

# PANEL #3

## Integrated ecosystem monitoring & management: addressing key challenges for the Mediterranean

Chair: Sylvain Petit

Programme Officer PAP/RAC – UNEP/MAP



“Bridging the Science-Practice-Policy Gaps  
in Mediterranean Biodiversity Protection”

*23-24 October 2017, Barcelona*

**MED Biodiversity Protection Community**

«... the issues related to the sea can no longer be unknown, and (our) duty is to point out, to study with the available means, to be a bridge over the *iron curtain*, by supporting the efforts of researchers in an atmosphere of comprehension. »

« Even though the Mediterranean seems to be a well studied sea, is it well known? »

***Annals of the Society of natural sciences of Toulon and the Var, France (1949)***

# PANEL OBJECTIVES

1. Reflect on Mediterranean and EU policies and legal frameworks towards integrated ecosystem monitoring and management to reach GES
2. Understand data availability & data gaps
3. Highlight strategies, mechanisms and best practices to bridge Science-Practice-Policy gaps

# Dynamic of the PANEL #3

- Set the stage
- The Panelists (10 min/pers.)
- The Guest challengers (5 min/pers.)
- Reaction of the panelists + discussion with the audience

# PANEL 3

## Integrated ecosystem monitoring & management: Addressing key challenges for the Mediterranean

**Chair:** Sylvain Petit, Program Officer, UNEP MAP PAP/RAC

**Panelists:**

- Antoine Lafitte, Programme Officer, UNEP MAP Plan Bleu
- Simona Simoncelli, EMODnet Med Sea Checkpoint
- Daniel Palacios, AMB, OPERAs Barcelona's Hybrid Dunes Project
- Simona Frascchetti, Università del Salento, Project AMAre
- Alicia Sánchez-Valverde, SARGA, Project WETNET

**Guest challengers:**

- Emiliano Ramieri, Thetis - EU MSP Platform
- Hugues Heurtefeux, EID Méditerranée, Project POSBEMED
- Samir Jodanovic, Development Agency of the Una-Sana canton, Project ECOSustain
- Christian Perennou, Tour du Valat

# Monitoring and management of coastal and marine zone within the Barcelona Convention

Speakers: Antoine Lafitte & Sylvain Petit

Organisations: Plan Bleu & CAR/PAP



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# Barcelona Convention System



- Action Plans (e.g. ICZM, SCP, wastes) & strategies (e.g. MSSD, MSST)
- Regional Frameworks (e.g. climate change)

- Adopted in 1975, amended in 1995
- Mediterranean Action Plan 1976
- 22 Contracting Parties
- 7 protocols:
  - Hazardous waste,
  - Dumping,
  - ICZM,
  - Land Based Sources,
  - Offshore,
  - Prevention & emergency,
  - Special protected areas

# EcAp & IMAP vs MSFD

## ECOSYSTEM APPROACH

Guiding principle to MAP PoW, with ultimate objective of achieving the Good Environmental Status (GES) of the Mediterranean Sea and Coast

## Integrated Monitoring and Assessment Programme (IMAP)

- determine **GES** and targets and to prepare an in-depth socio-economic analysis of human activities impacting, or benefitting from the quality and ecological health of coastal and marine ecosystems
- in line with the **MSFD requirements**, but also calls for the consideration of the land parts of the coastal areas, with particular attention to Land sea interactions (LSI)

## EcAp-MED I (2012-2015) and EcAp-MED II (2015-2018) projects

- EcAp roadmap in synergy and coherence with the implementation of the European Union (EU) Marine Strategy Framework Directive (MSFD)
- EcApMED II: 3 components + a specific activity dedicated to science-policy interface strengthening for EcAp implementation

# MSSD & H 2020

## **MSSD**

- Adopted by the Barcelona Convention contracting parties in 2016
- Strategic guiding document to translate the 2030 Agenda for Sustainable Development at the regional, sub regional and national levels
- Thematic scope and structure: 6 objectives with strategic directions, targets & flagship initiatives

## **Horizon 2020 Initiative**

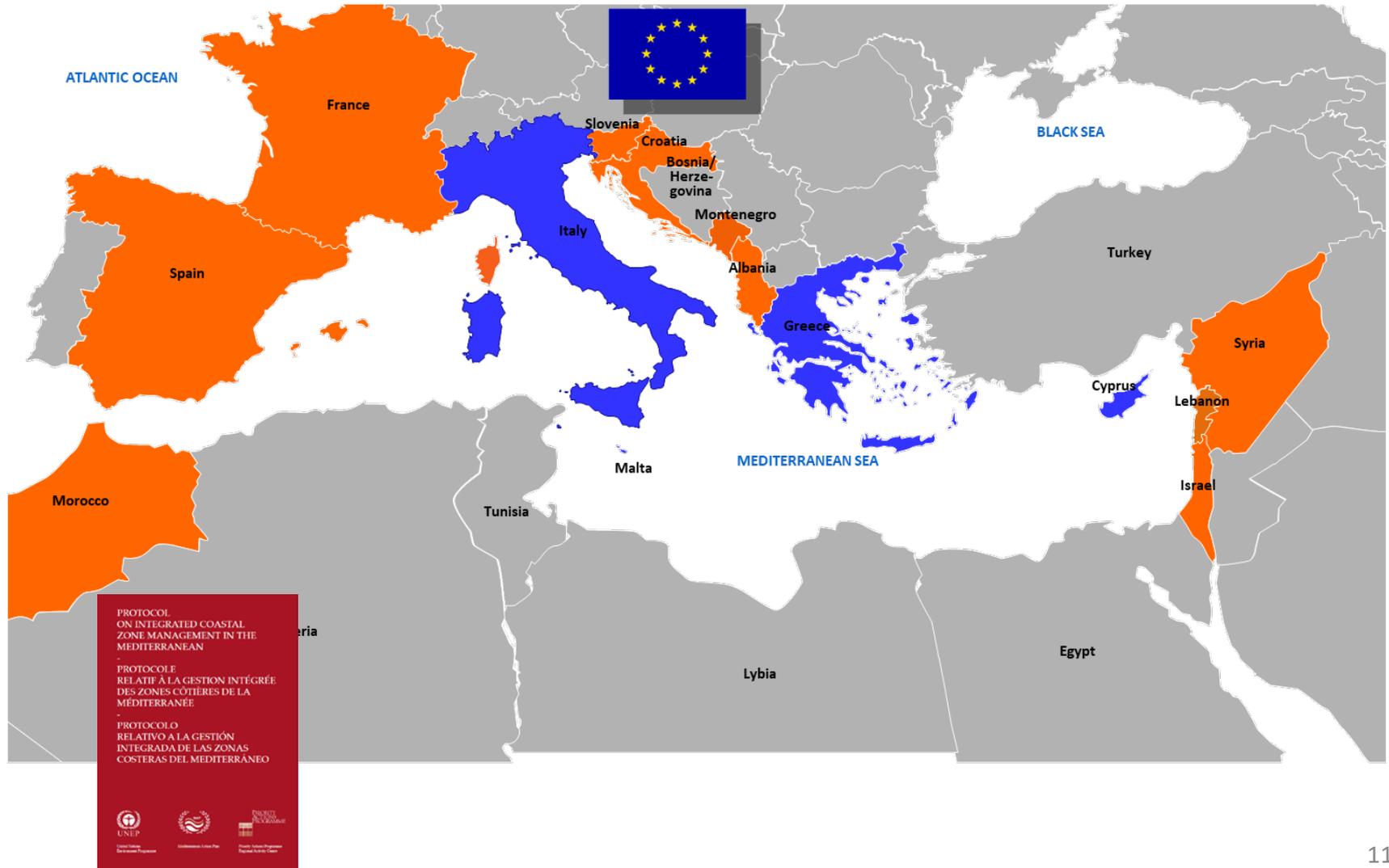
- De-pollute the Mediterranean by the year 2020 by tackling the sources of pollution that account for around 80% of the overall pollution of the Mediterranean Sea: municipal waste, urban waste water and industrial pollution.
- In line with EOs of EcAp dealing with Pollution, Contaminants, Eutrophication and Marine Litter.
- MedPOL is working on this to review and adapt the national monitoring programmes.

# Coast & Hydrography indicators in EcAp

## PAP/RAC assists the implementation of Coast (EO7) and Hydrography (EO) indicators

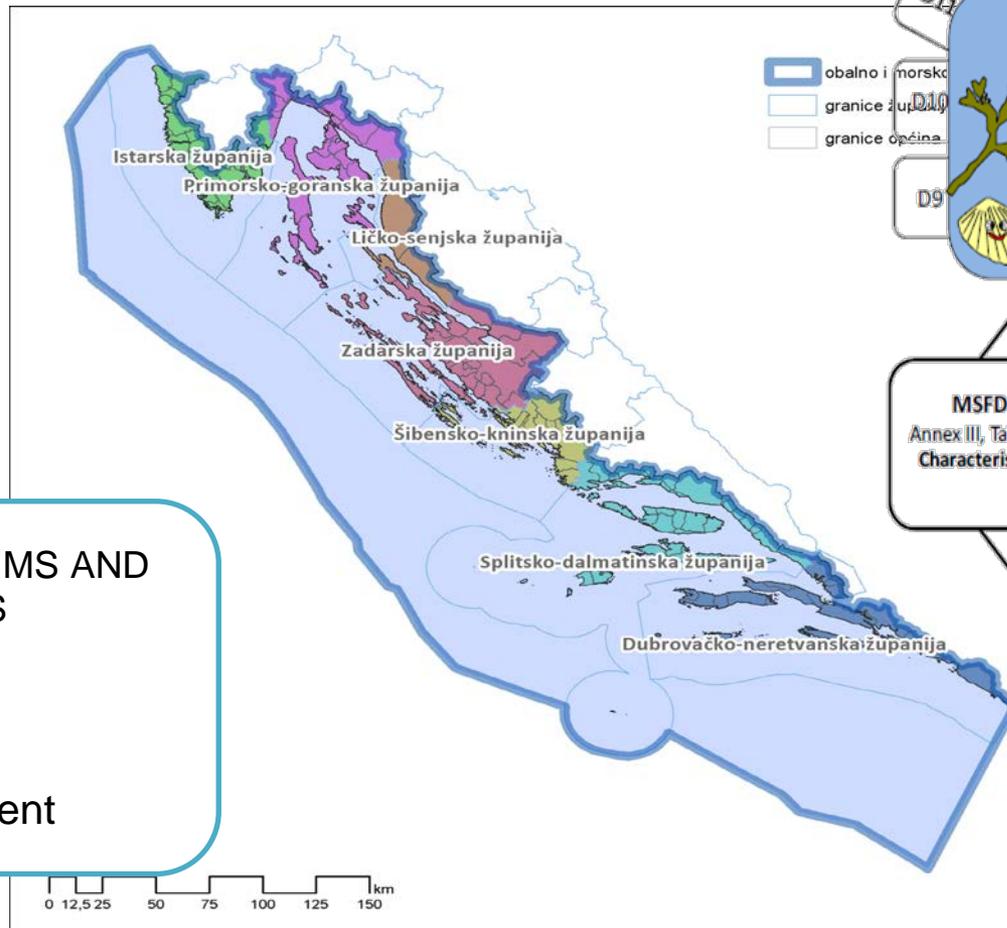
- EO7 common indicator on Hydrography ("Location and extent of the habitats impacted directly by hydrographical alterations");
- EO8 common indicator on Coast ("Length of coastline subject to physical disturbance due to the influence of manmade structures"); and
- EO8 candidate common indicator on Coast ("Land-use change").

# ICZM in the Mediterranean



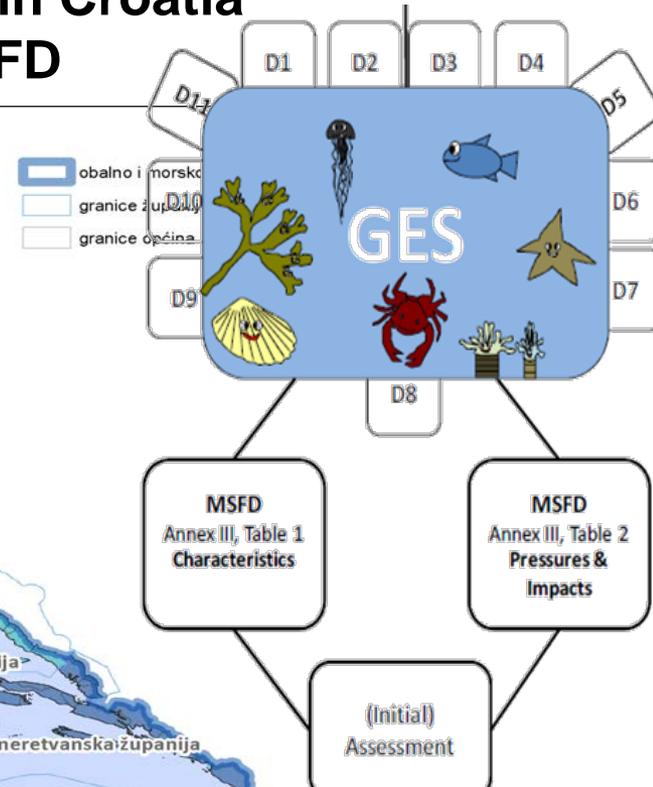
# Integrated approaches in PAP/RAC projects

## National strategy for the coasts and the sea in Croatia >> Integrated strategy : ICZM Protocol & MSFD



### COASTAL ECOSYSTEMS AND LANDSCAPES

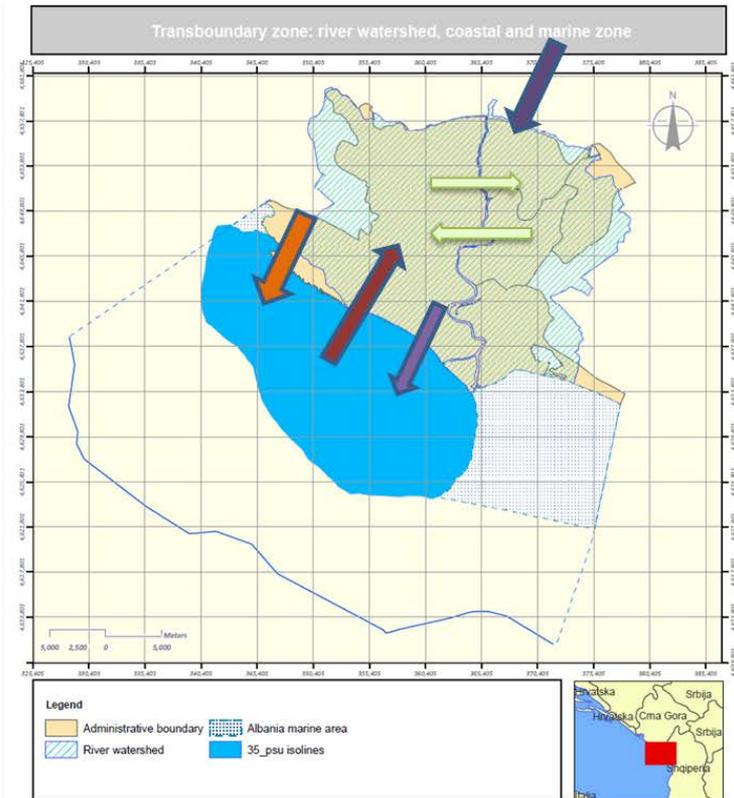
- Spatial planning
- Climate change
- Maritime domain
- Enabling environment



# Integrated approaches in PAP/RAC projects

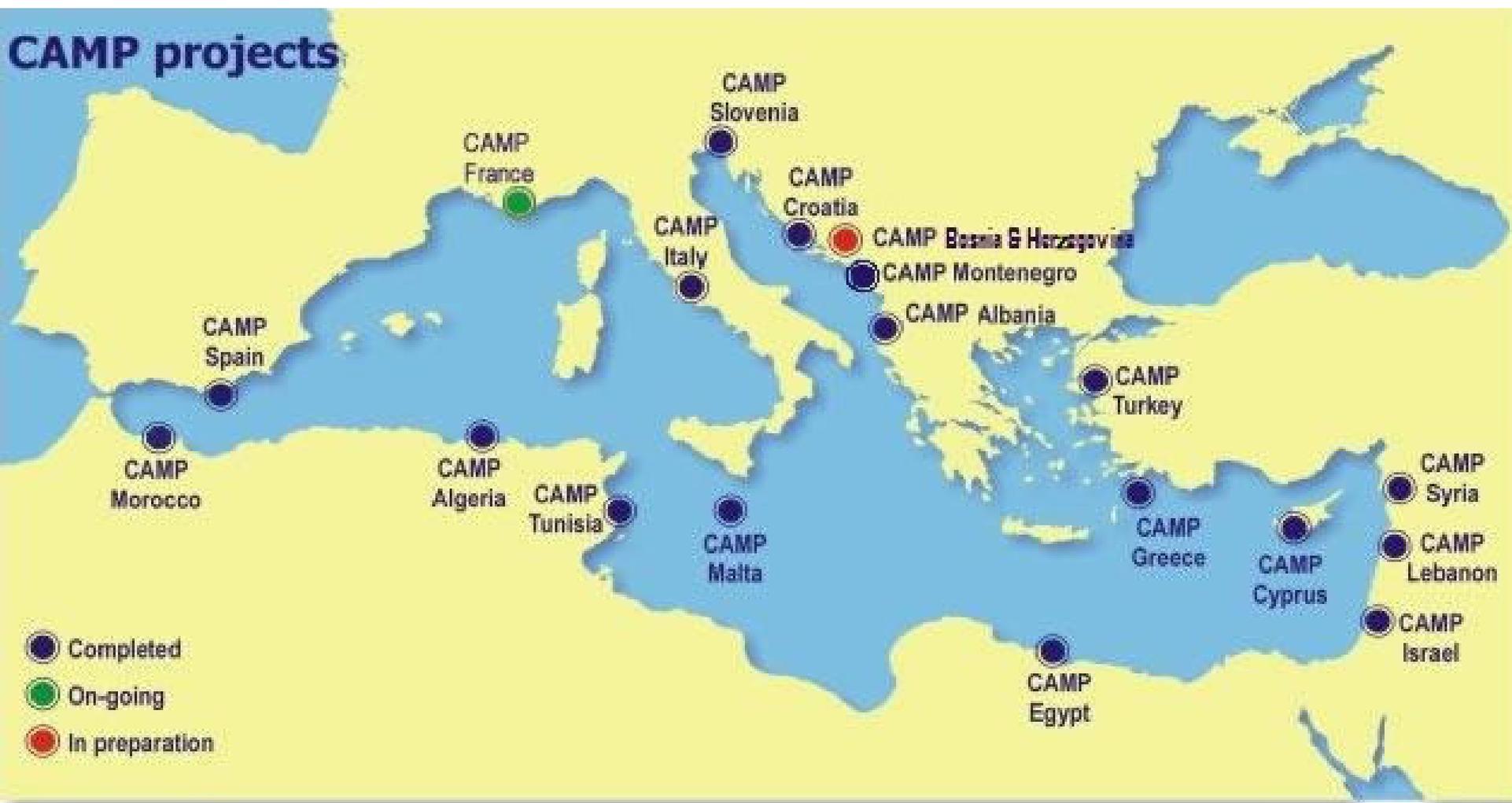
**MONTENEGRO: „source to sea” or „ridge to reef”**

**>> CAMP Montenegro, Buna-Bojana Integrated resources management plan, MSP, etc.**





# CAMP projects



# Integrated approaches in PAP/RAC projects



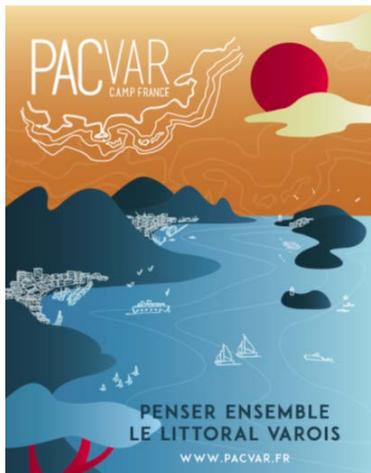
**Land Sea Forum** : Dialogue interface to support the emergence of a land-sea community based on ICZM principles facilitated & supported by PAP/RAC

>> Involves: decision makers, relevant institutions, institutes, researchers, civil society, wide range of sectors, private and public, general public.

## 3 Forums:

- i. Building the land-sea community to face climate change; >> 100 participants (March 2016, Grimaud)
- ii. The future of sailing and boating – time to rethink our uses >> 100 participants (November 2016, Saint-Raphael)
- iii. From the Mediterranean to local level management (June 2017, Toulon)

>> Final conference (06/10) to launch activities beyond the project



# Integrated approaches in PAP/RAC projects

## CAMP ITALY: Proposal for standardized approach for LSI identification

A Individual Activity	B Geographic Area considered in IA - Physiographic Unit of reference	C LSI type (pressures/driver)		D LSI identification in the framework of IA	E Gap Analysis linked to IA and LSI
		C1 SEA-LAND	C2 LAND-SEA		
IA (to complete with number and title of the considered Individual Activity)	<p><b>Terrestrial Area:</b></p> <ol style="list-style-type: none"> <li>1. Identification of specific geographic area subject of IA (Physiographic Unit of reference)</li> <li>2. Brief description of the geographical boundaries of the area of administrative competence, as well as the distinctive elements of the environmental and socio-economic interest detected</li> </ol> <p><b>Marine area:</b></p> <ol style="list-style-type: none"> <li>1. Identification of specific geographical area subject of IA (Physiographic Unit of reference)</li> <li>2. Brief description of the geographical boundaries of the area of administrative competence, as well as the distinctive elements of the environmental and socio-economic interest detected</li> </ol>	To add the specific interaction defined in Tab. 2	To add the specific interaction defined in Tab. 2	<p><b>Scope of IA:</b> Short definition of IA objectives</p> <p><b>LSI description:</b> Brief description of site-specific LSI detected (related and consistent with general elements in Tab.2).</p> <p><b>Identification of main ecosystem services (ES) involved in the considered geographic area:</b> - For the identification, refer to the CICES classification and to the proposed structure in Appendix 1 'Mapping and analysis of Ecosystem Services'</p> <p>- Brief description of the specific Ecosystem Services Starting from the proposed examples in CICES and WRI classification (Appendix 1 'Mapping and analysis of Ecosystem Services'), description for the specific case in object.</p> <p><b>Human activities/pressures and natural phenomena:</b> Identification and description of the main human activities/pressures with a potential significant impact on coastal and marine environment, as well as relevant natural phenomena to which the considered geographic area is (or could potentially be) subjected (refer to Annex III MSFD and Annex 1 'Mapping and analysis of Ecosystem Services, assessment of the impacts and efficiency of CAMP actions').</p> <p><b>Policy/planning:</b> Identification of main regulations potentially influenced on: • identified human activities/pressures; • LSI; • Ecosystem services; • correlated natural and socio-economic factors.</p>	<p>Gap analysis, considering the elements that IA should have considered from the point of view of:</p> <ul style="list-style-type: none"> <li>- policy and/or supplementary regulations to improve the geographic area considered, from the point of view of the elements in column D (LSI, human pressures/activities, protection and sustainable use of ecosystem services);</li> <li>- identification of possible special gap, concerning the need for the application of IA to a different size of geographic area (i.e. larger);</li> <li>- possible changes/extensions /additions of IA, considering further human /economic activities and natural phenomena not originally included to improve the geographic area considered from the point of view of elements in column D (LSI, human pressure/activities, protection and sustainable use of ecosystem services).</li> </ul>

### SUPREME; SIMWESTMED EU PROJECTS

Developing guidelines (and testing in pilot areas) on how to address LSI in maritime spatial planning

# Role of LSI in ICZM/MSP integrated approach

...the bridge, enabling coherence between marine and terrestrial planning?

- Towards a **Common Regional Framework (CRF) on ICZM** in the Mediterranean, foreseen by the ICZM Protocol (Art. 17)
- UNEP/MAP Programme of Work (PoW) approved for 2016-2017 envisages the preparation of a **Conceptual Framework (CP) for Marine Spatial Planning (MSP)**

>>> increase coordinated implementation of sectoral policies with a view to **adequately addressing land-sea interactions (LSI)**, ensuring the integrity of ecosystems and at the same time ensuring the **compatibility of land and sea uses by implementing MSP and clarifying its links with ICZM**

**Interreg**  
Mediterranean



EUROPEAN UNION



**BIODIVERSITY  
PROTECTION**

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**MED Biodiversity Protection Community**

<https://biodiversity-protection.interreg-med.eu>

Project co-financed by the European  
Regional Development Fund

*The MED Biodiversity Protection Community is featured by PANACeA*



AMB : Àrea Metropolitana  
de Barcelona



REGIONAL ENVIRONMENTAL CENTER  
Montenegro



# Ecosystem Approach the UNEP/MAP experience

Speaker: Antoine Lafitte  
Organisation: Plan Bleu



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# MSFD and Regional Sea Conventions

- Commitment for coordination with Member States and third countries, through Regional Sea Conventions → MSFD article 6
- Role of RSC highlighted in different stages of MSFD implementation (assessment, determination of GFS etc.)
- 4 European Regional Sea Conventions:
  - OSPAR Convention (OSPAR)
  - Helsinki Convention (HELCOM)
  - Barcelona Convention (UNEP/MAP)
  - Bucharest Convention (Black Sea Commission,



# MSFD and Regional Sea Conventions

Some highlights of the MAP/Barcelona Convention applying the Ecosystem Approach vis a vis the MSFD:

- Follows a similar approach
- Applies to all Mediterranean countries (including non-EU Member States)
- Has adopted an Ecological Objective on coastal ecosystems and landscapes, which is not covered by the MSFD
- Applies to the entire marine and coastal environment, including high seas
- Has a more flexible timeline

# Ecosystem Approach Roadmap: 7 Steps

1. Definition of an Ecological Vision for the Mediterranean
2. Setting of common Mediterranean strategic goals
3. Identification of important ecosystem properties and assessment of ecological status and pressures
4. Development of a set of ecological objectives corresponding to the Vision and strategic goals
5. Derivation of operational objectives with indicators and target levels
6. Revision of existing monitoring programmes for ongoing assessment and regular updating of targets
7. Development and review of relevant action plans and programmes

# Integrated Monitoring & Assessment programme

Key element of IMAP is the integrated approach, through the following steps:

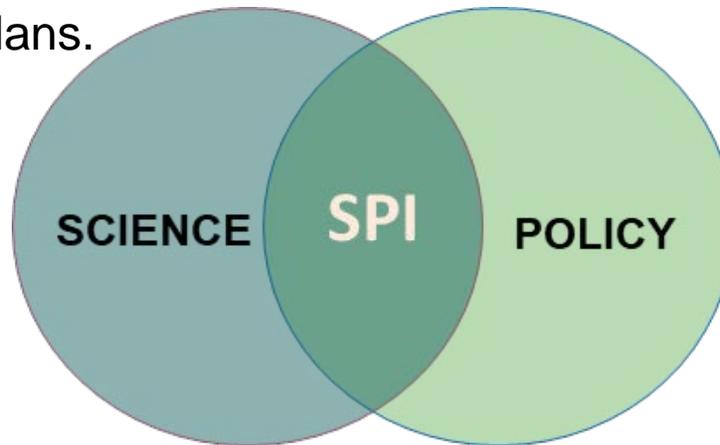
- At country level, development of IMAP, following region-wide agreed common indicators;
- Development of common indicator assessment fact sheets, to link assessment and monitoring in a practical manner;
- Assessment to be carried out in an integrated manner (overall status of GES - key products: 2017 Status Quality Report and 2019 State of Environment and Development Report);
- Implementation of IMAP to be supported by an Integrated Data and Information System (in line with IMAP delivery, region-wide, electronic format, with quality control and validation process);
- Cooperation among CPs and with regional bodies, to ensure

# Next Steps and Challenges

- Finalize gap analysis of programmes of measures adopted under the Barcelona Convention and its Protocols to assess the need for new or updated ones to achieve GES;
- In collaboration with regional Partners define an efficient governance mechanism to support a coordinated implementation of IMAP by the all Mediterranean countries including financial support;
- **Support the implementation of IMAP;**
- Support and coordinate research work to support IMAP and programmes of measures implementation with relevant partners and research projects;
- Establish an efficient information system to collect and process data coming from IMAP implementation based on SEIS principles.

# Focus on SPI strengthening for EcAp implementation

- In order to progress and **implement the IMAP** on a regional basis, it is an absolute **necessity to ensure links with various other ongoing monitoring frames and projects** (e.g EU initiatives).
- **SPI is key** to ensure that the **outcomes of scientific projects are reflected in EcAp monitoring plans**.



The SPI develops within the EcApMEDII project :

- Ensure that **scientific research projects will address monitoring challenges in the region** and can be **effectively channelled into the policy discussions** taking place under the BC.
- Highlight key policy challenges in relation to monitoring, where **scientific input is necessary**.
- Make the **scientific community more aware of policy needs and challenges** (more action-oriented).

# SPI strengthening workshops

## How Plan Bleu built SPI strengthening workshops ?



SPI inception workshop,  
December 2015,  
France.

SPI workshop  
workshop in the field  
of Pollution.  
October 2016,  
Marseille.

SPI workshop in the  
field of MPA and  
marine biodiversity,  
November 2016,  
Tanger.

SPI workshop on  
RBA.  
March 2017, Madrid.

SPI Workshop on  
scales of monitoring  
and assessment,  
April 2017, Nice

**SPI is a real issue** perceived by scientists and decision makers. **15 key cross-cutting knowledge gaps** have been identified to be filled for the implementation of IMAP

**Review of the pre-identified scientific needs** (Eu. & Cont.) in programs that contribute to achieve the GES and detail solutions to fill them.

**Discussion on how supporting IMAP implementation** with a specific expertise on the biodiversity aspects.

**Strengthen SPI to apply RBA as a methodological approach to optimize marine monitoring** by identifying marine areas under pressures on which to focus monitoring efforts.

**Encourage the definition of efficient spatial and temporal scales** for monitoring and assessment.

# Conclusion - Success

- A lot of initiatives are on going at country level on SPI in the framework of IMAP: towards formal regional SPI structure
- SPI workshops were organized back to back with thematic IMAP meetings allowing to gather scientific experts and CP's representatives in charge of IMAP implementation at national levels.
- Strong coordination with other MAP's components : CORMON on Pollution with MedPOL and CU (in Marseille in 2016); 2nd MAP Forum in the Mediterranean with SPA RAC (in Tangiers 2016); Integrated SPI & CORMON meetings with SPA RAC, PAP RAC and MedPol (3 clusters) in Madrid in 2017.

# Conclusion - Difficulties encountered

- To establish science-policy platforms for discussion : there no one-size-fits all SPI !
- Double gaps (EU CPs / other Mediterranean CPs) :
  - Regarding resources and training to implement EcAp and the new requirements of IMAP,
  - Regarding the conceptual aspects. E.g: EU MS discuss since at least years 2000 (WFD) and then within MSFD frame whereas most of the southern countries are dealing with since the IMAP decision (2013).
- A certain number of marine research projects (FP7) were under implementation from 2011 to 2015 but ended when the SPI strengthening activity started (2015) !
- Internal coordination in between CP's environmental and research directorates could be further encouraged

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