



Thematic Cluster on Coastal
and Marine Environment
Management



Joint brochure
on the outcomes of the
ADRION
Thematic Cluster n. 2
activities & potentials

2020

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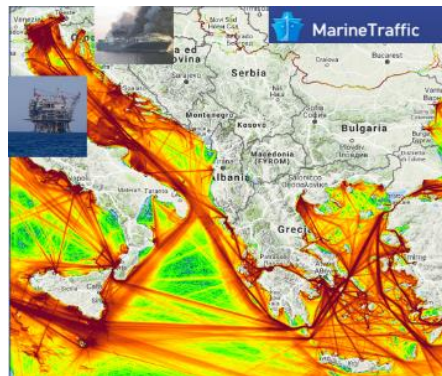
- Setting the scene
- Presenting the three sister projects
- ADRION challenges addressed by the Cluster
- Cluster contributions in terms of data/tools
- Cluster contributions in terms of guidelines/network/strategies
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- Project ideas for the 2021-2027 programming period
- Benefits of the macroregional cooperation to approach problems at ADRION scale

The ADRION area features

- hot spot of **biodiversity** - great environmental importance
- marine socio-economic activities rely on **Good Ecosystem Status** (but may threaten GES)
- lots of different **maritime activities** taking place in the area and several activities are expected to increase
- **pollution** in the ADRION area is a key issue
- **environmental conservation** is a priority
- **maritime spatial planning** highly needed



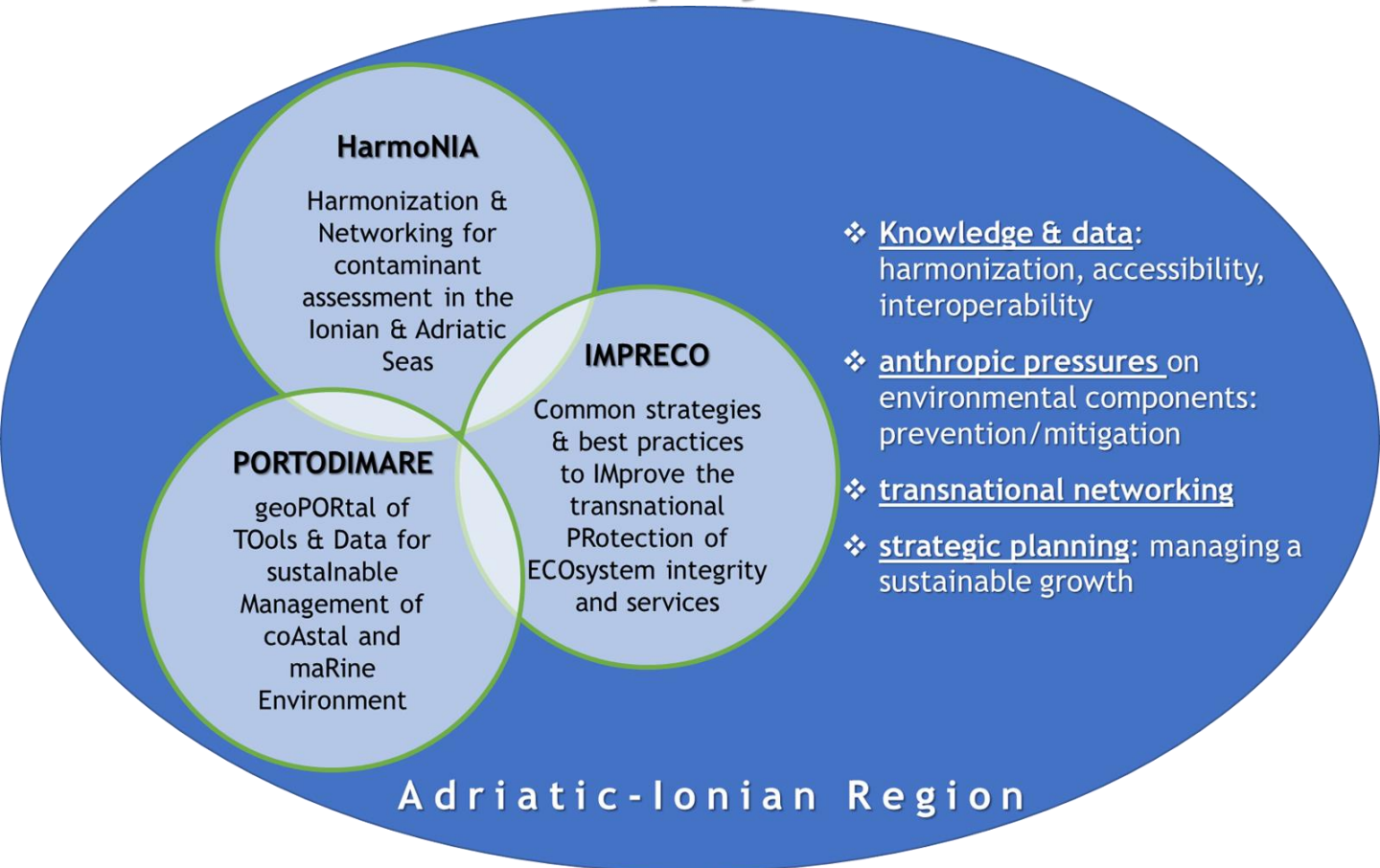
From: 2017 Mediterranean Quality Status Report, UNEP/MAP



EUSAIR as a key tool to identify macro-regional priorities and to promote coordination at ADRION scale of initiatives to manage threats to coastal and marine biodiversity, pollution of the sea, transnational terrestrial habitats and biodiversity



From the thinking of synergies between 3 sister projects...



...to a Thematic Cluster!

<https://www.adrioninterreg.eu/index.php/2020/03/04/adrion-thematic-cluster-on-coastal-and-marine-environment-management/>



Priority Axis: 2

Project acronym: HarmoNIA

Project name: Harmonization and Networking for contaminant assessment in the Ionian and Adriatic Seas

Total project budget: EUR 1.290.978,60

EU contribution: EUR 1.097.331,80 (out of which: ERDF EUR 1.022.334,60; IPA EUR 74.997,20)

Project duration: 29 months

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

Project outputs:

- Transnational Network of Institutions Sharing expertise and information towards harmonization of monitoring of contaminants in the marine environment, data management and visualization
- Adriatic - Ionian regional strategy for harmonized monitoring and assessment of contaminants in the marine environment
- Adriatic - Ionian regional strategy for a shared and harmonized evaluation of the risk due to contaminant dispersion from different sources of pollution

Project partnership:

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*



NATIONAL INSTITUTE OF BIOLOGY



INSTITUTE OF OCEANOGRAPHY AND FISHERIES SPLIT



UCG
 Universität Corfu



REGION OF WESTERN GREECE
 Full of contrasts!



hcmr
 ΕΛΚΕΒΕ

ARSO ENVIRONMENT
 Slovenian Environment Agency



Priority Axis: 2

Project acronym: IMPREGO

Project name: Common strategies and best practices to Improve the transnational PROtection of ECOsystem integrity and service

Total project budget: EUR 1.254.180,50

EU contribution: EUR 1.066.053,42 (out of which: ERDF EUR 970.840,67; IPA EUR 95.212,75)

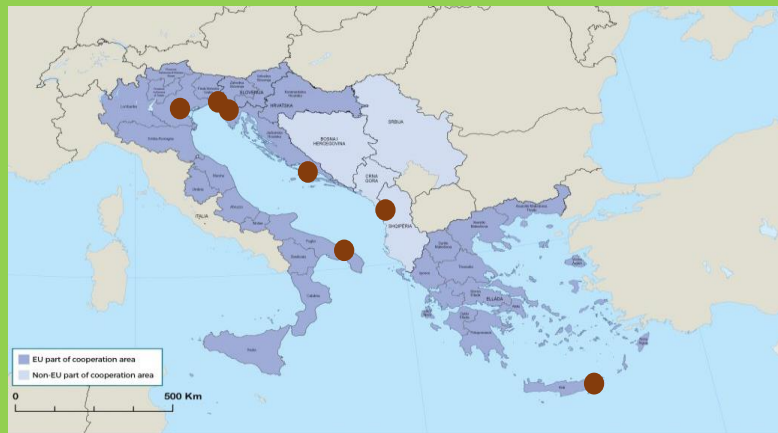
Project duration: 36 months

Project website: <https://impreco.adrioninterreg.eu/>

Project outputs:

- ❑ 1 IMPREGO Transnational Network by involving both Protected Areas and local actors in improving ecosystem and ecosystem services quality in the long period and increasing environmental sustainability in the ADRION area
- ❑ 1 S4ES - Strategy for EcoSystem management and conservation. The S4ES is an integrated framework adopted as the common strategy of the IMPREGO transnational network for the application of ecosystem services approach and the management and safeguarding of ecosystems through a Protected Area integrated management system

Project partnership:



Partnership

- ❑ Municipality of Staranzano (Staranzano) - *Italy*
- ❑ Veneto Agricoltura - Veneto Region's Agency for the innovation in the primary sector (VA) - *Italy*
- ❑ University of Salento - Department of Biological and Environmental Science and Technologies (UniSalento-DiSTeBA) - *Italy*
- ❑ DOPPS-BirdLife Slovenia (DOPPS) - *Slovenia*
- ❑ Public Institution for the Management of Protected Areas in the County of Split and Dalmatia "Sea and Karst" (PI Sea and Karst) - *Croatia*
- ❑ Albanian Development Fund (ADF) - *Albania*
- ❑ Region of Crete (Crete) - *Greece*

PORTODIMARE



Priority Axis: 2

Project acronym: PORTODIMARE

Project name: geoPORTal of TOols & Data for sustainable Management of coAstal and maRine Environment

Total project budget: EUR 1.581.219, 65

EU contribution: ERDF EUR 1.382.189,65 - IPA EUR 199.030,00

Project duration: 36 months

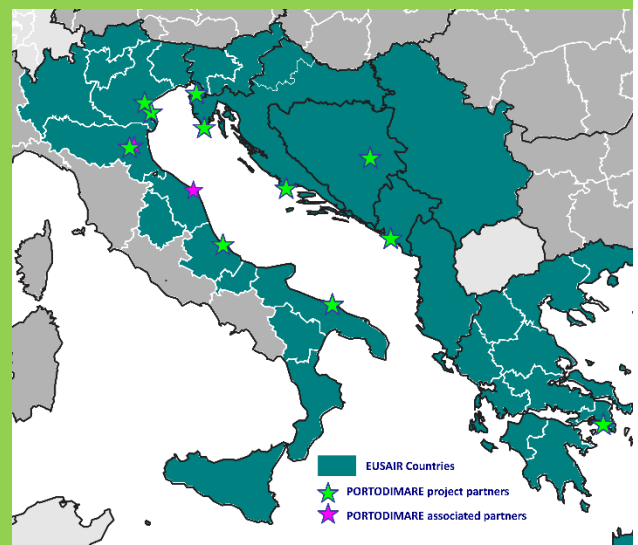
Project website: <https://portodimare.adrioninterreg.eu/>

Project outputs:

- **1 Transnational Network: the Geoportal of Adriatic-Ionian Region (GAIR)**, an open-source, interoperable platform which gives access to a wide range of information layers, to data processing and mapping functionalities, and to the use of a set of tools dedicated to the analysis for MSP and ICZM.
- **4 Action Plans** - strategic documents focusing on 4 pilot areas (in Croatia, Greece, Italy, and Slovenia) providing guidelines & good practices to prepare plans for the management of coastal and/or maritime areas, by testing the GAIR and its tools.

Partnership

- Emilia-Romagna Region, Directorate General for Territory and Environment Protection - *IT*
- CORILA, Consortium for Managing Research Activities in the Venice Lagoon - *IT*
- Regional development center Koper - *SI*
- Priority Actions Programme Regional Activity Centre - *HR*
- HCMR, Hellenic Centre for Marine Research - *GR*
- Institute for Physical Planning Region of Istria - *HR*
- Public enterprise for coastal zone management of Montenegro- *ME*
- Ceteor, Centre for economic, technological and environmental development Sarajevo - *BA*
- Apulia Region - Department of Civil protection - *IT*
- Abruzzo Region - Service for Maritime Works and Marine Water - *IT*
- Veneto Region, Environment Directorate - Integrated Water Service and Water Protection Unit - *IT*



Associated Partners

- Marche Region - *IT*
- ARPAE, Regional Agency for Nature Protection of Emilia-Romagna - *IT*

ADRION challenges addressed by the Cluster

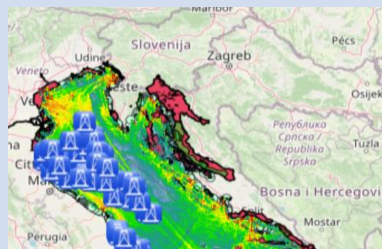
HarmoNIA

- **pollution monitoring and assessment** in the ADRION region with special focus on **offshore activities** (**harmonized monitoring-assessment-management-intervention**)
- **Data/information** harmonization, availability & sharing
- Harmonized implementation of **environmental policies and strategies**
- **Pollution risk assessment** from offshore sources



PORTODIMARE

- **competition for coastal & maritime space** triggered by human activities, climate change effects, natural & manmade hazards
- **transnational integrated and efficient planning & management** of coastal and marine spaces & uses at macroregional level
- fit for purpose **knowledge** and **tools** to support the planning processes




IMPRECO

- **Maintenance & enhancement of natural ecosystems and their functionality** to protect, from human & natural pressures, their capacity to provide services for the wellbeing and socio-economic prosperity of the ADRION area;
- Integration of the **ecosystem services approach** into society's decision-making and local management/development plans;
- Strengthening the Protected Areas' capacity to cooperate at transnational level on **environmental vulnerability & conservation challenges**.



... in terms of data/tools

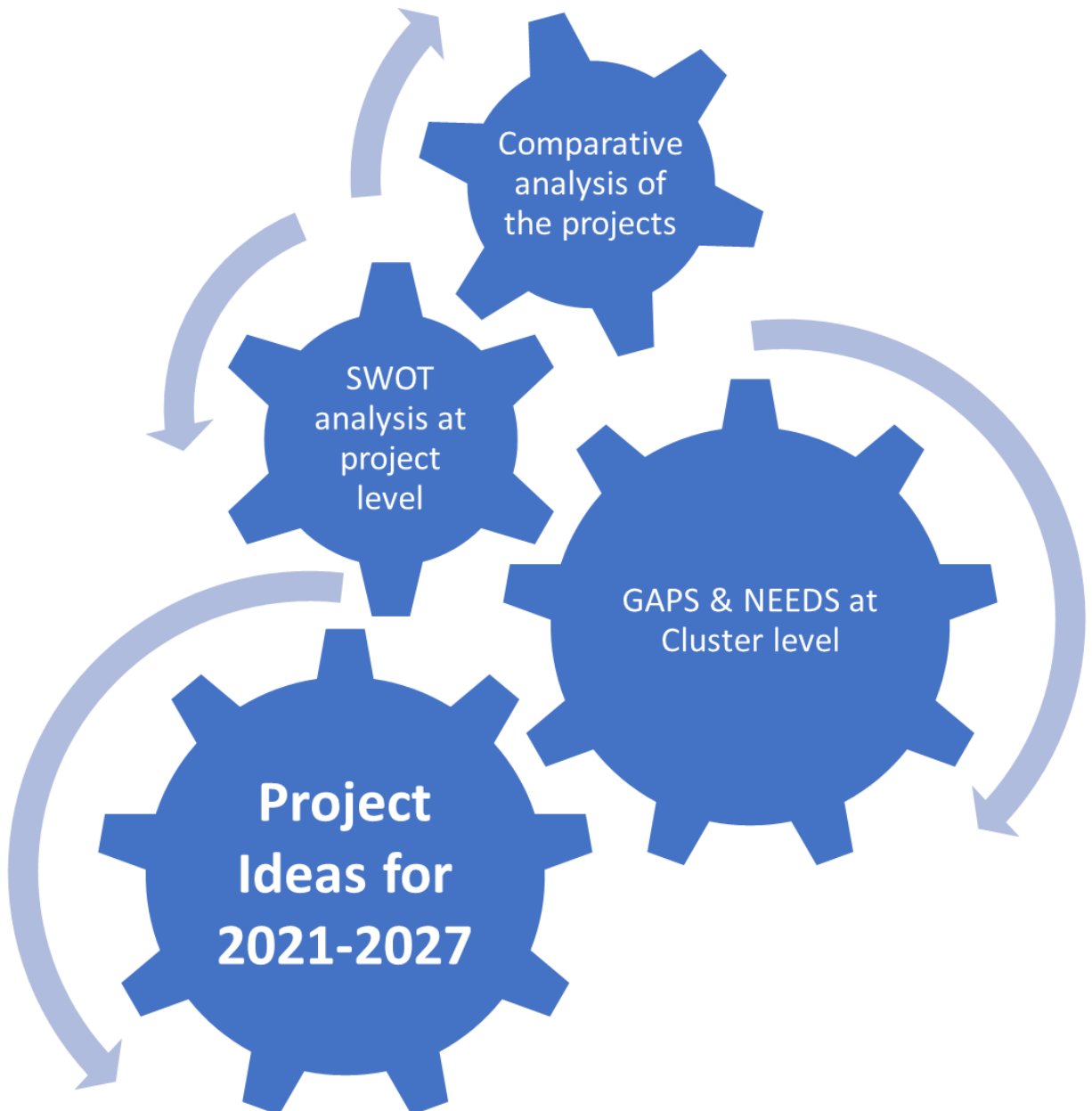
HarmoNIA	PORTODIMARE	IMPRECO
<ul style="list-style-type: none"> • Monitoring data (marine contaminants) • Spatial & temporal patterns in contaminant concentrations • Information to assess coastal vulnerability • Information to assess pollution hazards • Maps of pollution risk index • Oil spill simulations with hydrodynamic modelling tools • Information to support sustainable development 	<ul style="list-style-type: none"> • 528 layers organised in 21 categories • 7 tools4MSP (modules) Maritime Use synergy Conflicts Cumulative Effects Assessment Aquaculture Zoning Assessment Particles/conservative contaminants dispersion Oil Spill Coastal Vulnerability Small scale fisheries footprint Medium scale fisheries footprint & cumulative impacts of SSF/MSF • access to 12 data portals relevant for MSP & ICZM processes 	<ul style="list-style-type: none"> • Eco-system (ES) and Ecosystem Services (ESS) Mapping • Mapping of stakeholders (SH) analysed by: benefit perceived, impact produced, conflict among SHs, involvement in ESS management; • Selection of core cases and analysis of provided ESS, actual use of the ESS, economic values; • Monitoring data (indicatory species); • Development and collection of ES management measures
<p>HarmoNIA Data Access Portal</p> <p>HarmoNIA Visualization Tool</p> <p>HarmoNIA GeoPortal on Vulnerability of coastal areas</p>		

... in terms of guidelines, networks, strategies

HarmoNIA	PORTODIMARE	IMPRECO
<ul style="list-style-type: none"> ➤ HarmoNIA Methodological proposals for harmonized monitoring, assessment, EIA for offshore activities and decommissioning procedures ➤ HarmoNIA Strategy I: Harmonized Monitoring & Assessment of Marine Contaminants ➤ HarmoNIA Strategy II: Risk Assessment due to Contaminant Dispersion ➤ HarmoNIA Transnational Network Sharing expertise and information on monitoring marine contaminants 	<ul style="list-style-type: none"> ➤ PORTODIMARE transnational network (Geoportal) for ICZM & MSP processes relevant data, information, decision support tools ➤ 4 action plans to feed maritime and/or coastal plans at national or local level. They are based on outcomes from the 4 testing areas: 	<ul style="list-style-type: none"> ➤ IMPRECO transnational network composed by Protected Areas and local stakeholders ➤ IMPRECO common strategy for the ecosystem management and conservation together with a set of innovative governing tools

	PORTODIMARE	HARMONIA	IMPRECO
Pillar 1	<p>Fisheries & aquaculture: integrating/developing tools for sustainable fisheries and optimal aquaculture siting</p> <p>Maritime & marine governance / services: increasing institutional capacity to harmonize standards/regulations by the implementation of MSP & ICZM processes, and by promoting data availability and knowledge management according to the open data principle through the creation of the Geoportal</p>	<p>Fisheries & aquaculture: to uniform monitoring & assessment of the sea status of and pollutants in biota provides an overview of pollution and indirectly opportunities for the development of aquaculture</p> <p>the Geoportal provides data and enables modeling of the spread of potential pollution and thus indirect protection of shellfish/fish farming areas</p> <p>Maritime & marine governance / services: cooperation between partner institutions and stakeholders in the region has been established and strengthened</p> <p>sharing data and knowledge among experts and public bodies</p>	<p>Fisheries & aquaculture: Identification of provisioning ecosystem service (ESS) of seafood and fish-based products</p> <p>Maritime & marine governance / services: Transferring of data and information on ES/ESS of Marine and Coastal Protected Areas (M&CPAs) for a more effective and sustainable governance of maritime space</p>
Pillar 2	<p>Maritime transport & Energy networks: data and knowledge sharing favors the proper development & management of these human activities in a sustainable and multi-use context, avoiding conflicts and maximizing synergies</p> <p>Support to contingency plans in response to pollution & risks</p>	<p>Maritime transport & Energy networks: the Geoportal enables modeling of the spread of potential pollution and thus enables safer operation of ports and ships</p> <p>the strategy of setting up and environmental impact assessment enables the installation / removal of platforms</p>	
Pillar 3	<p>The marine environment: increasing marine knowledge as a sound basis for actions related to MSP, ICZM and MSFD through the creation of the Geoportal, and by providing tools to support the decision making & planning processes.</p> <p>Terrestrial habitats & ecosystems: promoting the ecosystem-based approach & the networking of protected areas (green/blue corridors)</p>	<p>The marine environment: data collection in one place to enable action planning</p> <p>improving the quality of data on the state of the sea, which enable better environmental impact assessment and revision of measures to improve the condition and protection of organisms</p> <p>Terrestrial habitats & ecosystems: Geoportal provides data and enables modeling of the spread of potential pollution and thus indirect protection of habitats and ecosystem</p>	<p>The marine environment: Inventory of species, habitats, ES/ESS. A common approach for biodiversity monitoring on the status of aquatic ES and for determining GES indicators & targets; Joint & coordinated management of M&CPAs, also in relation to MSP and ICZM; A common platform for data collection among M&CPAs through the adoption of a joint methodology for ES management and assessment;</p> <p>Terrestrial habitats & ecosystems: A common approach for biodiversity monitoring on the status of terrestrial ES and for determining GES indicators & targets. Promoting ESS approach & PAs networking. Protection /restoration of coastal wetland areas through clean-up; Awareness-raising on organic farming practices complementing restoration and preservation of biodiversity</p>
Pillar 4	<p>Macro-regional routes : the Geoportal provides data & tools for evidence-based solutions</p> <p>Attractiveness: enhancing the networking of protected areas and the sustainability of human activities to create the basis for a healthier and attractive Region</p>	<p>Macro-regional routes : Geoportal makes data on the state of the region and pollution available in one place</p> <p>Attractiveness: data availability allows the display of a realistic image which increases the reputation of the region</p>	<p>Macro-regional routes : Conservation and valorisation of cultural ESS for a more sustainable tourism offer and for addressing specific targets of tourists/tourism niches (eco-tourism)</p> <p>Attractiveness: Development of best practices and tools for the management of the touristic offer of M&CPAs</p>

From gaps, to needs, to project ideas for
the 2021-2027 programming period



Project ideas for 2021-2027

Topic 1: KNOWLEDGE

	GAPS	NEEDS	PROJECT IDEAS
K N O W L E D G E	<ul style="list-style-type: none"> • completeness of spatial data • lack of analytical capacity • lack of interdisciplinary integration 	<ul style="list-style-type: none"> • cover the AIR with harmonized data (scale, resolution, detail) • promote the usage of open data and software • to improve/refine analytical methodologies & tools • develop harmonized criteria to evaluate vulnerability and hazards • enhance a deeper understanding of Land-Sea Interactions • improve knowledge on ecosystems and their capacity to deliver services • address socio-economic aspects (costs/benefits of planning scenarios, ecosystem services value) • account for climate change effects 	<ul style="list-style-type: none"> • Integrate Ecosystem services and social-ecological systems perspectives in environmental impact assessments, considering relevant spatio-temporal scales and considering the inherent uncertainties and risks • Promote the adoption of Nature based Solutions (NbS) to tackle socio-environmental challenges • Formally support coordination actions among different initiatives to improve standardized data collection and analysis and ensure coherence in the shared information, maps and tools • Deepen the understanding of the Land-Sea Interactions, including climate change effects, to strengthen evidence-based policy making and ensure coherence between terrestrial and marine planning

Project ideas for 2021-2027

Topic 2: COOPERATION

	GAPS	NEEDS	PROJECT IDEAS
COOPERATION	<ul style="list-style-type: none"> • data management policies (agreements with providers) • cross-border cooperation on common issues and use of portals • low familiarity with spatial analysis & planning approaches 	<ul style="list-style-type: none"> • mechanisms for a long-term maintenance & transferability of the portals and of the transnational networks created within the projects • spread the awareness on the portals and tools and provide training • exchange with developments and experiences / lessons learnt from other regions 	<ul style="list-style-type: none"> • Maintain and further develop existing geoportals and tools for collaborative data sharing and harmonization of approaches and methods, towards the establishment of a long-term, structured and formalized (e. g. signature of MoU and Agreements) infrastructure supporting EUSAIR objectives and sustainable blue growth in the area. • Set up a formal harmonized and coordinated monitoring plan for MSFD and Barcelona Convention EcAp requirements at ADRION scale • Develop pilot projects in cross-border context so to involve partners/stakeholders from two neighboring countries/regions • Exchange experience from AIR with other marine regions • Support linkages with national formal ICZM/MSP processes in the AIR Countries, to promote coherent and coordinated MSP plans across the marine region

Project ideas for 2021-2027

Topic 3: COUNTERPARTS

	GAPS	NEEDS	PROJECT IDEAS
C O U N T E R P A R T S	<ul style="list-style-type: none"> • weak science-policy interface • limited interactions with social and economic sectors • limited integration of policy implementations at cross border scale (e.g. EU/non-EU) 	<ul style="list-style-type: none"> • to link better with the ICZM/MSP processes in the Countries • promotion of the project outputs (networks, portals) for the implementation of EU policies such as Green Deal, green infrastructures, macroregional strategies • overcome differences in the implementation of the environmental legal framework (EU and non-EU) 	<ul style="list-style-type: none"> • Consolidate and formally support capitalization and set up of Capitalization «forum» identifying main stakeholders who can mostly benefit from project and cluster outputs and results in order to improve impact on governance / management / planning • Propose regular information-sharing model with the EUSAIR 'political level' (Governing Bord, TSGs) so to provide political backing for the maintenance and use of the portals • Promote projects outputs (e.g., on mature NbS applications) as tools to implement the New Green Deal strategy

Benefits of the macroregional cooperation to approach problems at ADRION scale

Added values of the cooperation

- Share knowledge and expertise among EU and non-EU countries
- Improve coherence and harmonized implementation of environmental policies
- Improve capacity to address common trans-national problems
- Strengthen dialogue at ADRION scale

Memories from the Thematic Cluster n. 2 in 2020

- **Dialogue** among projects: a “renewable energy” in your hands
- **Brainstorming**: two heads are better than one (to say nothing about a Cluster)
- **Subsidiarity**: the helping hand of a sister project can save the day (and the event)
- **Relationships**: networking is important. But is not everything!
- **Perspective**: looking forward...