

MSP in the Mediterranean Sea

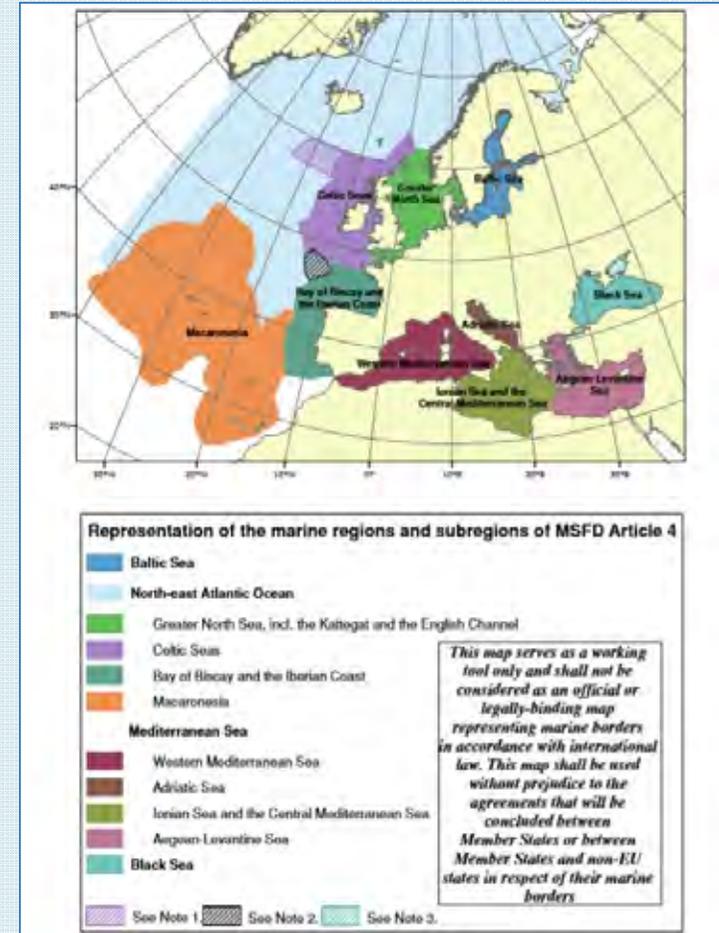
Emiliano Ramieri – Thetis SpA

MARSPLAN – BS II Project Opening Conference, 10.10.2019, Sofia, Bulgaria



The Mediterranean Sea

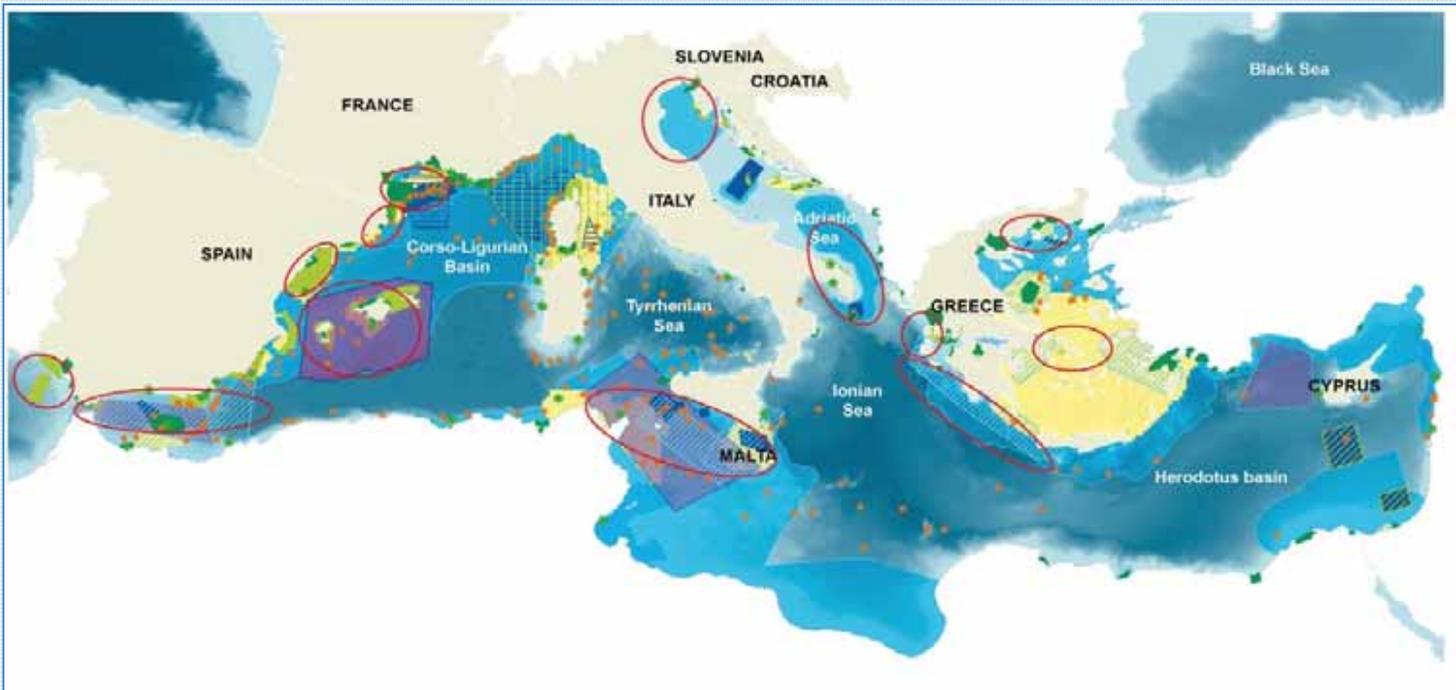
- EU and No-EU countries
- Delimitation of maritime boundaries is complex (geographical, geopolitical and economic reasons)
- Limited application of UNCLOS (EEZ and EEZ derived zones), high seas regime and some disputed areas
- Regional and sub-regional cooperation is particularly relevant
- Biodiversity hotspot
- Tourism, coastal development, shipping, fishery, aquaculture, oil and gas extraction + high potential for Blue Growth



Source: EC DG ENV web-site

Growing pressure on the coastal and marine environment

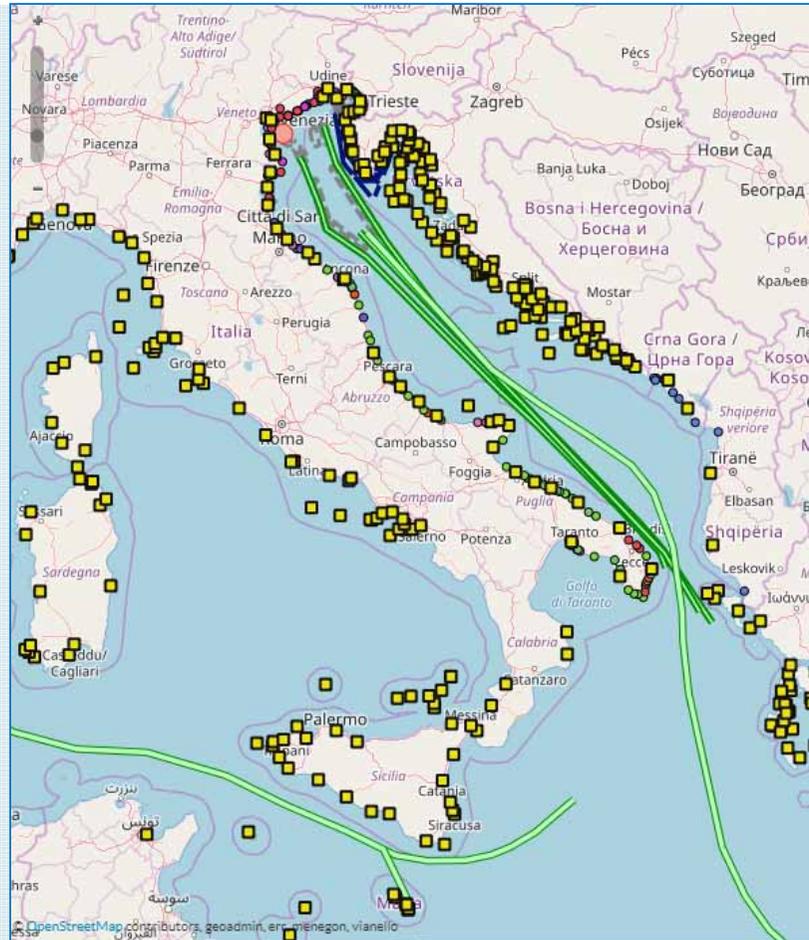
Sector	Expected development trend of sector	Estimations
Oil and gas exploration and extraction	↗	<ul style="list-style-type: none"> Offshore oil production could increase by 60% between 2010 and 2030, at the Mediterranean regional level, rising from 0.7 mbd to 1.12 mbd. Offshore gas production could increase five-fold from 2010 to 2030, from 35 Mtoe/year to 250 Mtoe/year at the Mediterranean regional level.
Maritime transport and ports	↗	4% per annum growth rate in global trade over the next decade can be anticipated and will be reflected in international maritime traffic routes at the Mediterranean regional level (Suez-Gibraltar axis, Aegean Sea, Adriatic Sea, and to a lesser extent the northwestern Mediterranean).
Professional fishing	↘	A downward trend is expected at an uncertain rate at the Mediterranean regional level.
Recreational fishing	↗	An upward trend is expected at an uncertain rate in the Mediterranean countries of the EU.
Marine aquaculture	↗	Forecast of fish aquaculture production in the Mediterranean countries of the EU anticipates a 112% increase between 2010 and 2030. Production could jump from 280,000 tonnes to nearly 600,000 tonnes.
Tourism (coastal tourism, cruise tourism, recreational boating)	↗	International tourist arrivals in the Mediterranean should increase by 60% between 2015 and 2030 to reach 500 million arrivals in 2030 at the Mediterranean regional level. France, Italy and Spain will remain the three biggest destinations.
Renewable energy	↗	While no marine renewable energy was produced in 2014, predicted production of electricity by offshore wind farms could reach 12 gigawatts (GW) in 2030 in the Mediterranean countries of the EU.
Marine mining	↗	An upward trend is expected at an uncertain rate in the mid-term, mainly in the Mediterranean countries of the EU.
Coastal development	↗	5,000 km of additional coastline will be artificialised by 2025 as compared to the 2005 situation at the Mediterranean regional level.
Land-based pollution sources	↗ ↘	<p>In the Mediterranean countries of the EU:</p> <ul style="list-style-type: none"> Pollution from wastewater is expected to keep decreasing over the next 15 years. Persistent Organic Pollutants (POPs) are expected to slowly decline. An upward trend in heavy metal pollution can be observed for mercury and lead. Nutrient discharges are expected to increase slightly over the next 15 years.



Source: MEDTRENDS project

Land Sea Interactions

- Long and indented coastline
- High number of islands
- Important land-sea transition systems
- No EEZ
- Concentration of maritime activities in coastal waters
- Limited pure offshore activity
- High concentration of people and activities along the coast
- ICZM and MSP

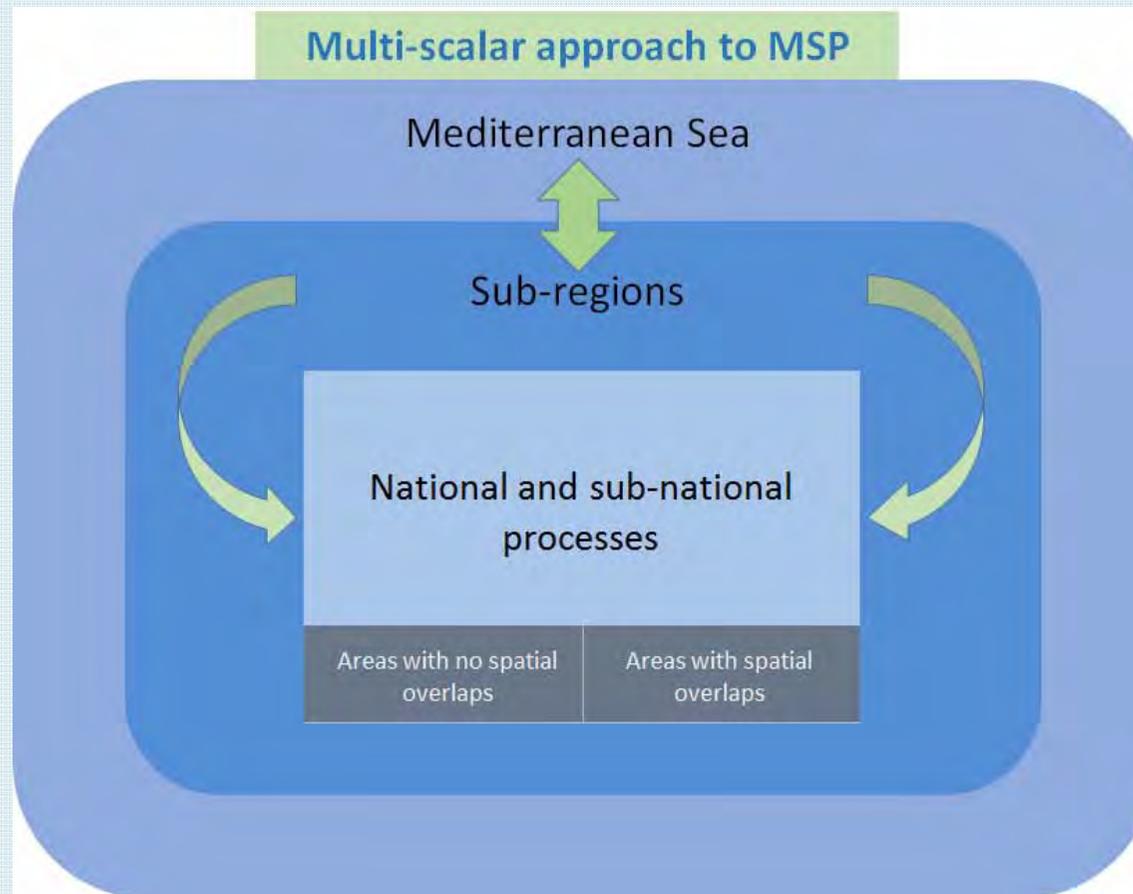


- Climate change adaptation and disaster risk reduction (e.g. coastal flooding and erosion, oil spills risks, etc.)
- Connections between land and sea-borne transportation;
- Coastal urbanization and littoralization
- Booming of coastal tourism
- Land-based impacts to marine environment as eutrophication, chemical contamination and plastic pollution
- Degradation/transformation of land-sea transition systems
- Limited connection between coastal and rural development

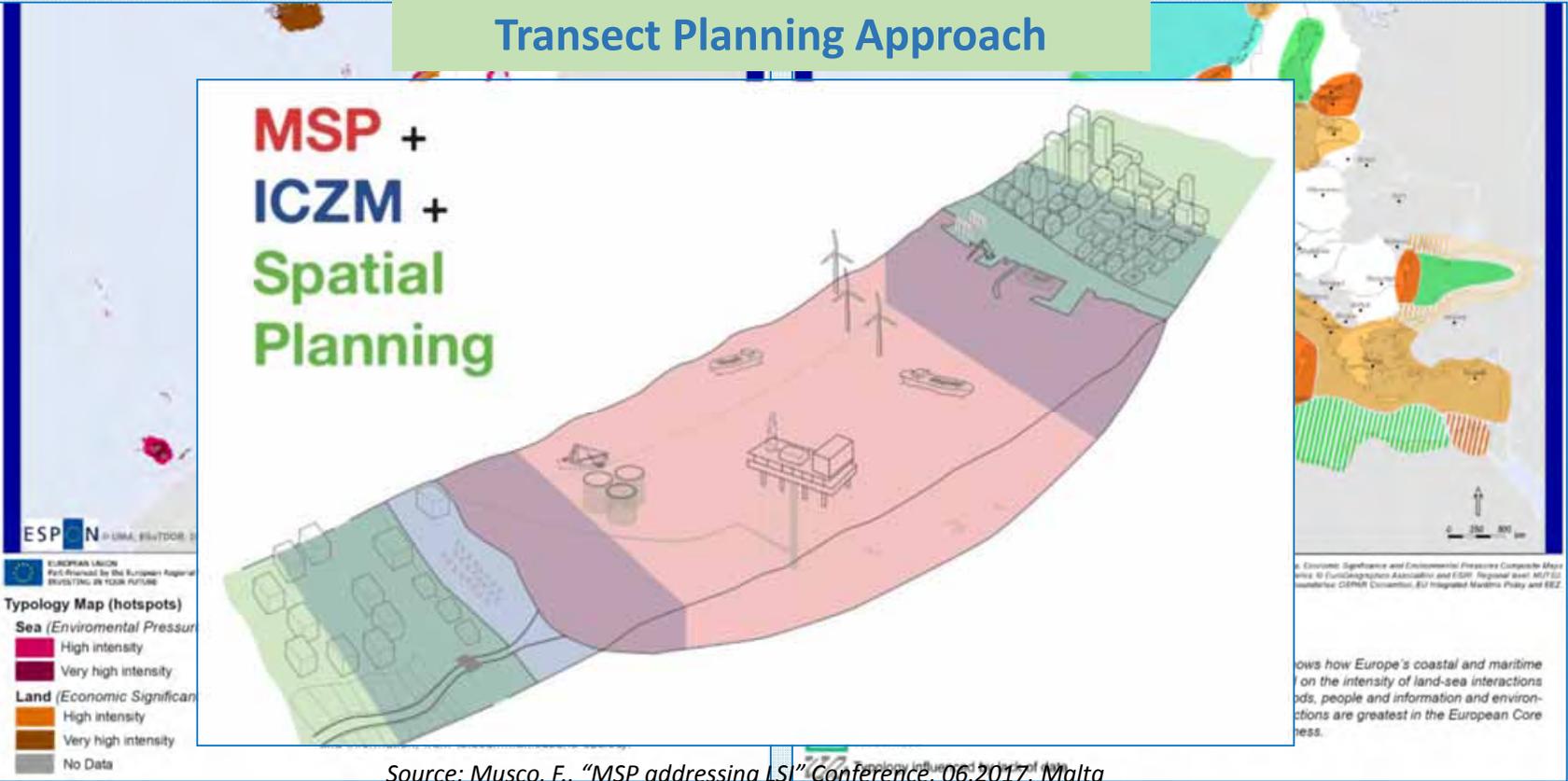
Source: Tools4MSP Geoplatform



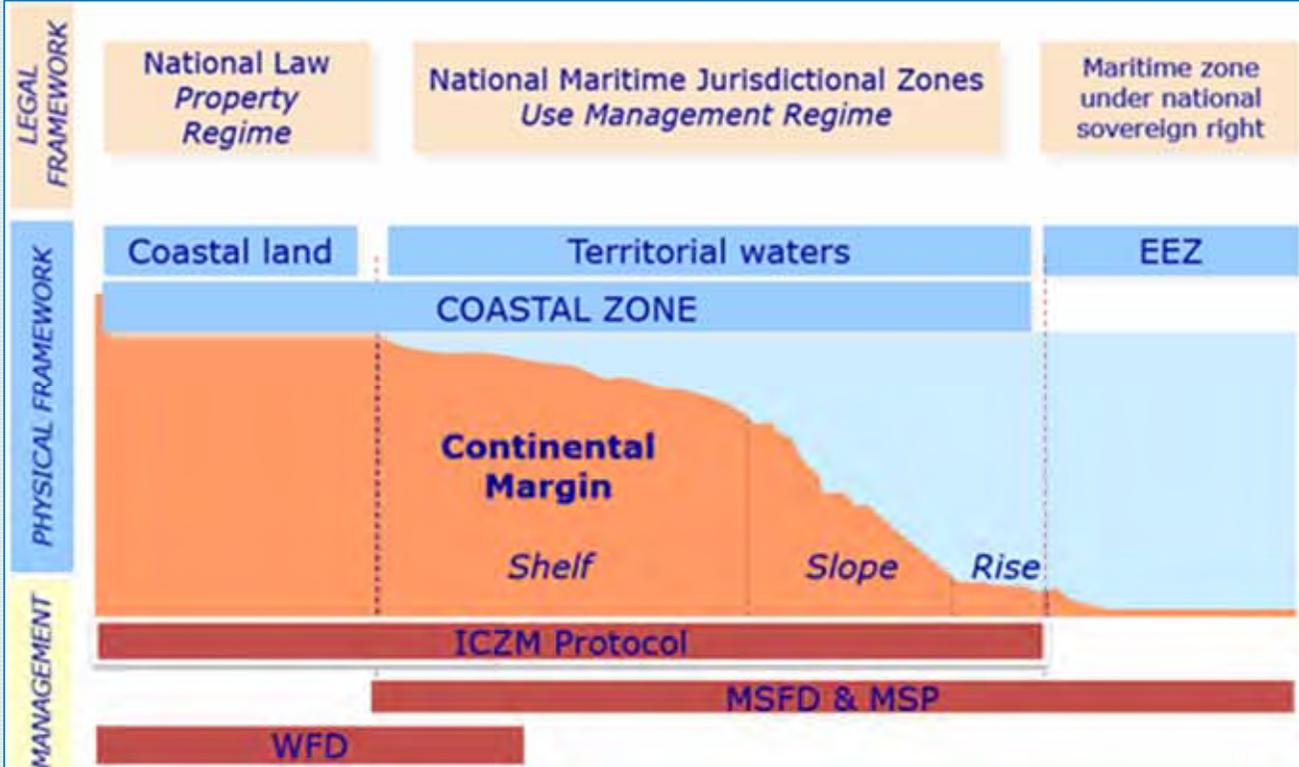
Multi-scalar approach to MSP



Multi-scalar approach to LSI



Regional level



Source: adapted from Vallega, A., 1999



Common Regional Framework for ICZM in the Mediterranean

Sub-regional level



MSP and ICZM have a cross-pillar relevance, being specifically considered by Pillar 1 (Blue Growth) and Pillar 3 (Environmental quality)

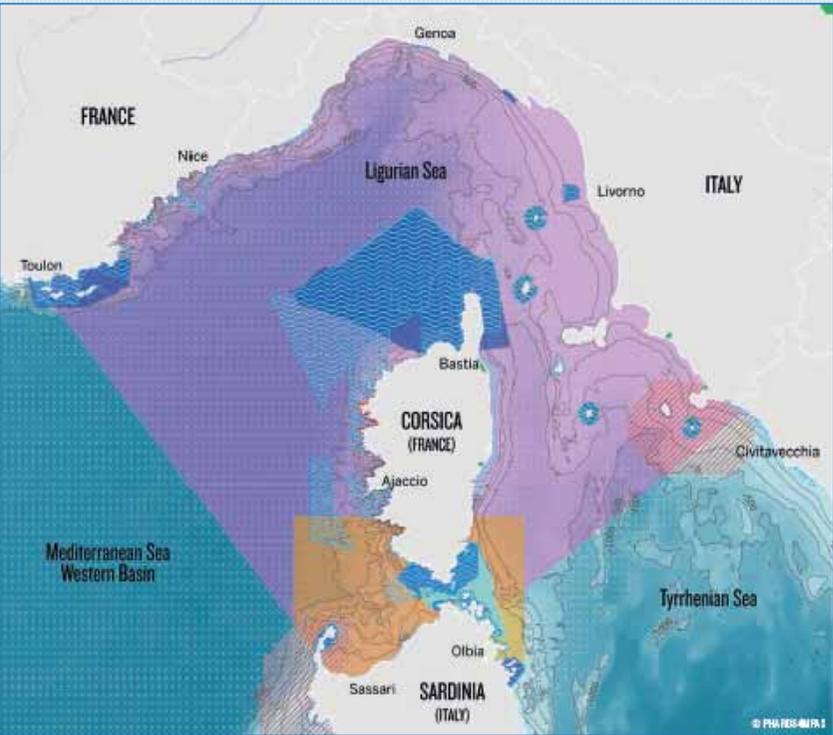


Foster sustainable blue growth and jobs, improve safety and security and preserve ecosystems

Actions seek to improve the management of maritime, marine and coastal areas through MSP and ICZM

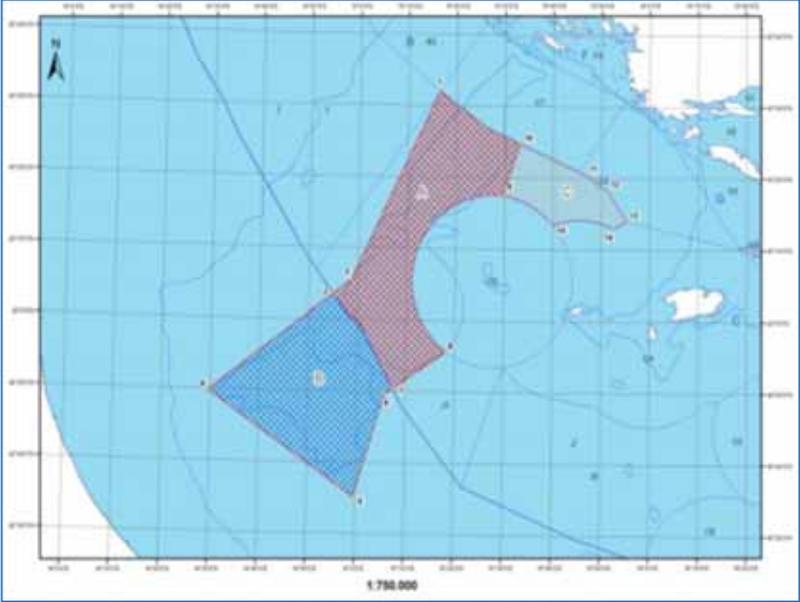


Cooperation for what?



Source: PHAROS4MPAs project

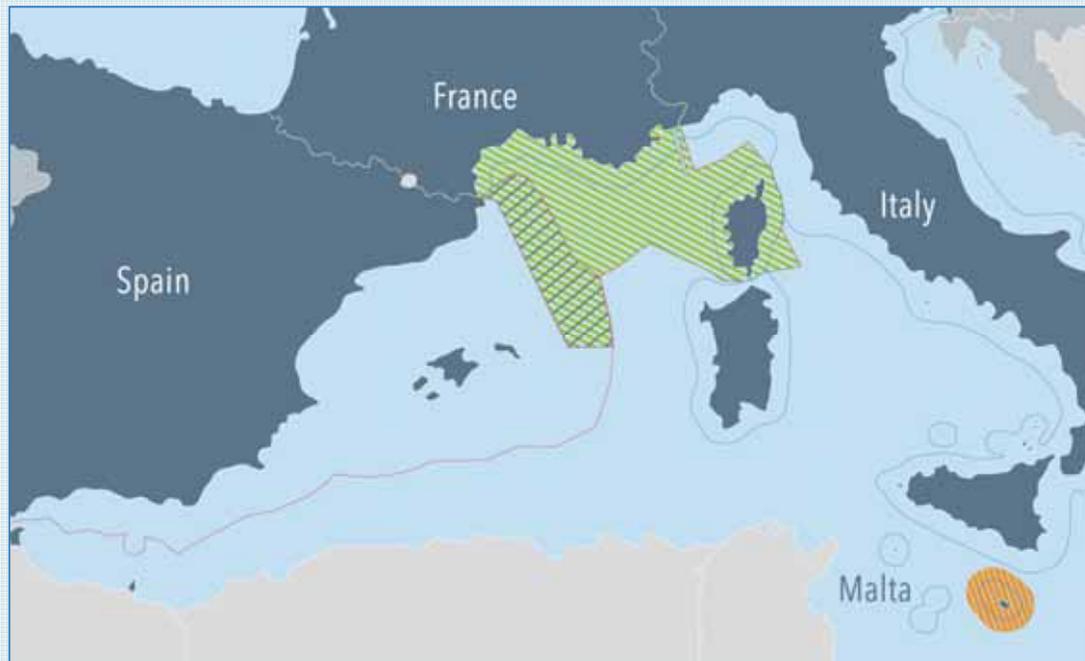
- Protection of ABNJs
- Improving functional connectivity of coastal and marine protected areas
- Sustainable management of fish stocks and habitats
- Shipping operation and safety
- Marine litter, including management of sources and identification of hot-spot
- Conflicts arising from the exploitation of submarine natural gas and oil resources
- GES achievement



source: Recommendation GFCM/41/2017/3



National and sub-national levels



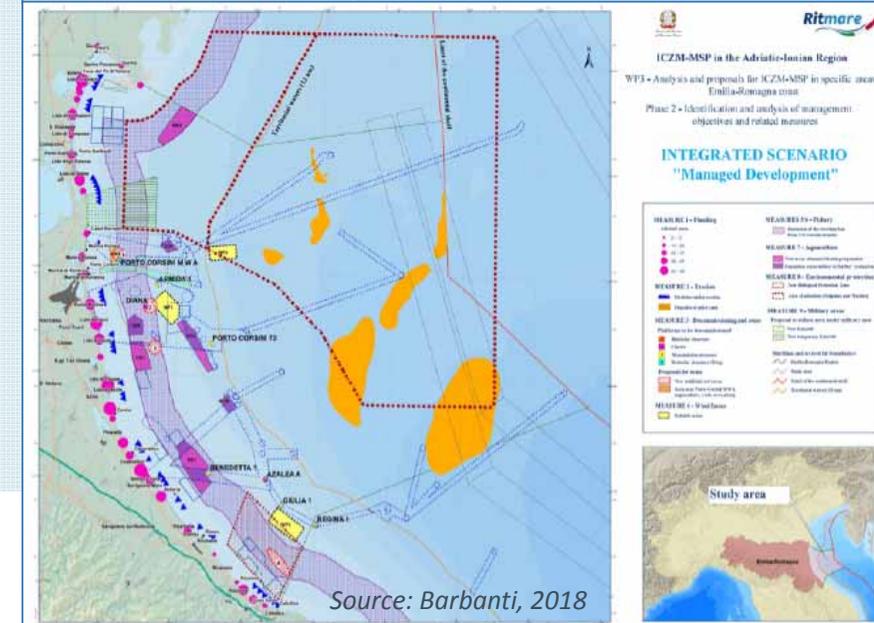
Source: EU MSP Platform

Italy

- Functions of MSP competent authority in charge of the Ministry of Infrastructure and Transport, but competences are shared
- Inter-Ministerial Coordination Table
- **Guidelines** containing indications and criteria for MSP plans (December 2017)
- **Three marine areas** for MSP plans: Western Med, Adriatic Sea and Ionian Sea, plus the possibility to zoom in on priority areas
- **Technical Committee:** elaborates MSP plans, according to the guidelines, including SEA
- Pilot plan for Emilia Romagna region



Source: EU MSP Platform



Source: Barbanti, 2018

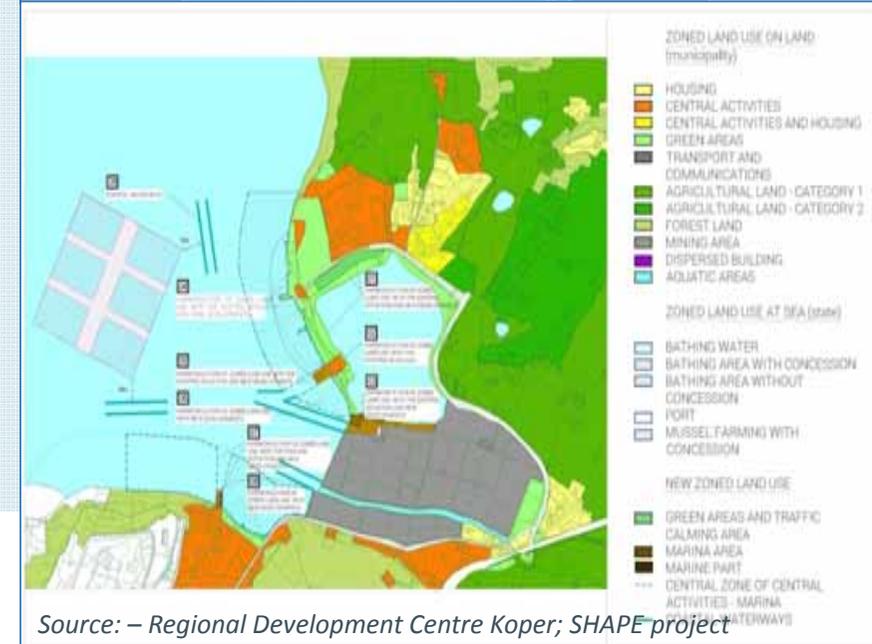


Slovenia

- Competent authority: Ministry of the Environment and Spatial Planning
- **Limited marine area**; land-sea interface and CBC issues are crucial
- The Spatial Planning Act requires the MSP plan to be prepared in the form of the Action Programme for the implementation of the **Slovenian Spatial Development Strategy** at sea
- The SSDS at 2050 is under development and will focus even more on sea
- **Completed activities**: baseline knowledge, cartography, methodology, future scenario, call for tender to draft the plan



Source: EU MSP Platform

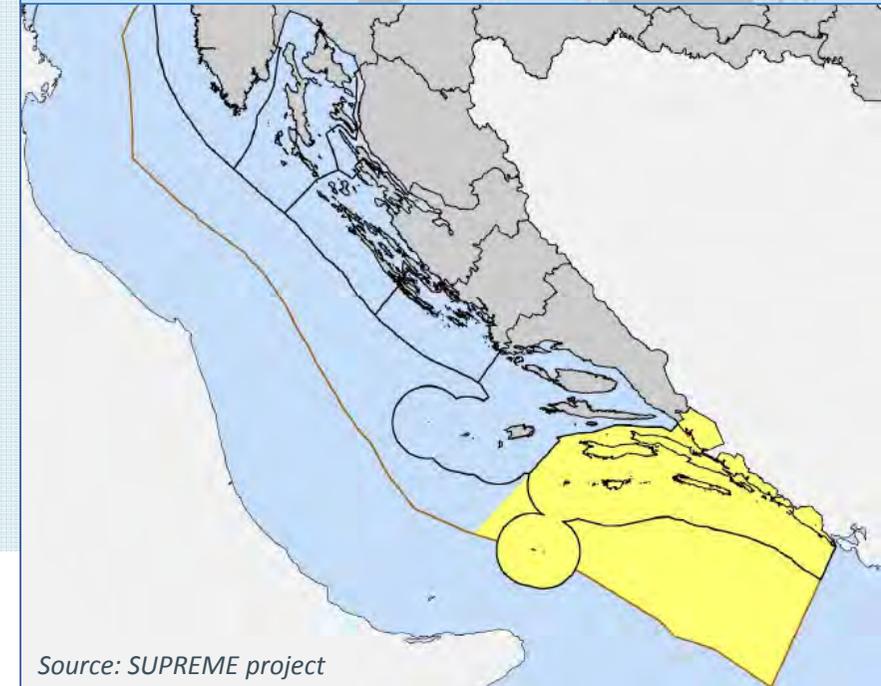


Source: – Regional Development Centre Koper; SHAPE project



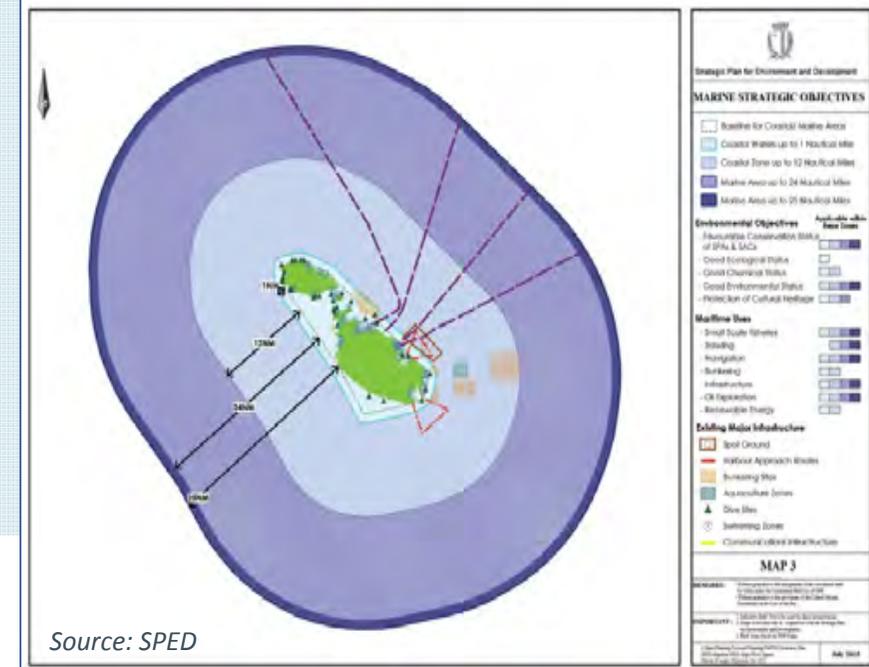
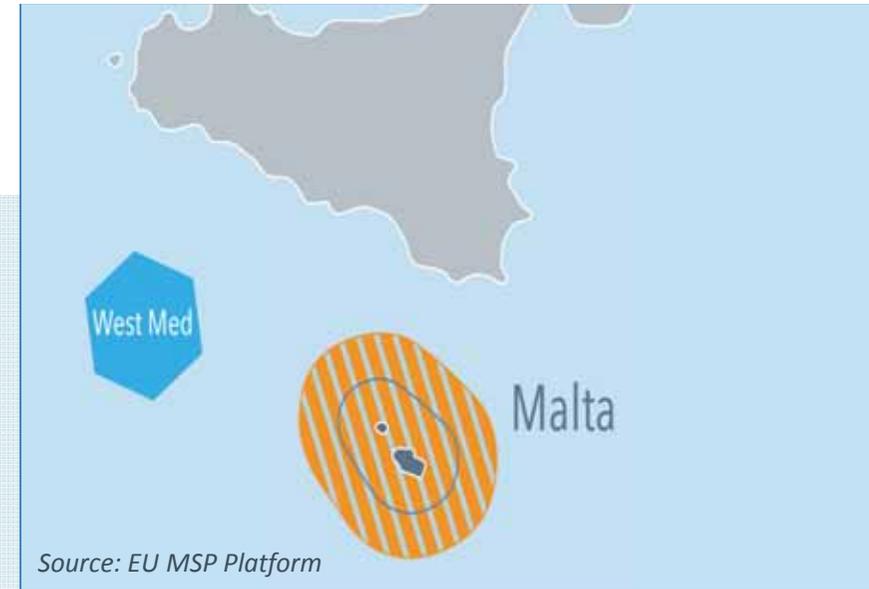
Croatia

- Competent authority: Ministry of Construction and Physical Planning
- Preparation of the **State Plan for Spatial Development** for the entire terrestrial and marine area up to the limit of territorial water is on-going
- **Two other MSP plans** will be developed at the national level, for the Ecological and Fishery Protection Zone and for the Continental shelf
- Coastal County plans include provision for the marine area (up to territorial waters) also referring to sea uses
- Dubrovnik Neretva plan was analysed within SUPREME

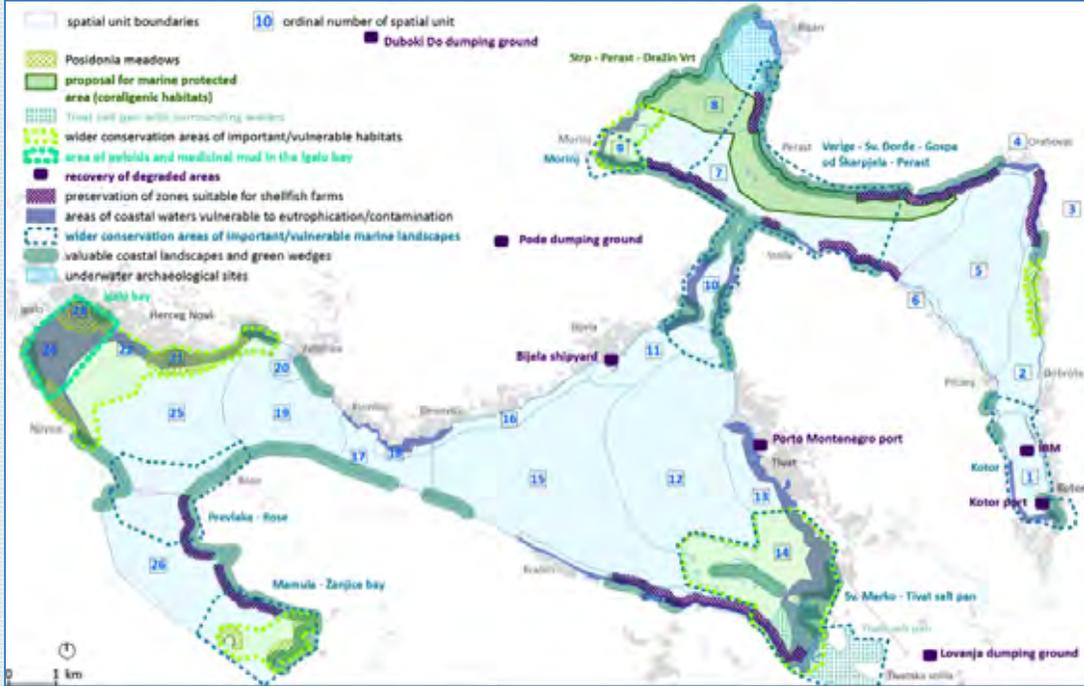


Malta

- Competent authority: the Planning Authority, responsible for both land and marine planning
- MSP Technical Committee: forum for technical cooperation
- The **Strategic Plan for the Environment and Development (SPED)**, approved in 2015, is the overarching document for planning issues on land and at sea
- It also constitutes the national Maritime Spatial Plan, to be further developed in detailed plans

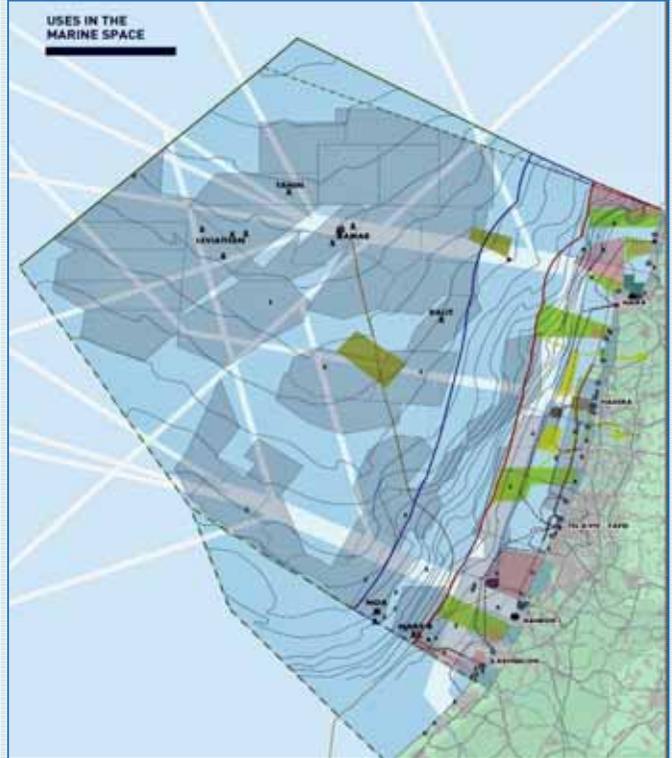


Outside the EU



Source: PAP/RAC and MSDT 2017

EcAp-based methodology for marine vulnerability assessment, aimed at identify spatial-based recommendations

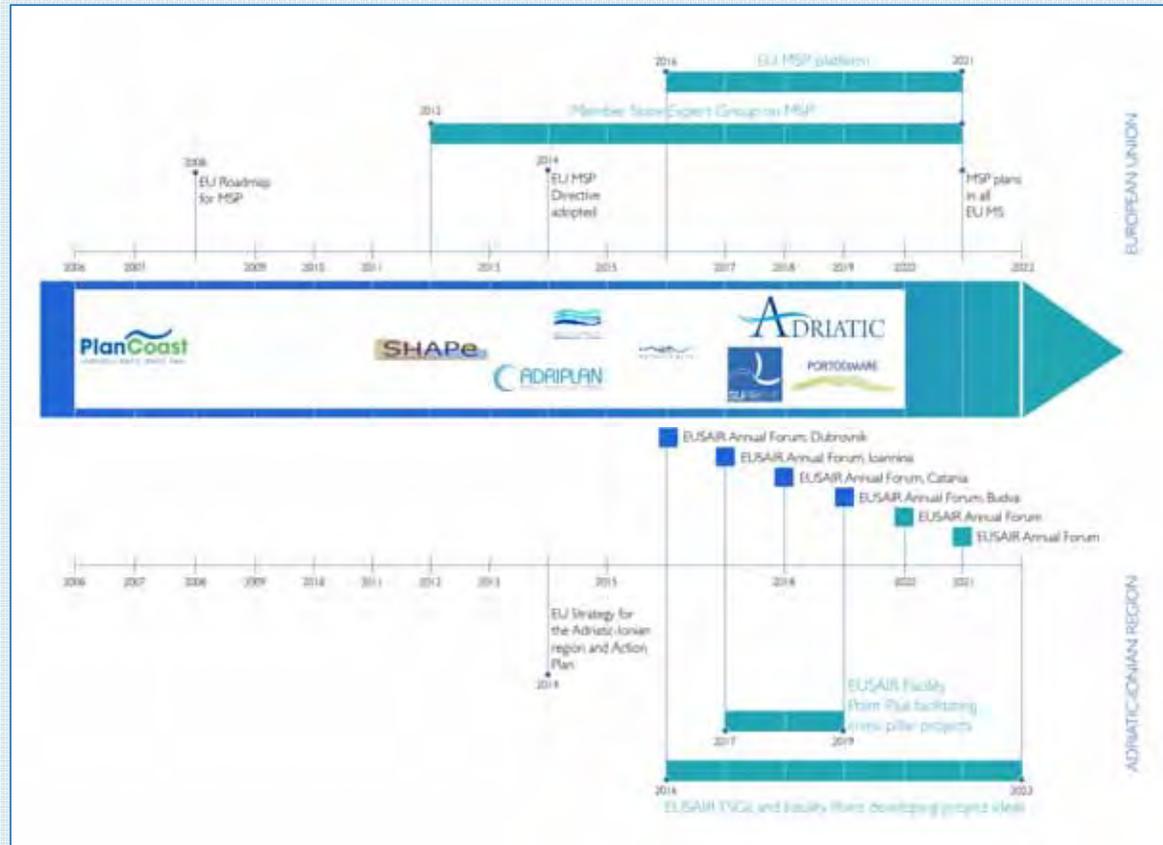


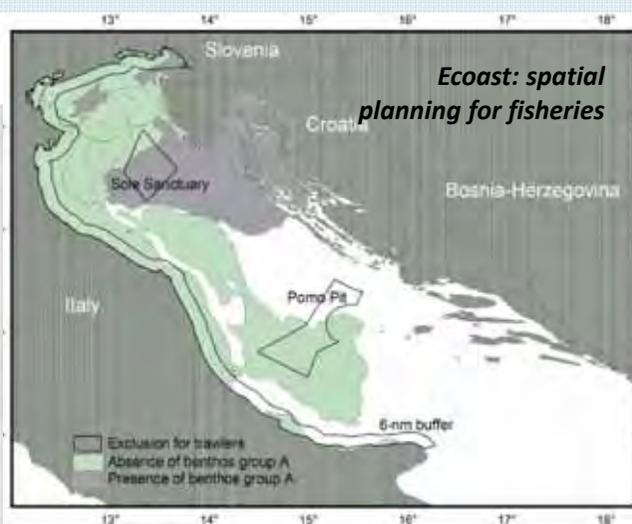
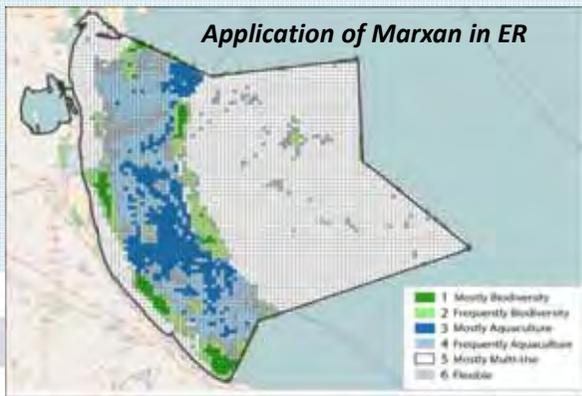
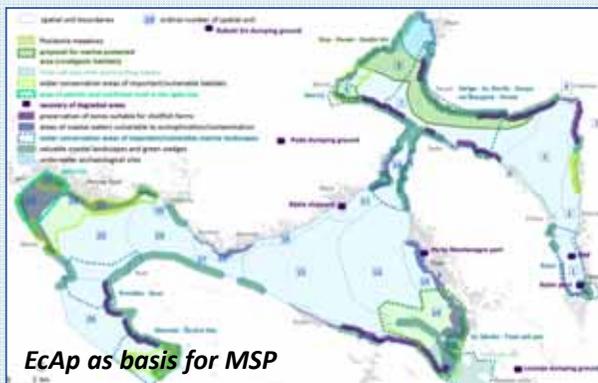
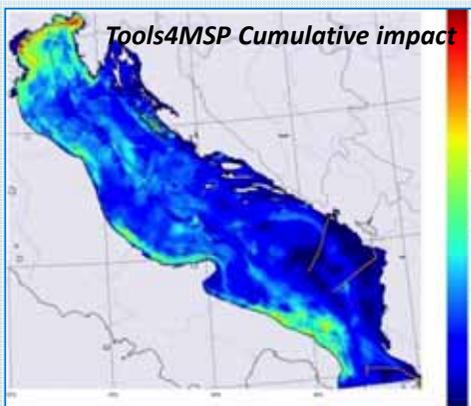
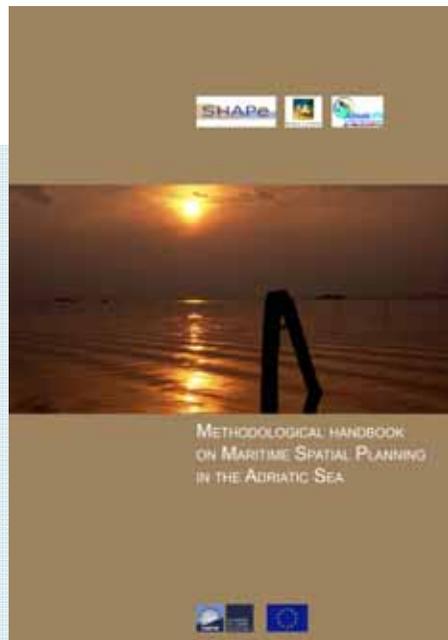
Source: msp.ioc-unesco.org

Israel Marine Plan (Technion – Israel Institute of Technology)



Wide project-based experience





Wide project-based experience

Uptake of projects results into statutory process is still a significant challenge:

- Identify ownership, commitment and clear responsibilities for the use of results after the end of the project
- Involve responsible actors in the project
- Develop capitalization models/plans
- Demonstrate the usefulness of project outcome (pilots)
- Keep improving project results
- Further progress along the project continuum is essential to keep knowledge growing and further sharing as well as to enlarge the MSP community



Way forwards

The implementation of a **multi-scalar approach** to MSP is recommended, including the Mediterranean, sub-regional, national and sub-national scales

The interplay among scales occur in two directions: **top-down and bottom-up**

Coherent and **integrated planning** is a necessary challenge, beyond being a legal requirement

How can **coherence** among national processes and plans be improved? formal vs. informal structures (e.g. HELCOM-VASAB working group on MSP); shall these be embedded into existing mechanisms (UNEP-MAP, EUSAIR, etc.)? what's their role (sharing experience, fostering cooperation, enabling formal consultation processes, etc.)

High relevance of **LSI** in the AI region is one of the element calling for an integrated ICZM-MSP process

One of the main challenge lies in the **unbalanced distribution** of experiences and capacity between EU and non-EU countries

Although challenging, the **establishment of EEZs** would extend the area of MSP implementation, providing opportunities for both the managed exploitation of marine resources as well as for improved conservation

