

The 2030 European Biodiversity Strategy and the EU Nature Restoration Law

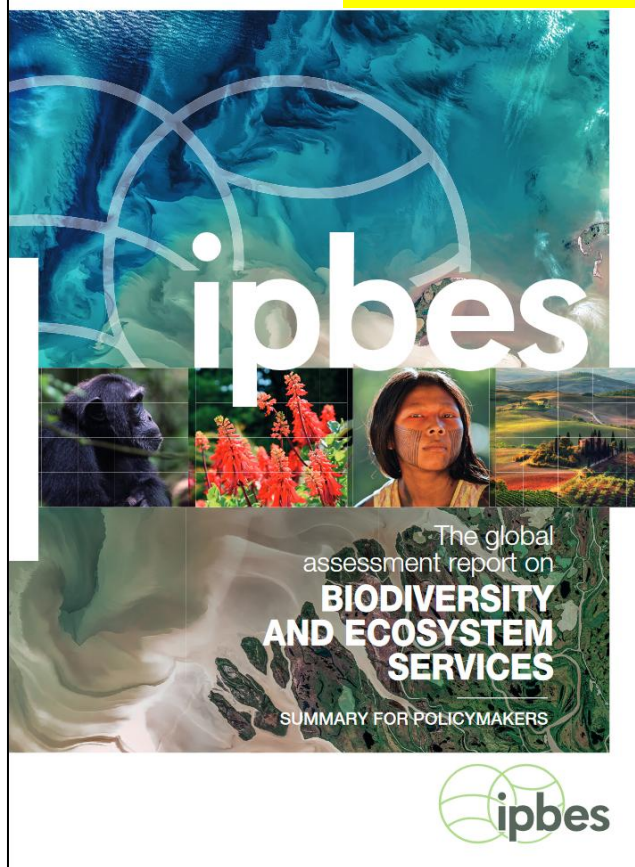
The Mediterranean and Italian marine context

Leonardo Tunesi

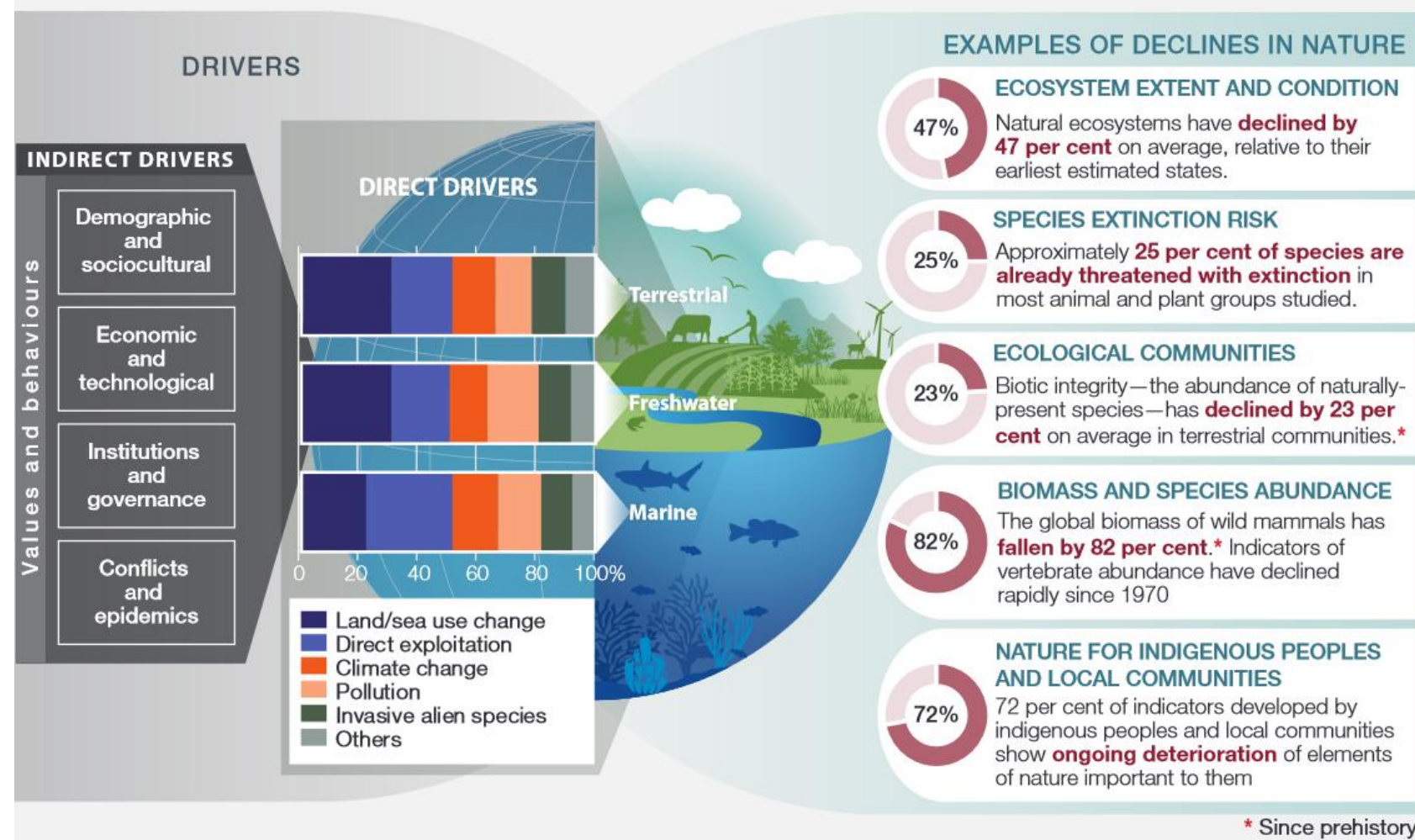
The Future of Marine Spatial Conservation: From Science to Policy

Liepāja, 28.10.2025

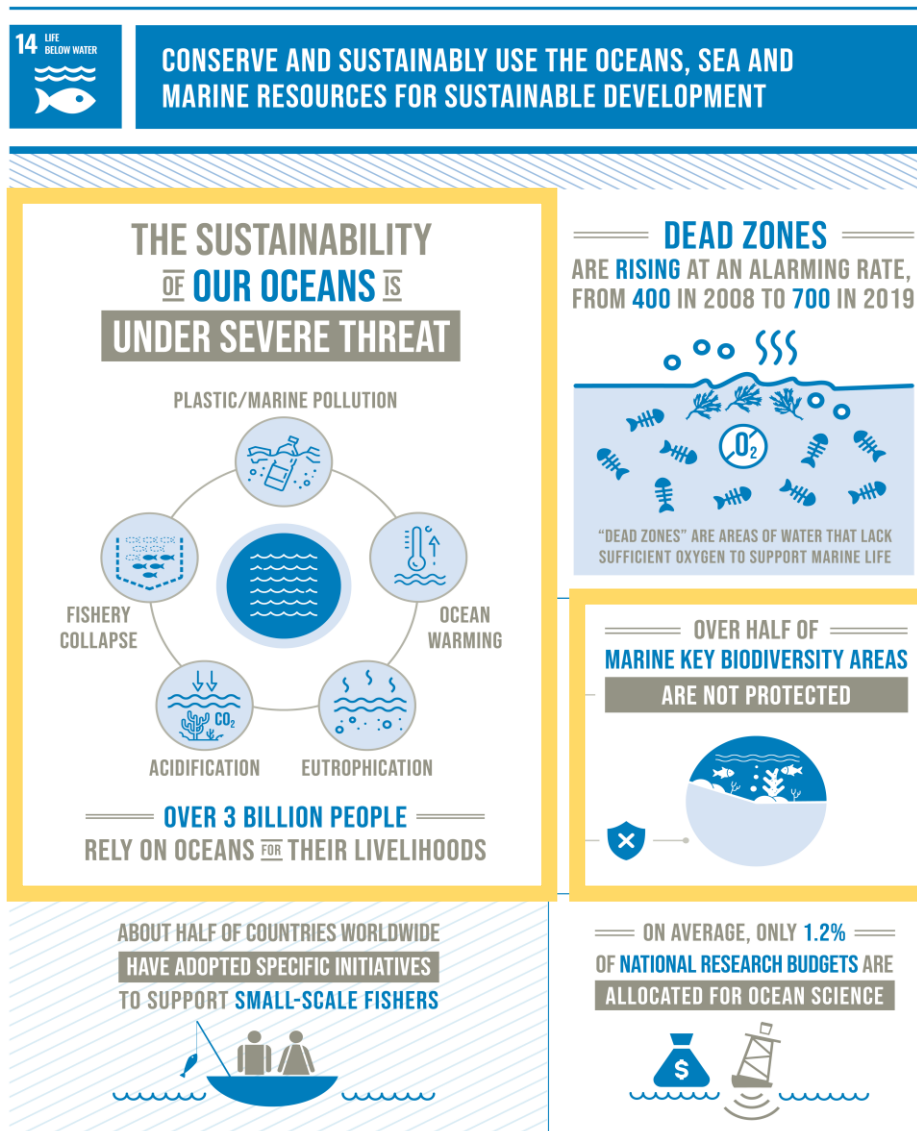
PLANET-WIDE DECLINE IN NATURE AND BIODIVERSITY CAUSED BY DIRECT AND INDIRECT FACTORS



IPBES: intergovernmental science-policy platform on biodiversity and ecosystem services - Intergovernmental body established by states to strengthen the science-policy interface on biodiversity and ecosystem services, for the conservation and sustainable use of biodiversity, long-term human well-being and sustainable development.



Da IPBES (2019) - *Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services*. Díaz et al. (eds.). IPBES secretariat, Bonn, Germany: 56 pages.

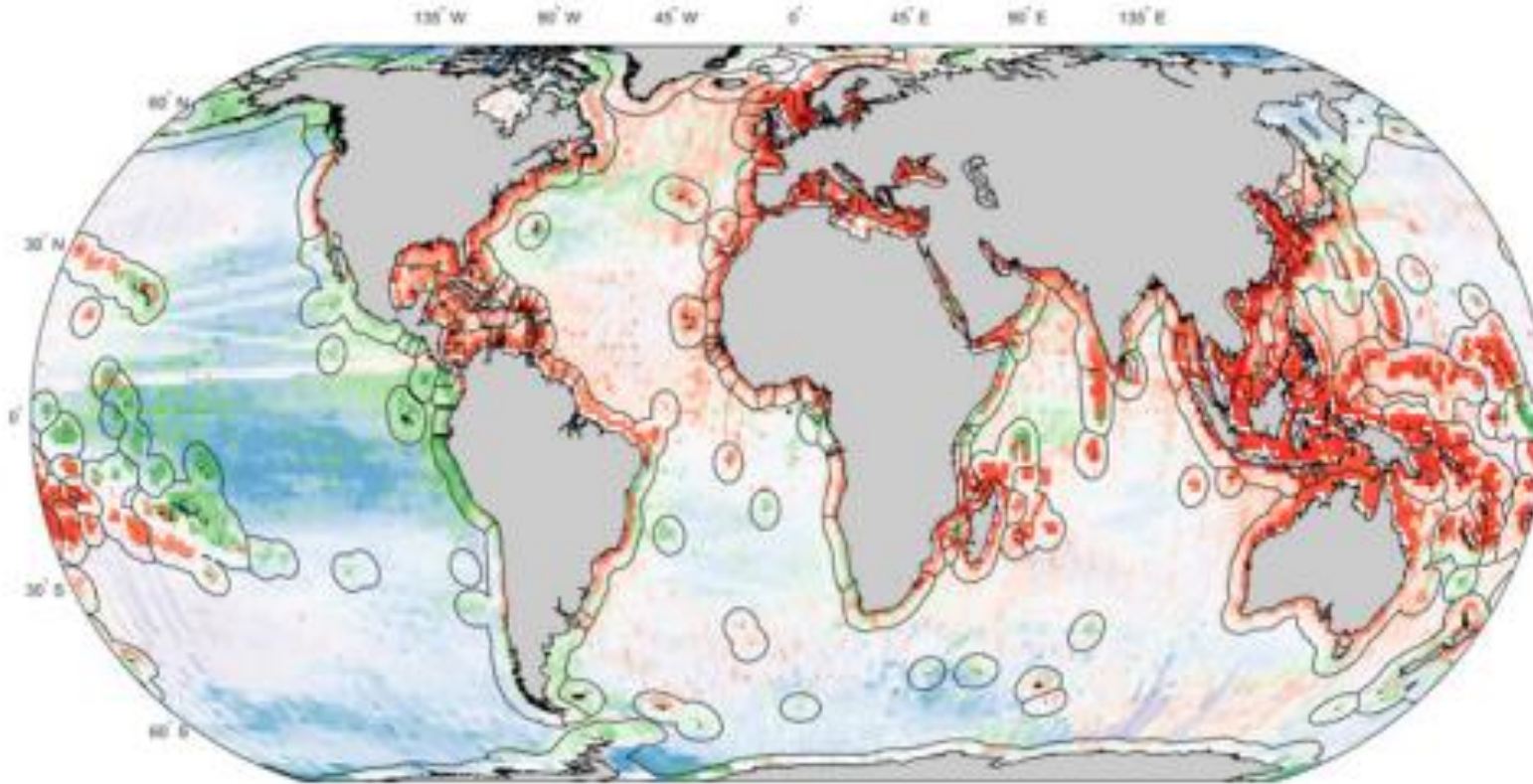


THE SUSTAINABLE DEVELOPMENT GOALS REPORT 2021: [UNSTATS.UN.ORG/SDGS/REPORT/2021/](https://unstats.un.org/sdgs/report/2021/)

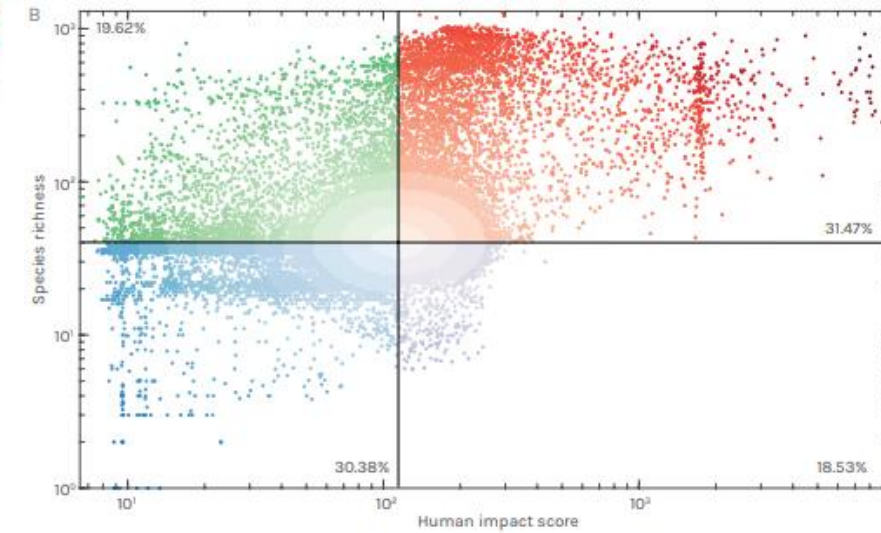
need for concrete measures to conserve marine biodiversity

Critical habitats and marine biodiversity

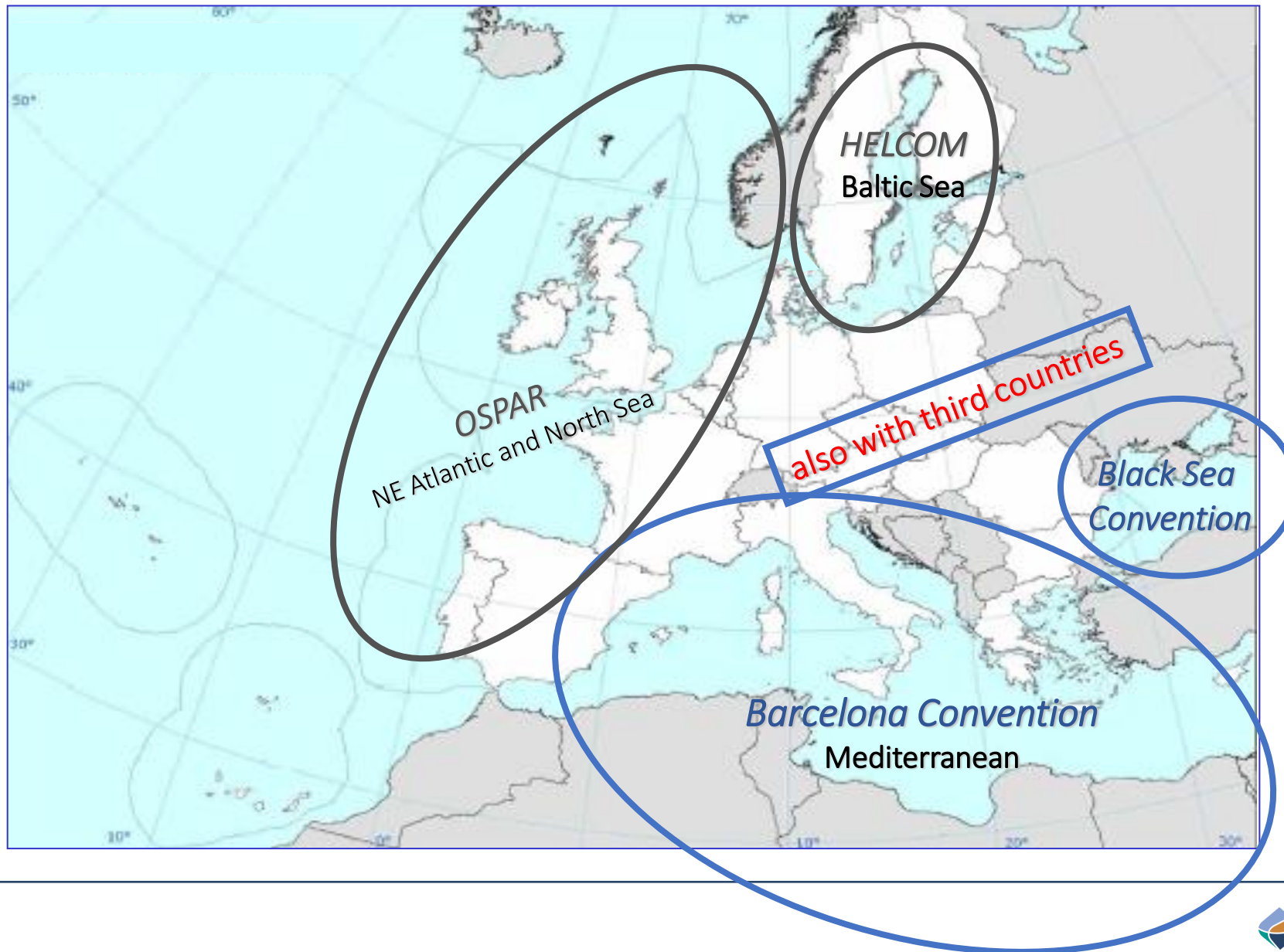
A



Marine biodiversity in relation to human impact



Conventions signed by EU states to protect the seas



Barcelona Convention for the Protection of the Mediterranean

‘Convention for the Protection of the Mediterranean Sea against the Risks of Pollution’

Legal and operational instrument of the **United Nations, Mediterranean Action Plan (UNEP-MAP)**

Signed on 16 February 1976

Entered into force in 1978

1995: Revision of the original agreement

New aspects: the Precautionary Principle

New objective: to eliminate possible sources of pollution

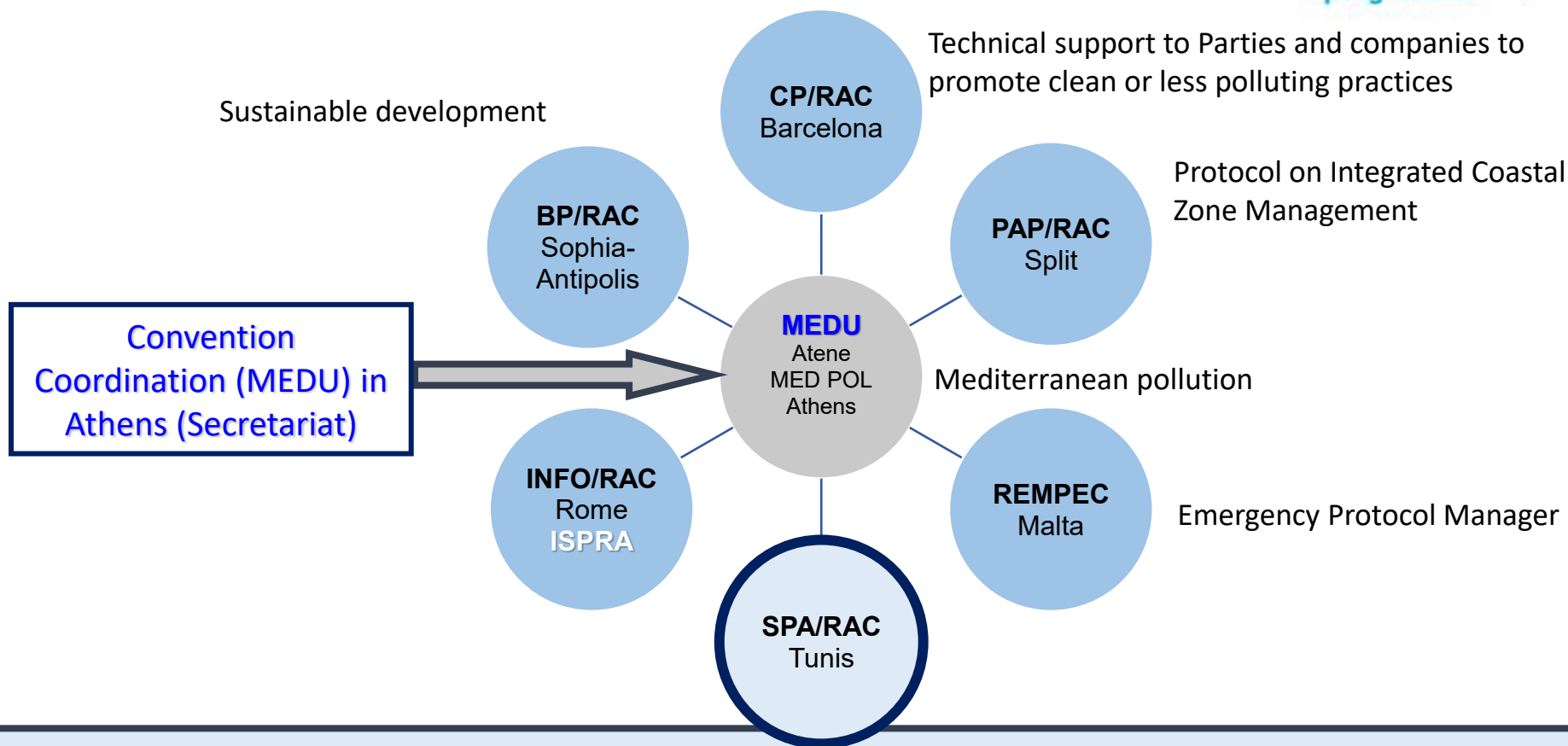
Les pays méditerranéens et leurs régions méditerranéennes.



Source : Gaussen & De Philipolis - FAO

This restructuring is known as MAP Phase II - formalisation of the SPAMI Protocol (Specially Protected Areas and Biological Diversity in the Mediterranean).

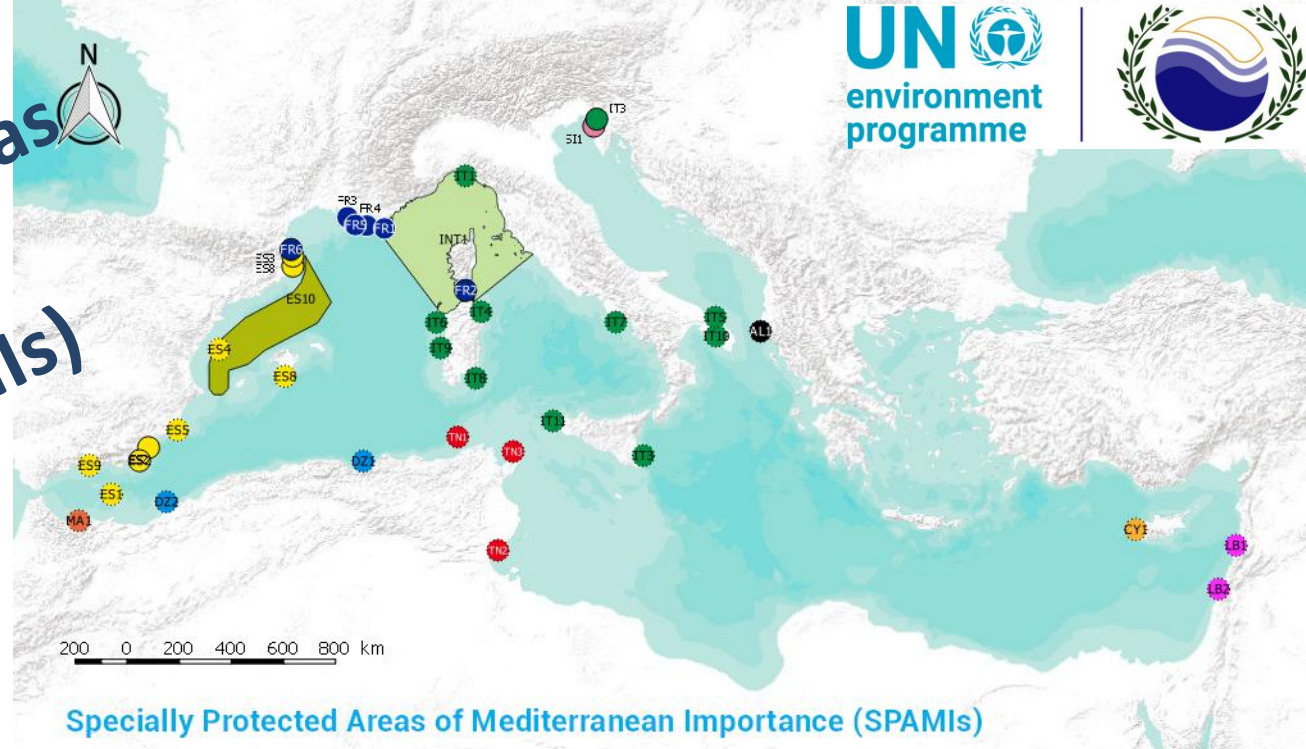
Barcelona Convention - organisation



SPAMI Protocol - Objectives:

- **establish Specially Protected Areas of Mediterranean Importance (SPAMIs)** to conserve biodiversity and maintain ecosystems specific to the Mediterranean
- contribute to the **preservation of biological diversity** in the region;

Specially Protected Areas of Mediterranean Importance (SPAMIs)



Specially Protected Areas of Mediterranean Importance (SPAMIs)

Albania

- AL1 - Karaburun Sazan National Marine Park (2016)

Algeria

- DZ1 - Banc des Kabyles Marine Reserve (2005)
- DZ2 - Habibas Islands (2005)

Cyprus

- CY1 - Lara-Toxeftra Turtle Reserve (2013)

France

- FR1 - Port-Cros National Park (2001)
- FR2 - Bouches de Bonifacio Natural Reserve (2009)
- FR3 - The Blue Coast Marine Park (2012)
- FR4 - The Embiez Archipelago - Six Fours (2012)
- FR5 - Calanques National Park (2017)
- FR6 - Cerbère-Banyuls Marine Nature Reserve (2019)

France, Italy, Monaco

- INT1 - Pelagos Sanctuary for the Conservation of Marine Mammals (2001)

Italy

- IT1 - Portofino Marine Protected Area (2005)
- IT2 - Miramare Marine Protected Area (2008)
- IT3 - Plemmirio Marine Protected Area (2008)
- IT4 - Tavolara-Punta Coda Cavallo Marine Protected Area (2008)
- IT5 - Torre Guaceto Marine Protected Area and Natural Reserve (2008)
- IT6 - Capo Caccia-Isola Piana Marine Protected Area (2009)
- IT7 - Punta Campanella Marine Protected Area (2009)
- IT8 - Capo Carbonara Marine Protected Area (2012)
- IT9 - Penisola del Sinis - Isola di Mal di Ventre Marine Protected Area (2012)
- IT10 - Porto Ceseo Marine Protected Area (2012)
- IT11 - Egadi Islands Marine Protected Area (2019)

Lebanon

- LB1 - Palm Islands Nature Reserve (2012)
- LB2 - Tyre Coast Nature Reserve (2012)

Morocco

- MA1 - Al-Hoceima National Park (2009)

Slovenia

- SI1 - Landscape Park Strunjan (2019)

Spain

- ES1 - Alboran Island (2001)
- ES2 - Cabo de Gata-Níjar Natural Park (2001)
- ES3 - Cap de Creus Natural Park (2001)
- ES4 - Columbretes Islands (2001)
- ES5 - Mar Menor and Oriental Mediterranean zone of the Region of Murcia coast (2001)
- ES6 - Medes Islands (2001)
- ES7 - Sea Bottom of the Levante of Almería (2001)
- ES8 - Archipelago of Cabrera National Park (2003)
- ES9 - Maro-Cerro Gordo Cliffs (2003)
- ES10 - Cetaceans Migration Corridor in the Mediterranean (2019)

Tunisia

- TN1 - La Galite Archipelago (2001)
- TN2 - Kneiss Islands (2001)
- TN3 - Zembra and Zembretta National Park (2001)

Main European directives concerning the sea



IAS -Regulation (EU) No 1143/2014 on invasive alien species

Habitats -Habitats Directive

Birds -Birds Directive

CFP -Common Fisheries Policy;

Food standards -Regulation (EC) No 1831/2003 on food additives

Nitrates -Nitrates Directive

UWWTD -Urban Waste Water Treatment Directive

Water Framework Directive (WFD)

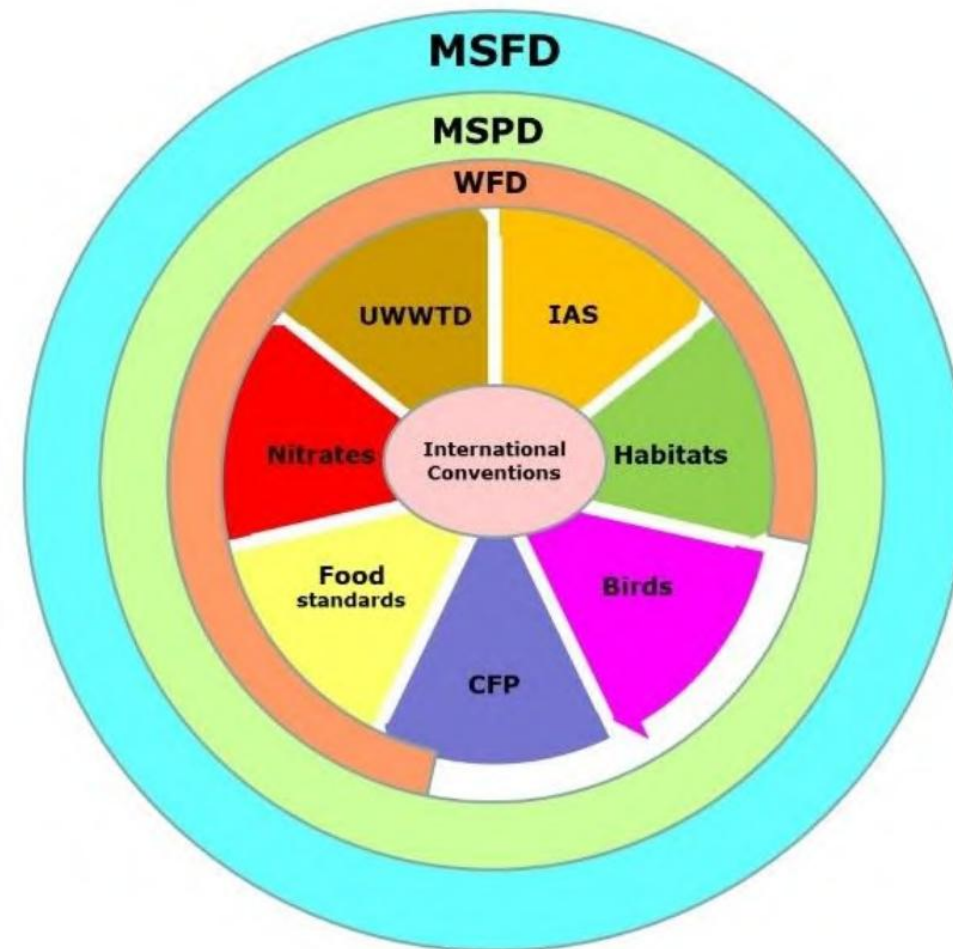
Maritime Spatial Planning Directive (MSPD)

MSFD - Marine Strategy Framework Directive

• **2030 EU Biodiversity Strategy**

• **EU Restoration Regulation**

Leonardo Iunesi



Da: EC_SWD(2020) 62 final

EU BIODIVERSITY STRATEGY for 2030 - MAIN TARGETS



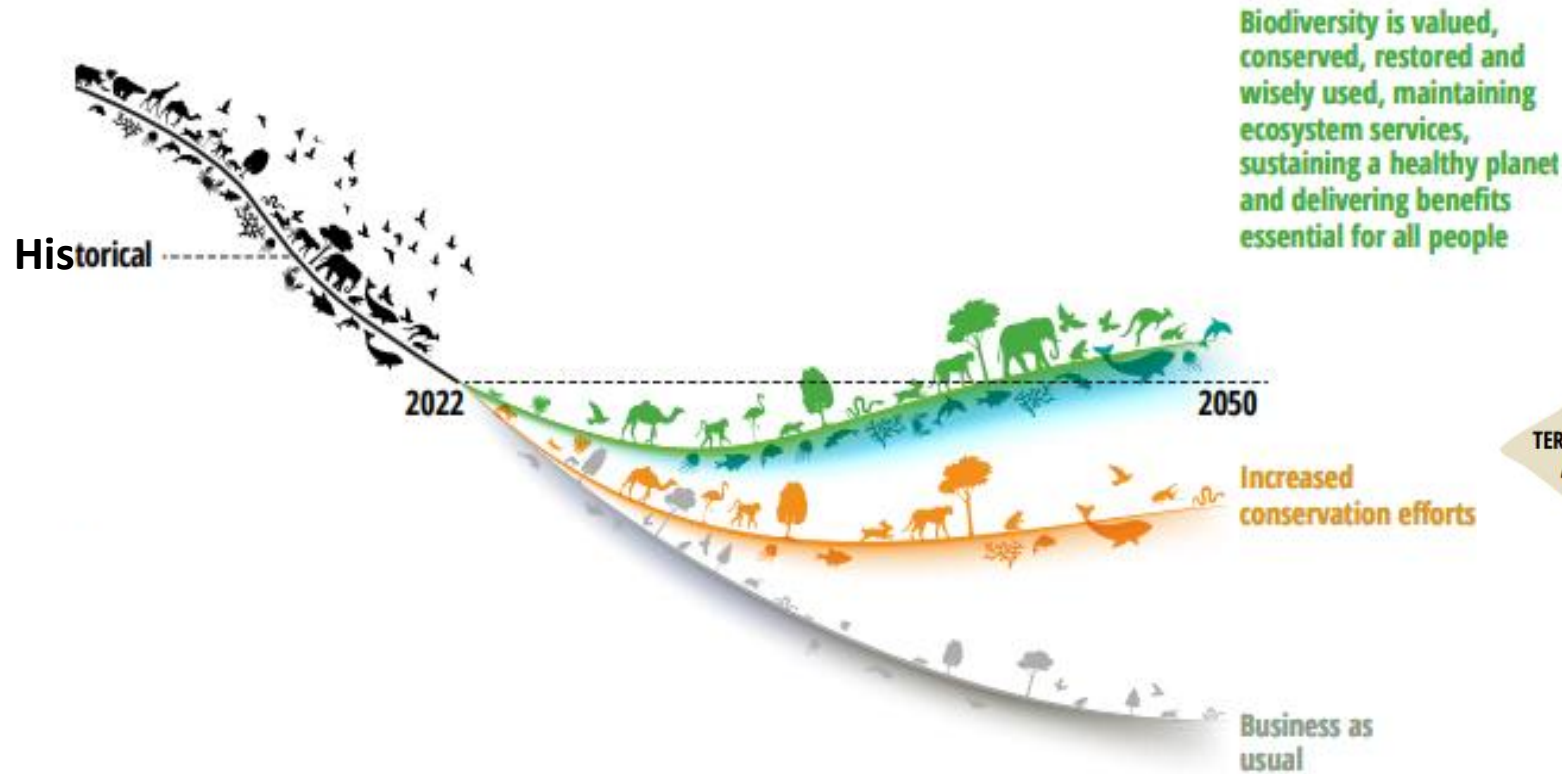
a) Create a European Network of Protected Areas to protect:

- at least **30%** of the land area and **marine environment** must be protected through **effectively managed protected areas** (*Target 3 of the Kunming-Montreal Global Biodiversity Framework (GBF) CBD*);
- at least **10%** of the land area and **marine environment must be strictly protected** (the areas with the greatest biodiversity, starting with MPAs and Natura 2000 sites);

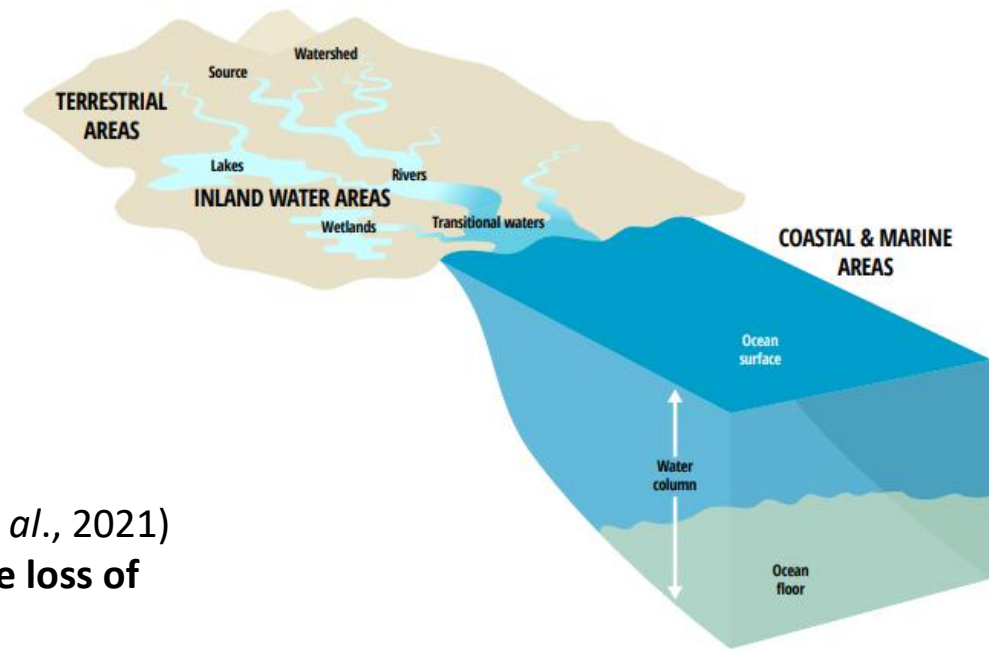
b) European nature restoration regulation

Italy's biodiversity strategy for 2030: fully in line with the European one, accompanied by a national plan for the ecological transition

Target 3: Reverse the decline in biodiversity and put nature on a path to recovery

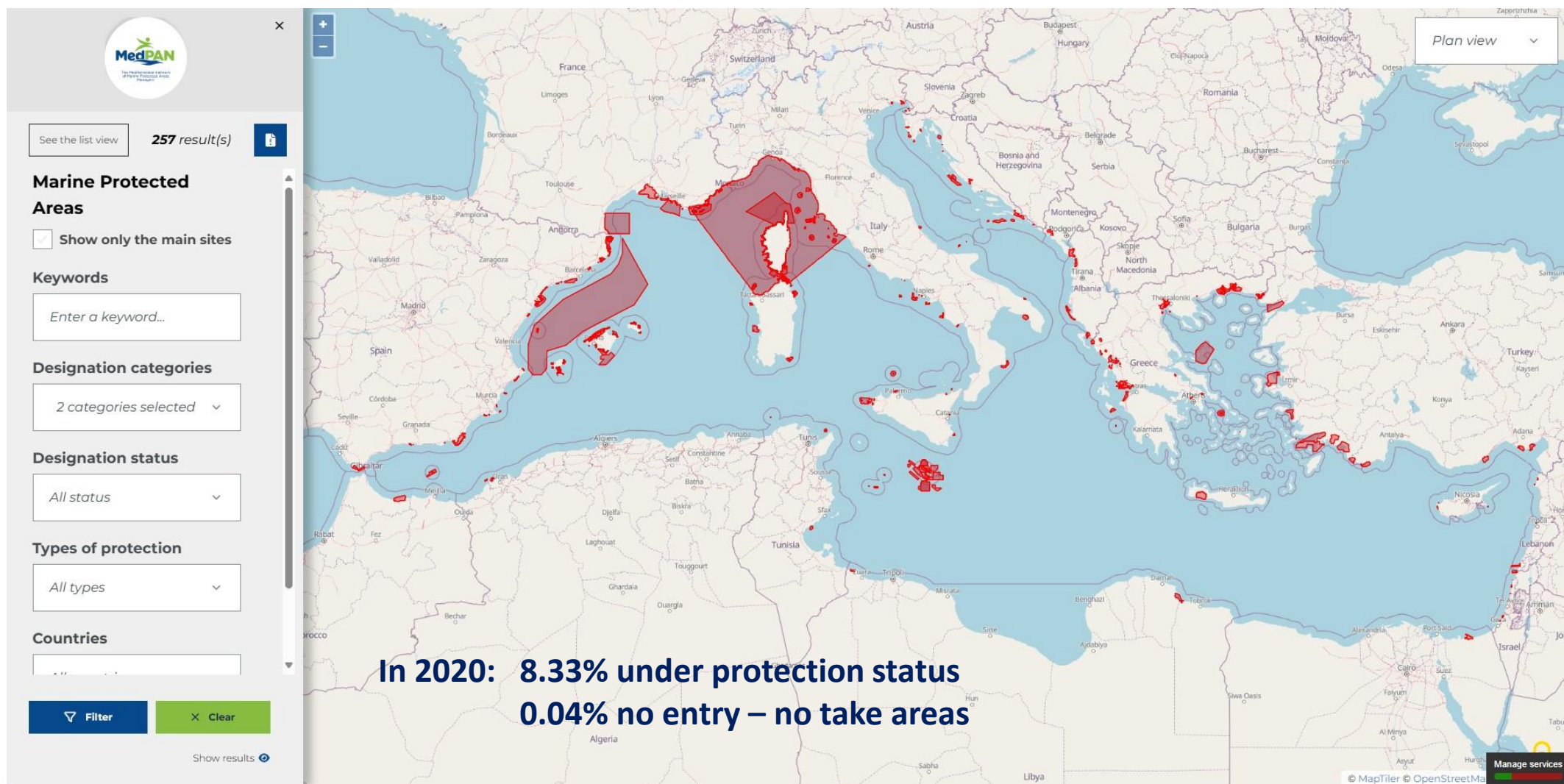


In three realms



“Nature-Positive” - Definition given in the document *Global Goal for Nature* (Locke et al., 2021) and expressed by NPI(Nature Positive Initiative Partnership): **Halting and reversing the loss of nature by 2030 with reference to 2020, to achieve full recovery by 2050.**

Marine protected areas in the Mediterranean



Barcelona Convention support to OECMs to reach the
Post-2020 GBF targets in the Mediterranean

10 September 2024

Asma Kheriji, SPA Programme Officer



Mediterranean
Action Plan
Barcelona
Convention



The POST-2020 MCPAs and OECMs Strategy

Adopted by the Barcelona Convention COP 22 (Antalya, Türkiye, 7-10 Dec. 2021)

Reaching the global target in terms of area-based conservation implies numerous and ambitious quantitative and qualitative improvements to be made at different levels (5 pillars):



1) By 2030, at least 30 % cent of the Mediterranean Sea is **protected and conserved** through well connected, ecologically representative, and effective **systems** of marine and coastal protected areas (MCPAs) and other effective area-based conservation measures (**OECMs**), ensuring adequate geographical balance, with the focus on areas particularly important for biodiversity

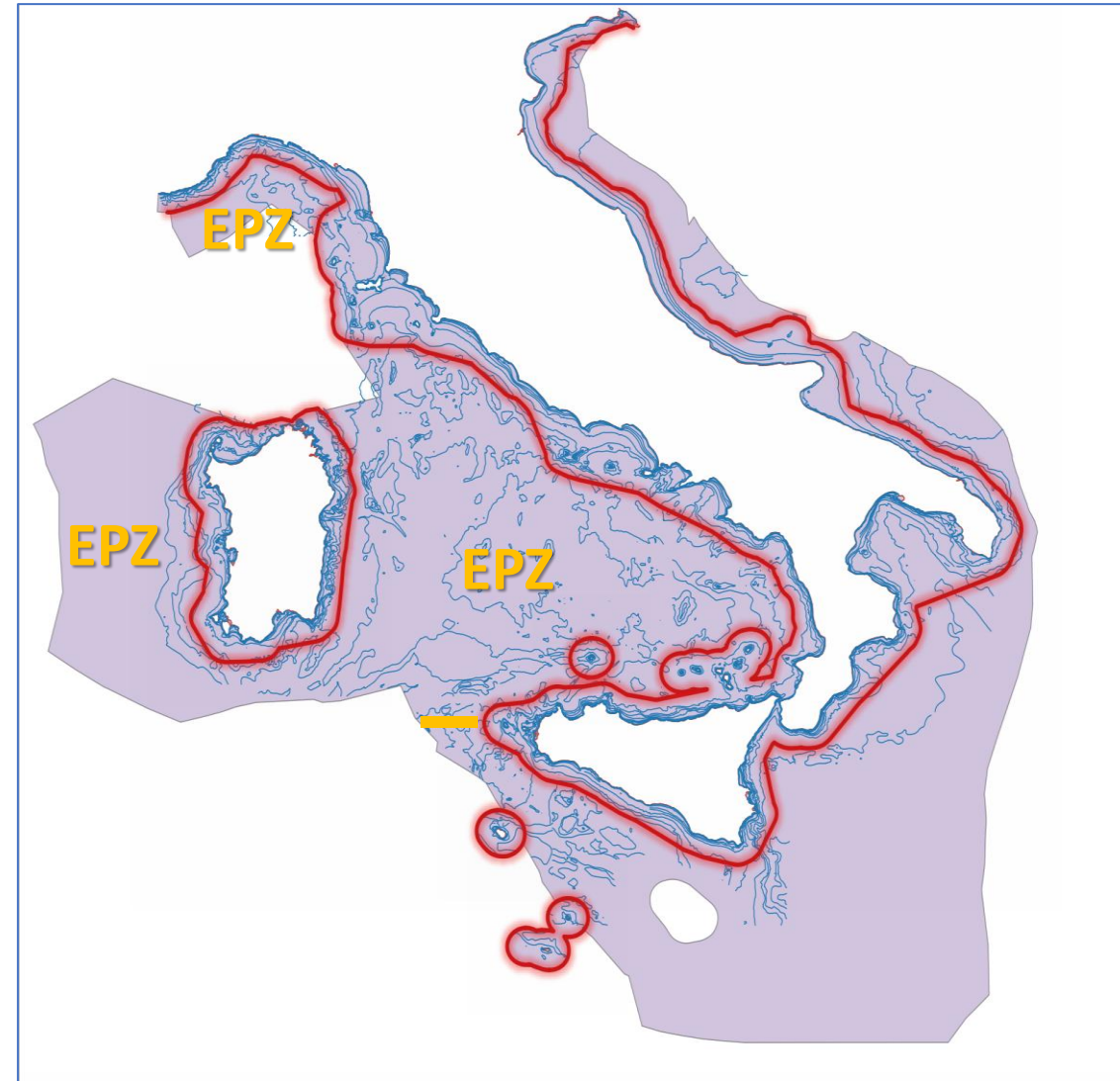
2) By 2030, the **number** and **coverage** of MCPAs with **enhanced protection levels** is increased, contributing to the recovery of marine ecosystems



SPATIAL AREA of reference - Italian Waters

= what is our 100 per cent?

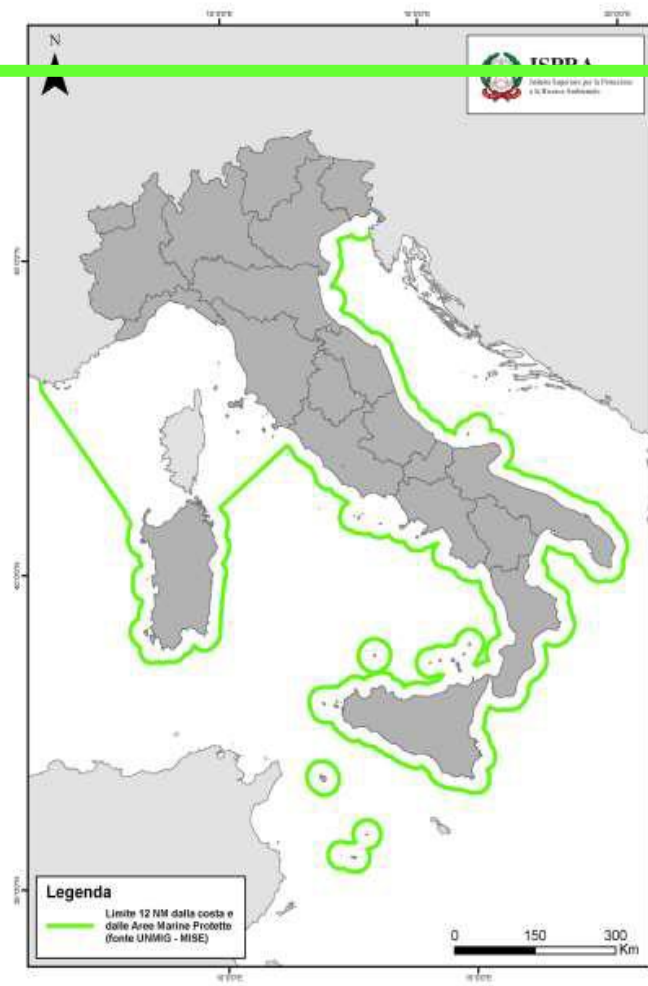
- *Territorial waters*
- *Ecological protection zone (EPZ)* (GU n. 293 - 17-12-2011);
- *Instituting Economic Exclusive Zone EEZ* (GU n.148 - 23-06-2021) – existence of disputes;



Objective: Protect at least 30% of the marine environment - OECMs

Principal active measures in the Italian seas that can be classified as OECMs (other effective conservation measures)

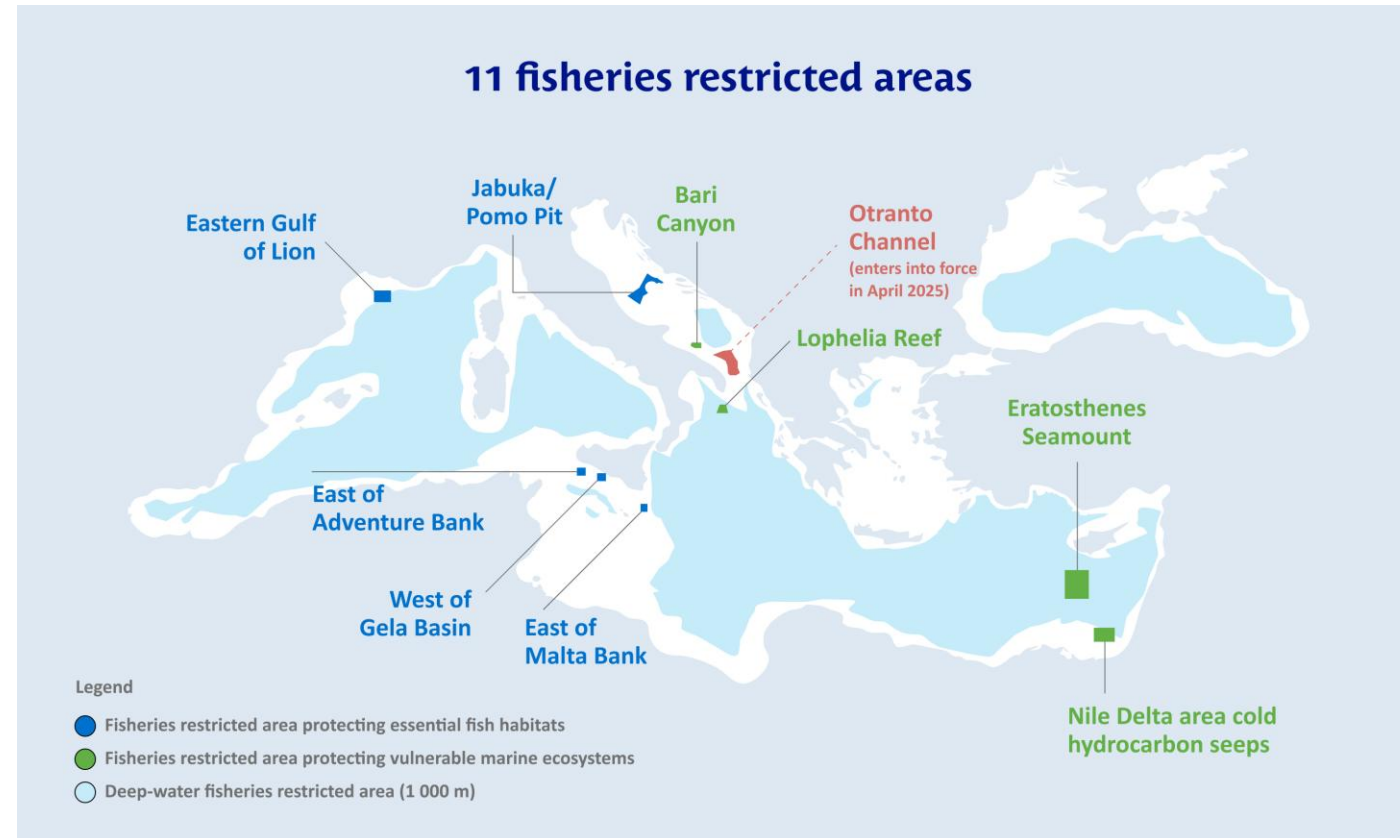
- D.L. Prestigiacomo (22/06/2012 n° 83) which
“for the protection of the environment and the ecosystem ... will prohibit prospecting, exploration as well as the cultivation of liquid and gas hydrocarbons at sea ... in the sea areas located within 12 miles from the coastlines along the entire national coastal perimeter and from the outer perimeter of the above-mentioned protected marine and coastal areas ...” as revised by the new D.L. 18/11/2022, no. 176 ‘Urgent support measures in the energy sector and public finance’
 - According to the provisions of this Decree-Law, Italy, in the 6th CBD National Report of 2019, declared to protect 19.1% of its marine areas.
- The ban of industrial fishing (trawl & purse sein) within 3 nm from the coast or at depths shallower than 50 m



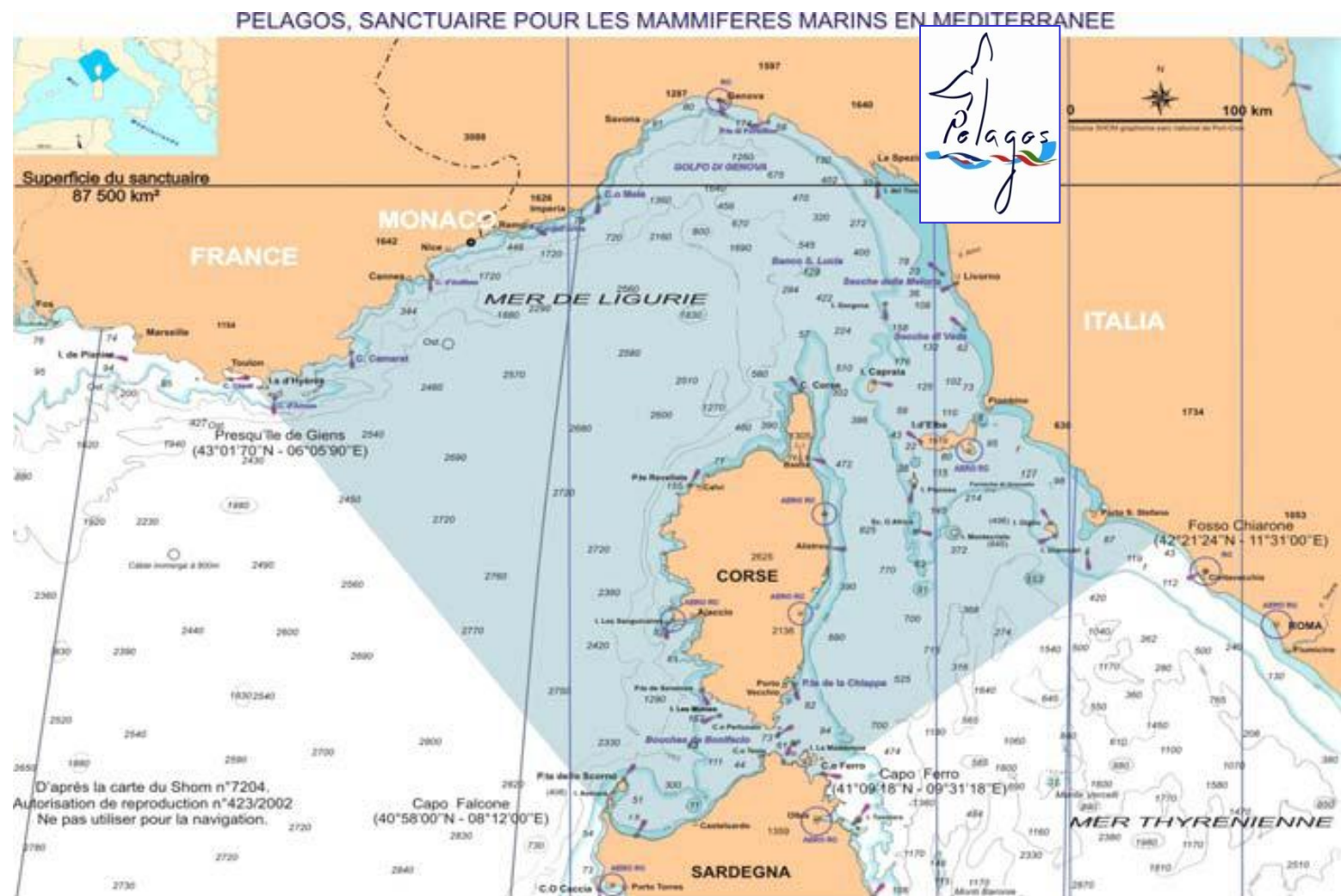
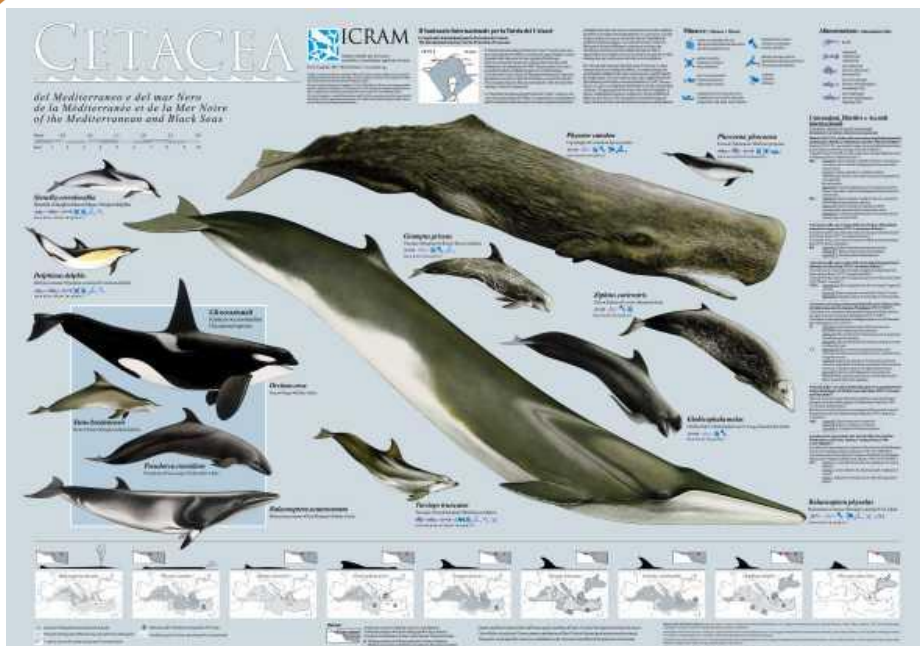
Objective: Protect at least 30% of the marine environment - OECMs

Principal FAO measures in place in the Mediterranean that could be classified as OECMs: fishing restricted areas (FRAs):

- **Trawling prohibition at depths beyond 1,000 meters** - declared in 2005 by the General Fisheries Commission for the Mediterranean - FAO, to protect benthic marine habitats (VMEs) and the slow-growing fish that live there;
- **Prohibition of fishing in areas hosting Essential Fish Habitats (EFHs)**, some of which are in close proximity to Italian waters (Pomo Pit, Bari Canyon, Otranto channel, Lophelia reef (off Santa Maria di Leuca) and two in the Sicilian Channel);



Pelagic Marine Protected Areas - Pelagos Sanctuary



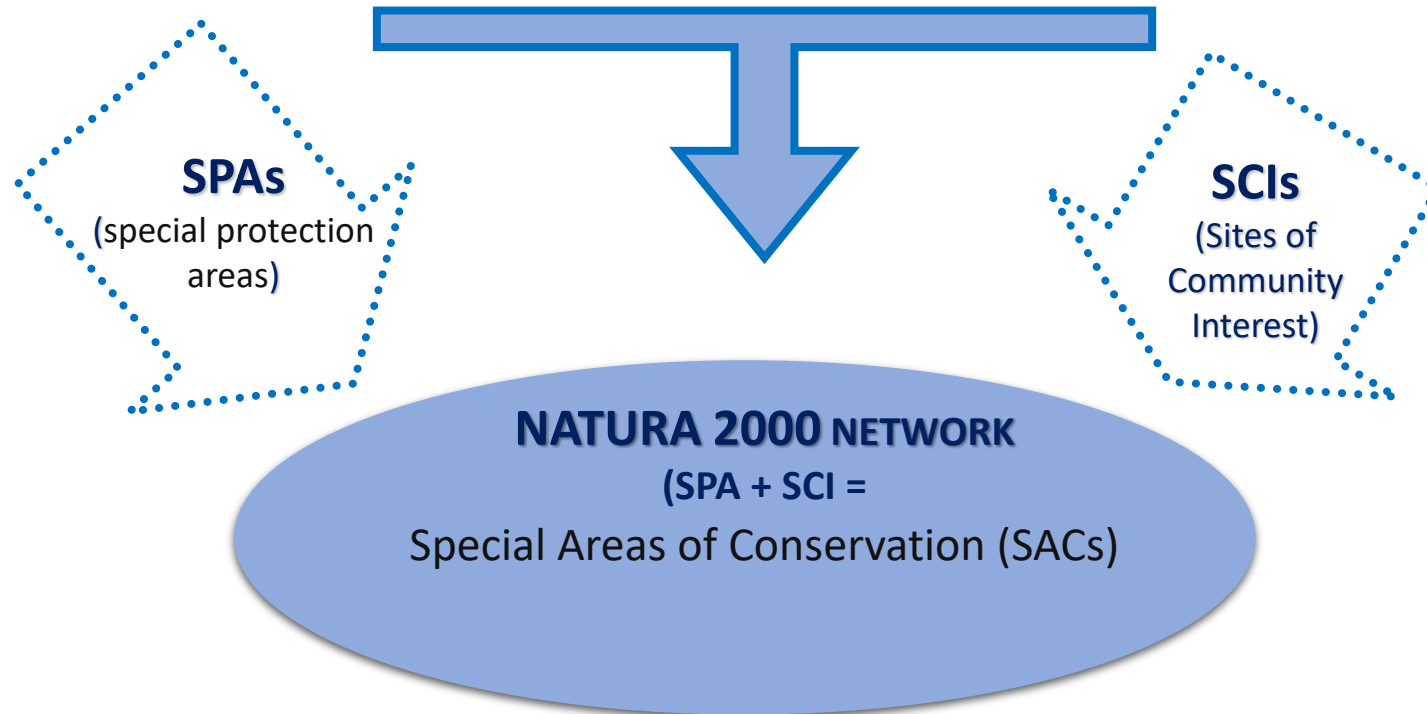
EU NATURA 2000 NETWORK AND THE SEA



Creation of a specific European network of protected areas

Birds Directive CE 409/79 - 2/04/'79 for the Conservation of Wild Birds

Habitats Directive CEE 43/92 of the Council of 21 May '92 on the conservation of natural habitats and of wild fauna and flora



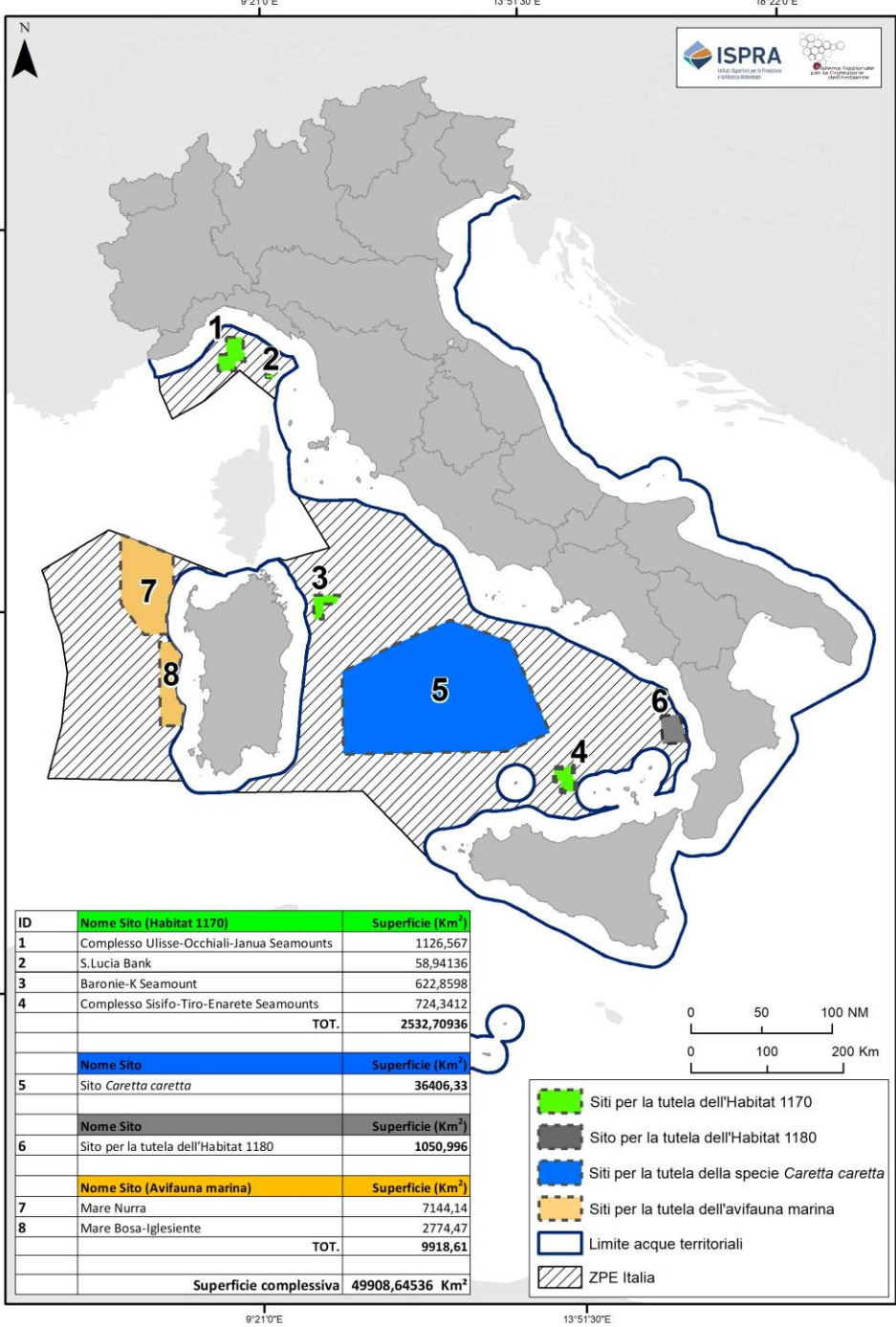
SCIs & SPAs per Region

Ecological Protection Zone
(GU n.293 - 17-12-2011)



Infringement procedure 2028/2021
for incomplete Natura 2000 network for certain species (*Tursiops truncatus*, *Caretta caretta*, seabirds) and habitats **(1170, 1180)** – especially to protect deep habitats: **seamounts**

REGIONE	Natura 2000		
	n. siti	superficie a	
		sup. (ha)	
Oltre le acque territoriali	2	0	
**Abruzzo	60	387.434	3
Basilicata	65	174.658	1
Calabria	185	289.805	1
Campania	123	373.031	2
Emilia Romagna	159	266.888	1
***Friuli Ven. Giulia	69	153.751	1
**Lazio	200	398.086	2
Liguria	134	139.959	2
Lombardia	246	373.555	1
**Marche	96	140.783	1
**Molise	88	118.734	2
*Piemonte	152	404.005	1
PA Bolzano	44	150.047	2
PA Trento	143	176.217	2
Puglia	91	402.579	2
Sardegna	128	454.672	1
Sicilia	245	470.893	1
Toscana	158	327.005	1
Umbria	102	130.094	1
*Valle d'Aosta	28	98.946	3
***Veneto	131	414.345	2
TOTALE	2649	5.845.489	1



ITALIAN MPAs - MAIN CHARACTERISTICS

multi-objective - to ensure: - environmental conservation

- sustainable use of coastal marine resources

Multi-level zoning,
with higher protection intensity in the
presence of high environmental
vulnerability:

Zone A: No entry - no take

Zone Bs: Entry - no take

Zone B: Entry - regulated taking

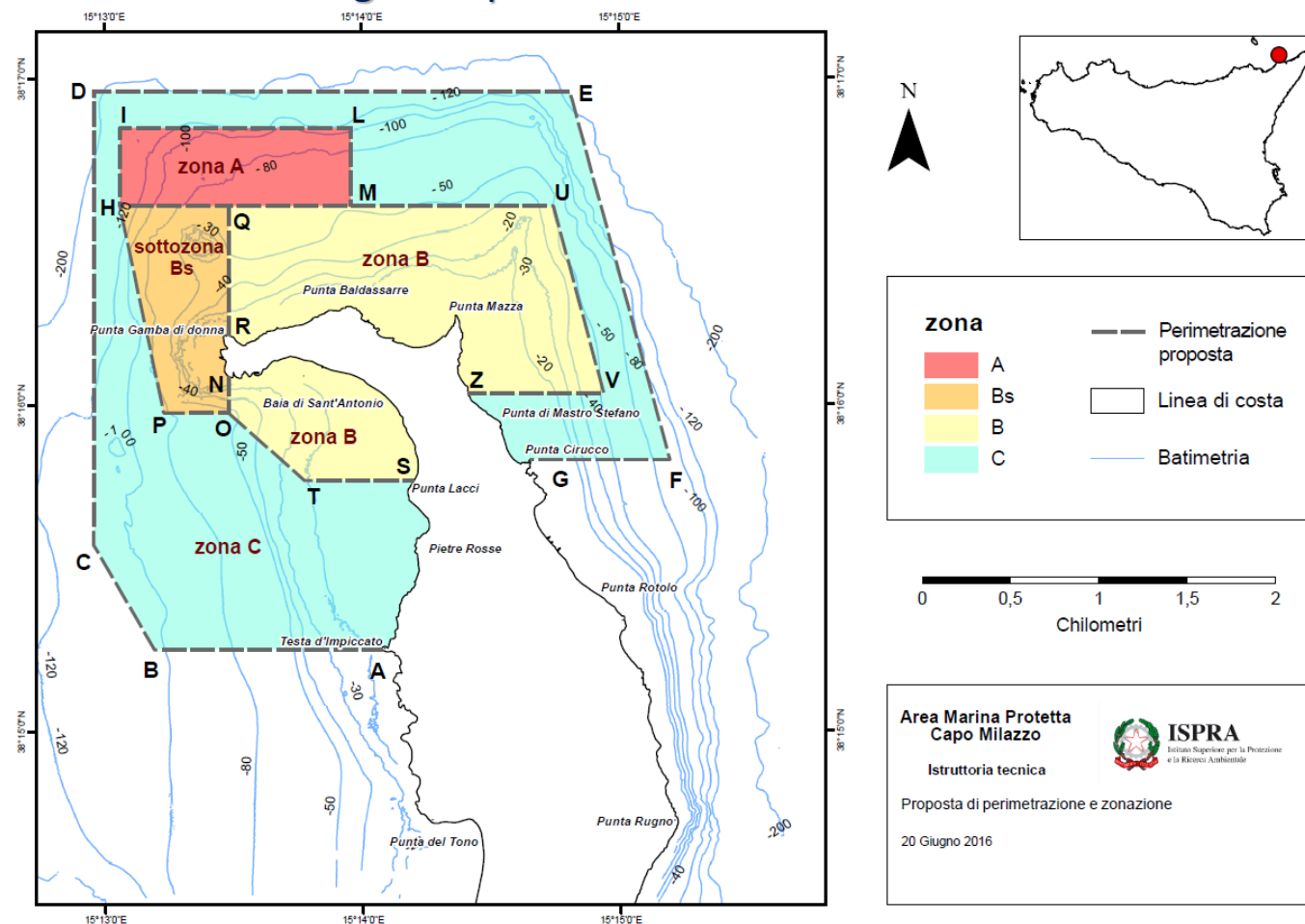
**Zone C: Entry - regulated taking with
lower restrictions**

Zoning must :

- Promote protection
- Avoid conflicts of use

**Zoning: first step in creating a new MPA and
primary management tool**

Zoning example



“Strict protection”: term adopted ‘only’ by the European Biodiversity Strategy, which is currently being defined at European level

It is very important for Italian MPAs to be considered under strict protection because it is already in them:

- **Prohibited:**
 - **industrial fishing** (trawling and purse seining) (in zones A, Bs, B and C)
 - **spearfishing**
- **Allowed:** **only local artisanal fishing**, sustainable and properly regulated (with the involvement of fishermen)



MPAs and their local communities should / can play a pilot role in defining management solutions and developing increasingly effective, sustainable and participatory activities for the fruition of the marine environment

54 Areas of Establishment - 32 MPAs
already established



ISPRA PNRR projects - activities of direct interest to MPAs

DIGITAP PROJECT

Sub-investment 3.2a) Nature Conservation - monitoring of pressures and threats on species and habitats - PNRR Measure M2C4 Investment 3.2 Digitisation of national parks and MPAs



Equipping the MPA system with digital equipment to

- monitor environmental aspects (species and habitats)
- surveillance and control (illegal activities)
- use (human activities)



Marine Ecosystem Restoration Project

Investment 3.5 Restoration and protection of seabeds and marine habitats – With numerous interventions:

- A6-A8 – **Active Restoration:** ‘Activities for the restoration of coralligenous and/or Posidonia and/or *Cystoseira* habitats’ .
- A9-11 – **Passive Restoration:** ‘Activities for the protection of sensitive habitats with mooring fields’.
- A16-A18 – **National seagrass mapping:** ‘Surveys for the mapping of coastal LIDAR habitats’ (*Posidonia*, *Cymodocea*, *Zostera*)’
- A13-A15 – **National seamounts mapping:** ‘Mapping service for deep-water marine habitats of conservation interest on seamounts and on circalittoral and bathyal rocky outcrops’



- Active restoration in some MPAs
- Passive restoration, to equip MPAs and N2k sites with mooring systems to protect sensitive habitats (*Posidonia* and coralligenous)
- Updated national mapping of all marine seagrasses (*Posidonia*, *Cymodocea*, *Zostera*) as a key management support tool
- Study of the majority of Italian **seamounts** located beyond 12mn from the coast (**79**) for their protection and restoration

To comply with the requirements of the CBD, the Barcelona Convention and the European Biodiversity Strategy, Mediterranean countries are finally demonstrating a significant commitment to protecting the Mediterranean.

A number of new MPAs are being established, and activities aimed at formalising the existence of OECMs are beginning to materialise.

Feedback on this new phase will be available in the coming months, when a new assessment of the Mediterranean region will be presented. RAC/SPA is currently conducting this assessment with the support of MAPAMED and MedPan.

Research is crucial for contributing to the achievement of the EU 2030 Biodiversity Strategy goals as well as the identification of (new) effective management measures to promote the protection of biodiversity and the participation of local communities

Effective management of protected areas **requires:**

- **real implementation**
- **verification of the effectiveness**

Thank you

leonardo.tunesi@isprambiente.it

www.isprambiente.gov.it/it