

HarmonIA



Harmonization and Networking for contaminant assessment in the Ionian and Adriatic Seas

From monitoring to risk assessment



Marina Lipizer & HarmonIA partnership



3rd ADRION ANNUAL EVENT
3 December 2020, Online

SPECIFIC OBJECTIVE 2.2

ENHANCE THE CAPACITY IN TRANSNATIONALLY TACKLING ENVIRONMENTAL VULNERABILITY, FRAGMENTATION, AND SAFEGUARDING ECOSYSTEM SERVICES IN THE ADRION AREA

Who we are:

Partnership

- ☐ National Institute for Oceanography and Applied Geophysics (OGS) - **Italy**
- ☐ Italian National Institute for Environmental Protection and Research (ISPRA) - **Italy**
- ☐ Institute of Oceanography and Fisheries (IOF) - **Croatia**
- ☐ Ruder Boskovic Institute (RBI) - **Croatia**
- ☐ Hellenic Centre for Marine Research (HCMR) - **Greece**
- ☐ Region of Western Greece (RWG) - **Greece**
- ☐ National Institute of Biology (NIB) - **Slovenia**
- ☐ Slovenian Environment Agency - (ARSO) - **Slovenia**
- ☐ Public institution University of Montenegro - Institute of Marine Biology (UoM-IMB) - **Montenegro**
- ☐ Agriculture University of Tirana - Department of Plant Protection (AUT) - **Albania**



Associated Partners

- ☐ Ministry of Economic Development Directorate General for the Safety Also Environmental of Mining and Energy Activities
National Mining Office for Hydrocarbons and Georesources - **Italy**
- ☐ Durres Municipality - **Albania**
- ☐ Ministry of Sustainable Development and Tourism - **Montenegro**
- ☐ Ministry of Environmental and Nature Protection - **Croatia**



Challenges in the ADRION region:

→ Hot spot of biodiversity - great environmental importance



→ Marine socio- economic activities rely on **Good Ecosystem Status** (but may threaten GES)

→ Pollution in the ADRION area is a key issue

Are the Adriatic - Ionian Seas polluted?

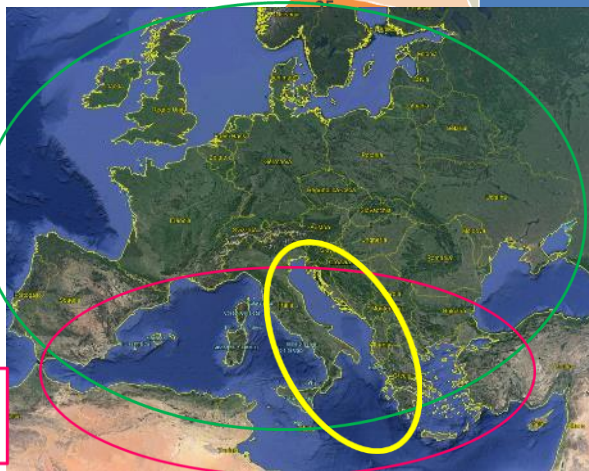
Main pollution sources:

→ Legislative instruments indicate **how** to assess pollution (what to measure, how, where, when)

EU Marine Strategy Framework Directive (MSFD)

Not using exactly the same criteria

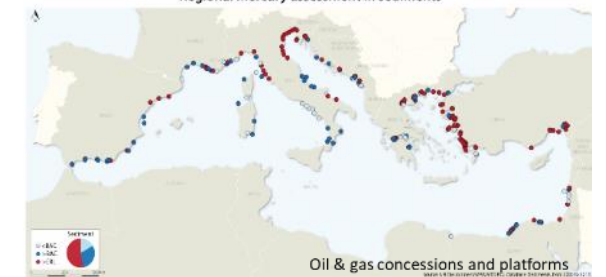
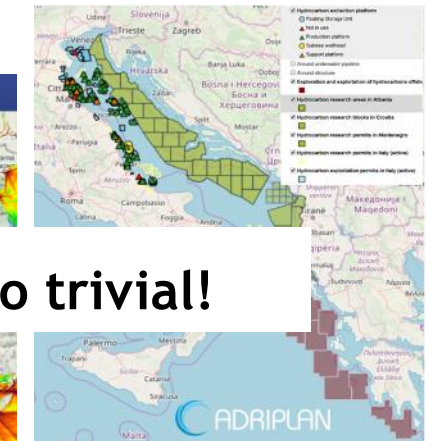
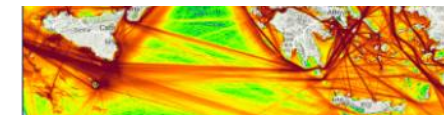
In the Mediterranean:
Barcelona Convention
- MEDPOL - UNEP-MAP



- Shipping
- Mariculture
- Offshore gas/oil activities

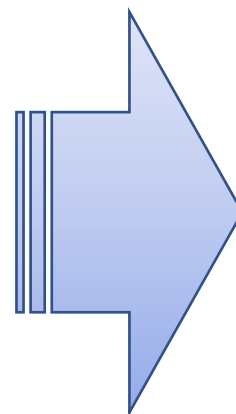
→ **Harmonized assessment not so trivial!**

- Dredging/dumping of dredged material
- Historical dumping sites
- Shipwrecks



HarmoNIA overall objective:

- ❑ to address the heterogeneity in **methodological approaches** (sampling -> analysis -> assessment)
- ❑ to overcome the **fragmentation** in **data** availability on contaminants
- ❑ to propose an approach for contaminant dispersion **risk assessment**.



HarmoNIA has dedicated efforts, at ADRION scale, to:

- ❖ share data
- ❖ information
- ❖ best practices

for harmonized monitoring (MSFD), assessing and managing **pollutants** in the marine environment

Contribution to wider strategies & policies:



2021
2030 United Nations Decade
of Ocean Science
for Sustainable Development



HarmoNIA



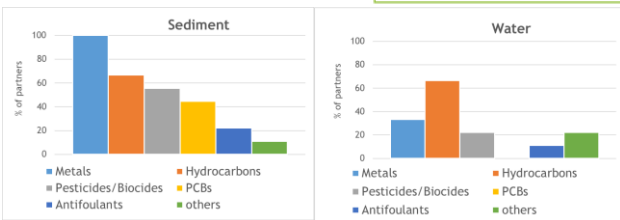
30 years together

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1 - Harmonized monitoring

HarmoNIA Methodological Proposals to support harmonized implementation of marine environmental directives (MSFD, Barcelona Convention Protocols) in the ADRIION region

Considering heterogeneity in:



Focus on impacts of offshore activities

1. Harmonized sampling/analytical/data Quality Control procedures
2. Environmental Impact Assessment (EIA) protocols for offshore activities
3. Monitoring the impact of offshore platforms and decommissioning procedures



Targets:

- National, regional authorities involved in MSFD and IMAP, in Offshore monitoring
- Data management infrastructures (EMODnet,...)

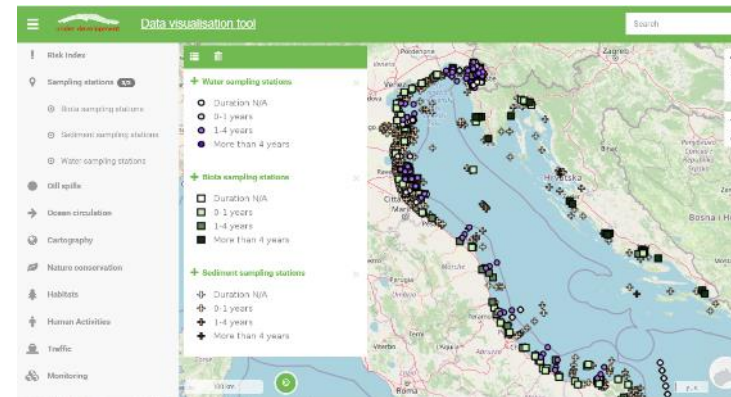
2 – Accessible harmonized data



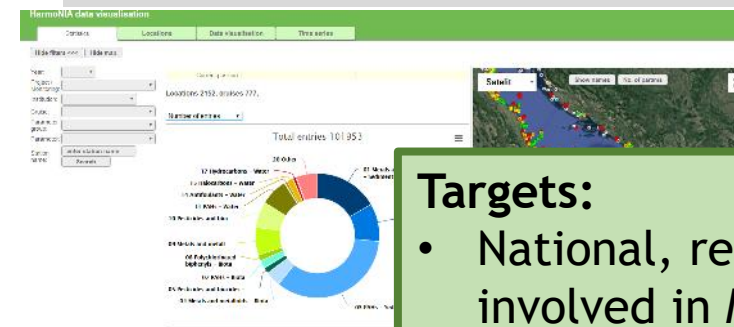
To facilitate access and re-use of marine data

Based on long-consolidated EU initiatives (SeaDataNet, EMODnet):

Provide easy access to metadata:



... and to data visualizations:



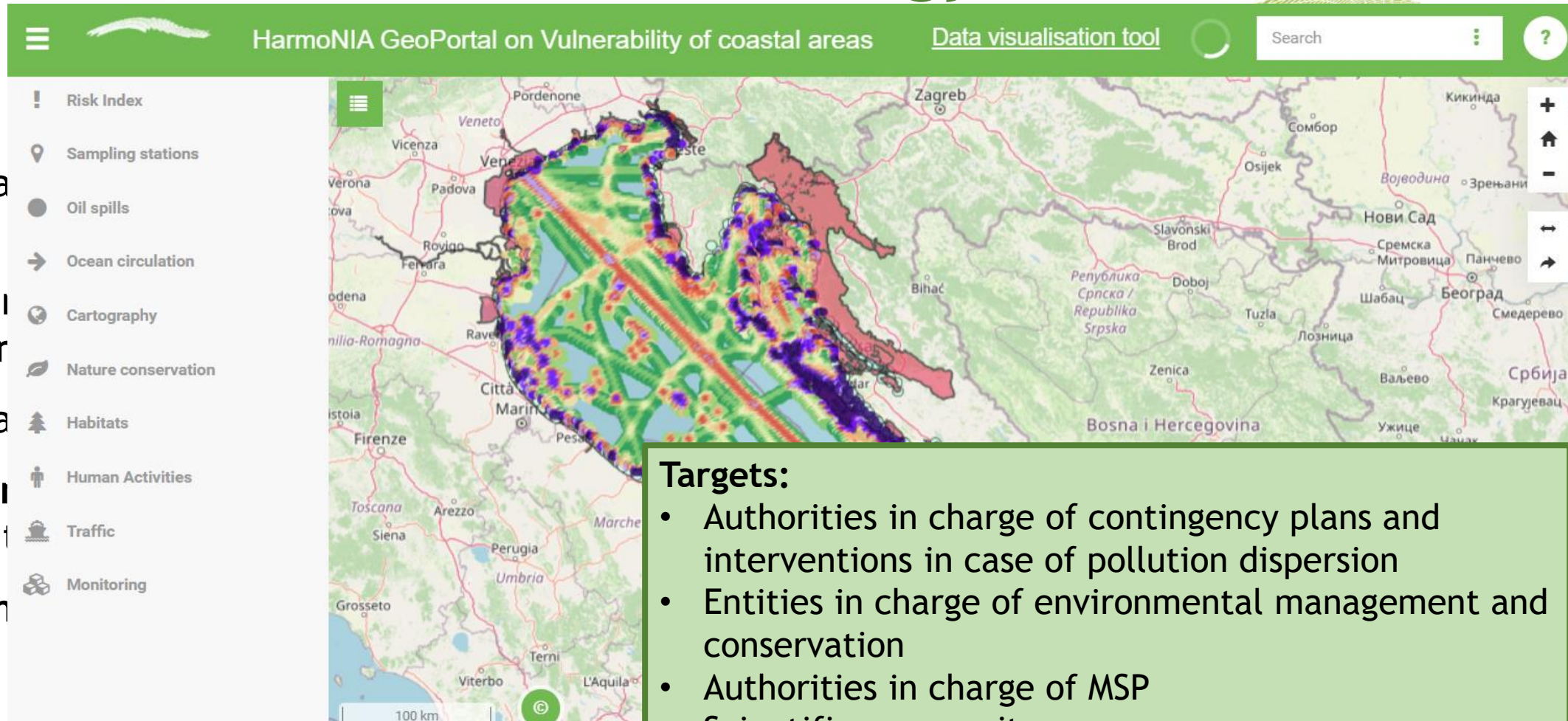
Targets:

- National, regional authorities involved in MSFD and IMAP
- Managers of pollution
- Scientific community
- General public



3 – Risk assessment of contaminant dispersion: tools and methodology

- Mapping marine pollution
- Collecting information on coastal vulnerability
- Implementing risk assessment
- Hydrodynamic modelling to predict contaminant dispersion
- Oil spill simulation



Targets:

- Authorities in charge of contingency plans and interventions in case of pollution dispersion
- Entities in charge of environmental management and conservation
- Authorities in charge of MSP
- Scientific community
- General public

HarmoNIA in synthesis:

HarmoNIA

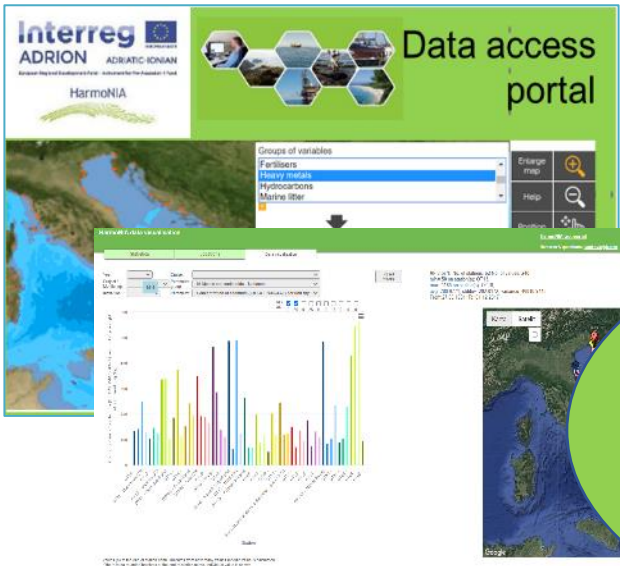


Shared analytical protocols



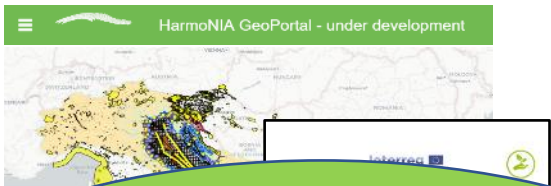
→ Guidelines

Common data infrastructure



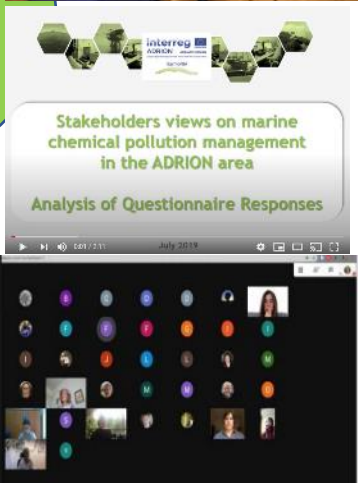
→ Accessible data and information!

Risk assessment of contaminant dispersion: **tools and methodology**

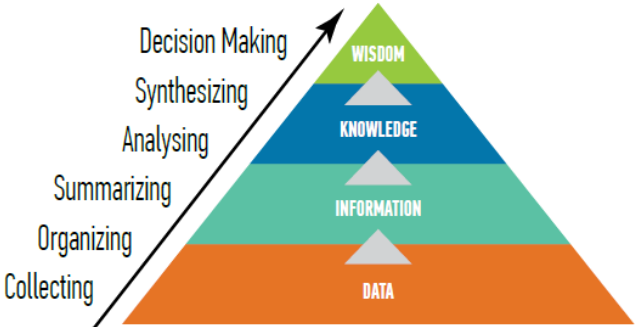


Continuous stakeholder engagement through workshops, bilateral meetings, questionnaires to better understand and fit ADRION needs

decision making



From **good monitoring** data to **good decision making**



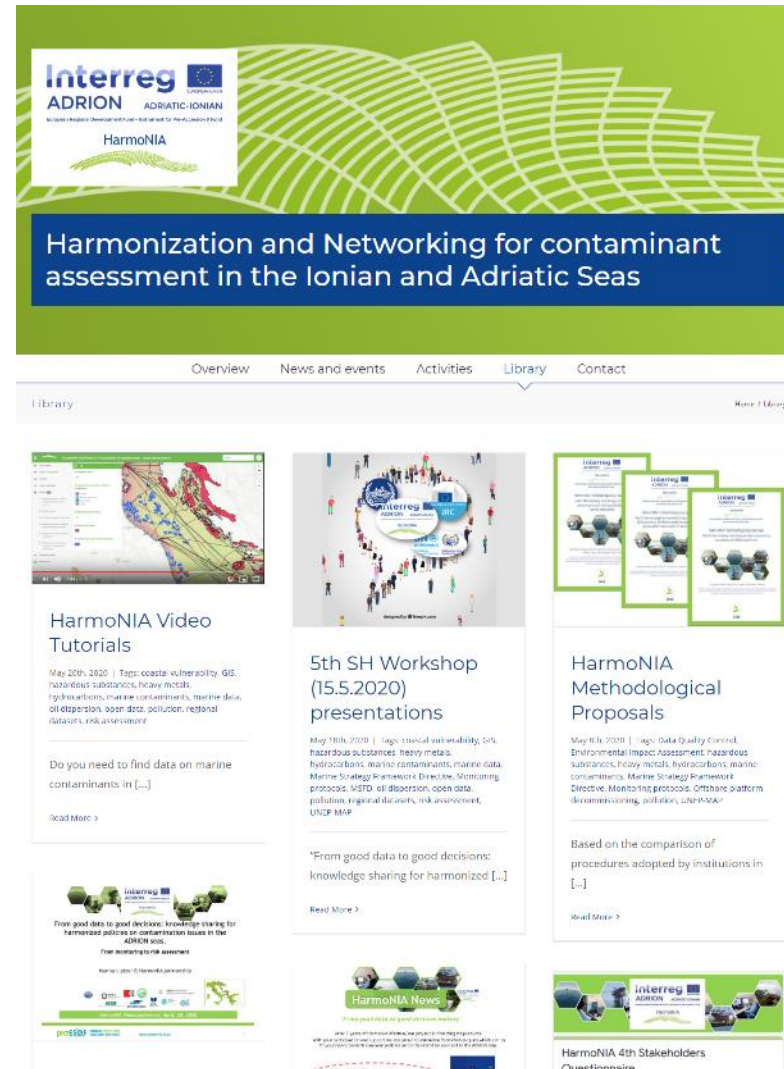
Thanks for your attention!

More information available on:

<https://harmonia.adrioninterreg.eu/>

HarmonIA video:

<https://www.youtube.com/watch?v=FN0wRyXn9Ps>



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