;
   - e-reporting
Analysis of maritime/marine data availability

- 135 keywords from a vocabulary – multilingual analysis using Environmental Thesaurus + translations of the INSPIRE Directive
- INSPIRE Geo Portal accessed in November 2015
- 1614 unique metadata records related to the marine environment and maritime activities (out of a total of 182,570) – datasets (1380), followed by layers (130), services (77) and series (27).

Multilanguage Keywords Analysis

- Baltic Sea
- Greater North Sea
- Celtic Sea: 1717
- Bay of Biscay and Iberian Coast: 187
- Macaronesian: 189
- Western Mediterranean Sea: 51
- Adriatic Sea: 129
- Indian Sea: 8
- Aegean Sea: 8
- Black Sea: 1
- Global: 10
- Other: 14
- Total: 20
Land-sea interactions analysis supported by INSPIRE data model

- Overview MSP with Land Planning – **MSP & ICZM interoperbility**
- *Planned land use & Planned marine use* – same INSPIRE data model
- Planned land(marine) use
- Document Land-sea interactions form Marine/maritime planning and Land
- **ZoningElement feature** – extended ExistingLandUseObject
MSP Directive e-reporting

- Final plans should be provided to EC until 2021
- Paper-based requirement could be replaced by e-reporting
- Sharing MSP in INSPIRE data model through the already operational (N)SDI – avoiding multiple non-updated copies,
Re-using operational (N)SDI

Use of (N)SDI in **MSP stakeholder process** (two directions):

1. **Dissemination of MSP drafts** (Planners to stakeholders) - updated draft version – useful in iterative process
2. **Dissemination of the stakeholders spatial claims & requirements** – (stakeholders to planners & stakeholders)
   - Kind of **crowd (stakeholders)** - sourcing data
   - Early **identification of potential conflicts**
Implementation of the environmental legislation that refers on the sea and coastal areas:


- **DPSIR framework Directive**
  - Assess current status – identify and assess impact & pressures
  - Integrated monitoring programmes - 4 years cycles
  - Develop **Programme of Measures**, establish Marine Protected Areas

**INSPIRE requirement on data sharing**
MSFD marine data producer

- MSFD requires **sharing marine monitoring data through INSPIRE** – Marine pilot JRC project
- MSFD requires **exhaustive integrated monitoring** (biodiversity, non-indigenous species, eutrophication, hydrographical conditions, contaminants, noise, litter...) – unlocking marine data –
- **Public sector data producer – administration** – institutions responsible for MSFD implementation
Even MSP sometimes is strictly oriented to **mitigate conflicts** in the maritime sector

– marine data is required:

  – To **allocate maritime activities** where impact on the environment is less, minimized and controlled

  – To **superpose** the maritime VS marine data (link impact and pressure)

  – Continuous monitoring and **management of maritime activities environmental impact** (provide solutions to decrease the pressure & env. impact)

  – To **assure sustainability** of marine resources, marine ecosystems & eco-services
Welcome on MaPSIS 2017

...& thank you for your attention

andrej.abramic@ulpgc.es