



Coastal Mapping Bathymetry in shallow waters

Draw a joint future strategy for the blue sustainable economy

SHOM

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- Uses of marine data - collection of data
- Integration, standardization and interoperability of data
- Availability and accessibility of data
- Communication and promotion on data use and accessibility

BATHYMETRY IN SHALLOW WATERS
THE BASIS FOR SUSTAINABLE MANAGEMENT OF THE
COASTAL ZONE

« *COASTAL MAPPING* » *Objectives*

- ✓ Assess the current availability of digital coastal maps in the EU
- ✓ Disseminate this information by EMODnet
- ✓ Share experience of coastal mapping in the EU
- ✓ Develop standards and an 'algorithm' for acquisition of data
- ✓ Propose how a future strategy and programme could operate

Multilevel Consortium

➤ **Hydrographic Offices :**

FRANCE – BELGIUM –
GERMANY – GREECE –
IRELAND – ITALY – LATVIA –
NORWAY – PORTUGAL –
SLOVENIA – SPAIN – SWEDEN

➤ **Regions :**

CPMR – Regione Lazio

➤ **Public Bodies :**

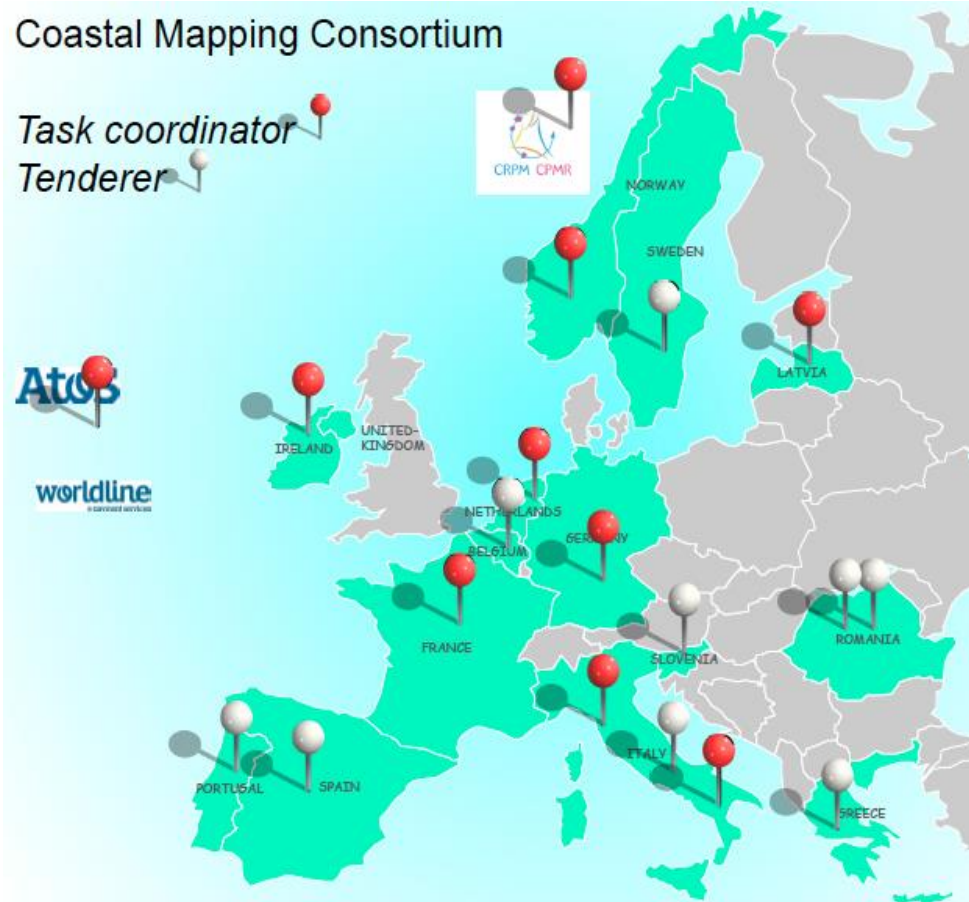
ISPRA – RWS - GeoEcomar –
DDNI

➤ **IT Company :**

ATOS-Worldline

Coastal Mapping Consortium

Task coordinator
Tenderer



Organisation

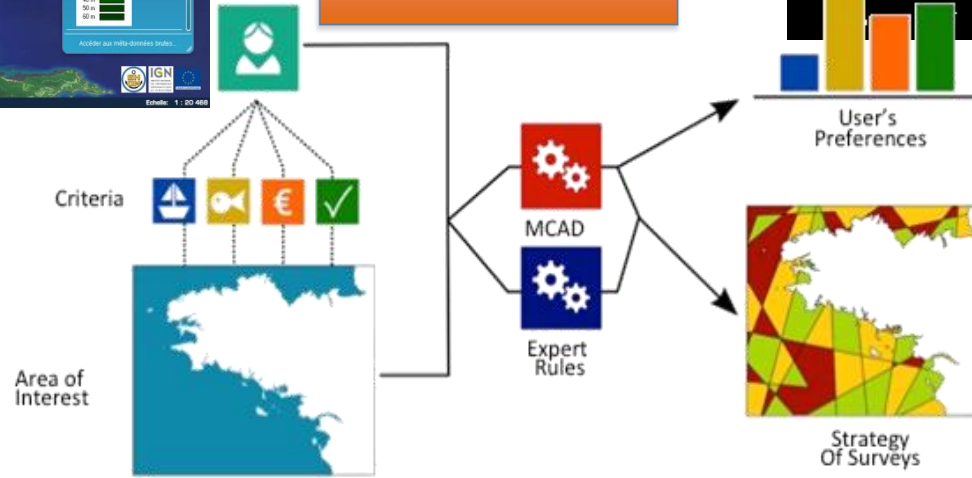
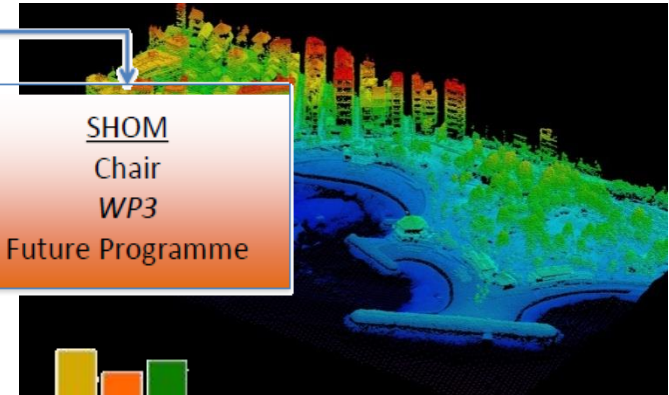
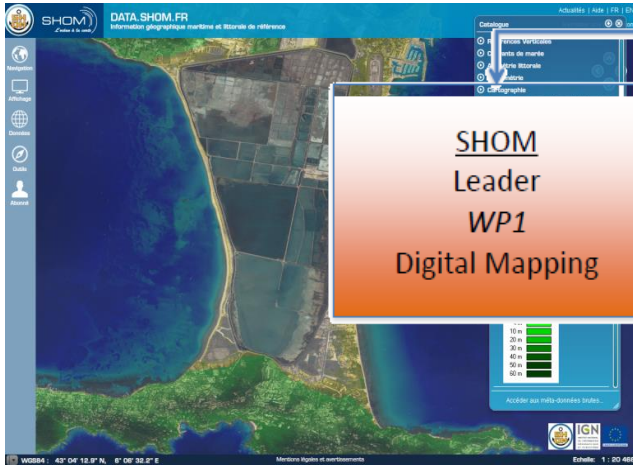


SHOM
Prime Coordinator
WP4
Project Management

SHOM
Leader
WP1
Digital Mapping

ISPRA
Leader
WP2
Share Experience,
Standards & Best
Practices

SHOM
Chair
WP3
Future Programme



The background of the slide is a composite image. On the left, there is an aerial bathymetry map of a coastal area, showing various depths and features. A small white airplane is flying over the map, with a green laser beam pointing down to the water. On the right, there is a large satellite dish antenna. The European Union flag is visible in the upper right corner. The text "Coastal Mapping WP2 – Share experiences, standards and best practices" is overlaid in the center in a large, white, sans-serif font.

Coastal Mapping

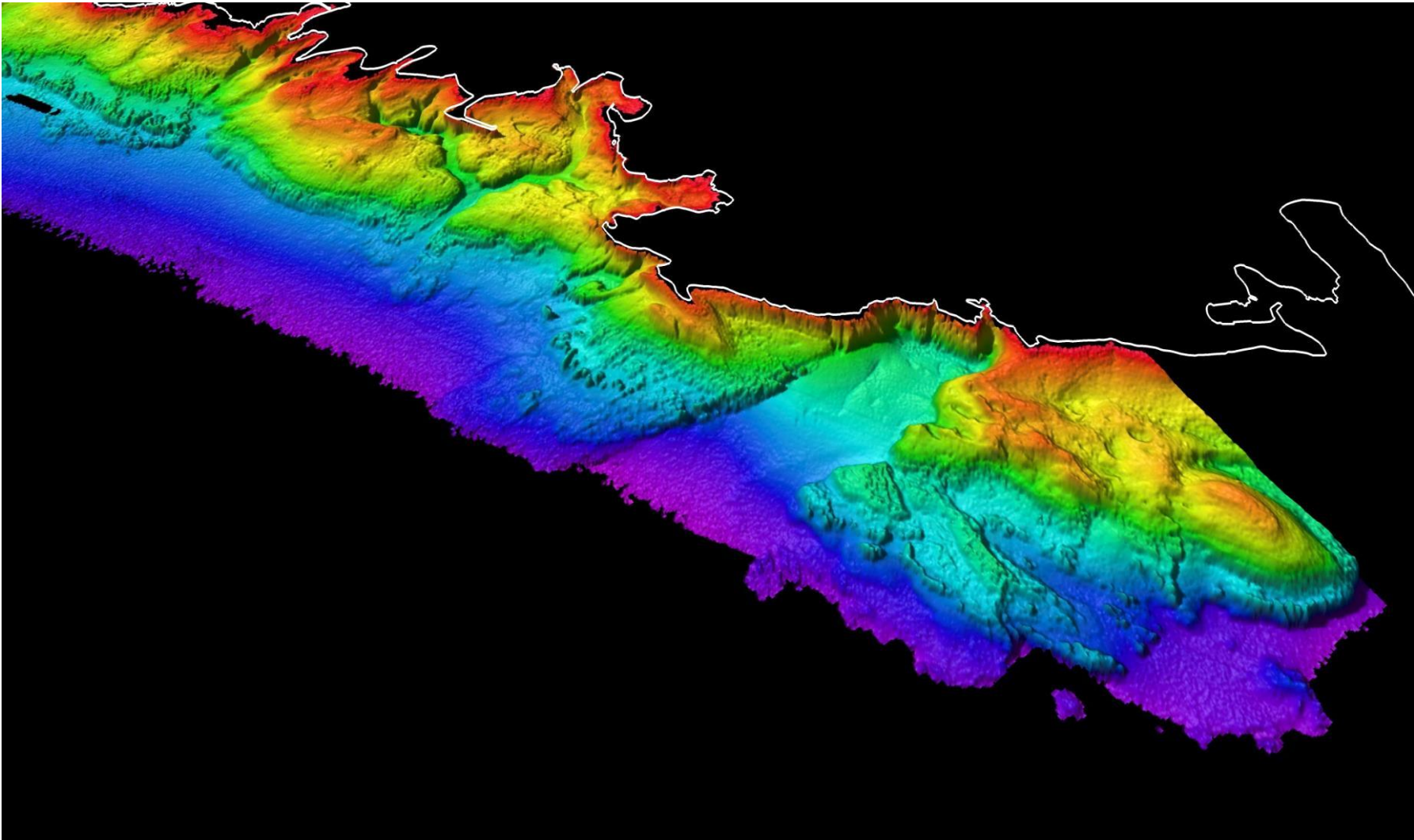
WP2 – Share experiences, standards and best practices

ISPRA
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Objectives

- Assess consistency of the **existing vertical datum**;
- Insure interoperability with **relevant standards**;
- Develop and test an **algorithm** for choosing most appropriate surveying method;
- Build a **technical & economical** strategy, *sharing platforms?*
- Links with Emodnet and Copernicus

SHARING INDUSTRIAL MEANS ? EX LIDAR



European policies

- Maritime Spatial Planning Framework Directive (2014/89/EU)
- Marine Strategy Framework Directive (2008/56/EC)
- Promotion of the use of Energy from Renewable Sources Directive (2009/28/EC)
- Directive on the assessment and management of flood risks (2007/60/EC)
- EU White Paper on Adaptation to Climate Change



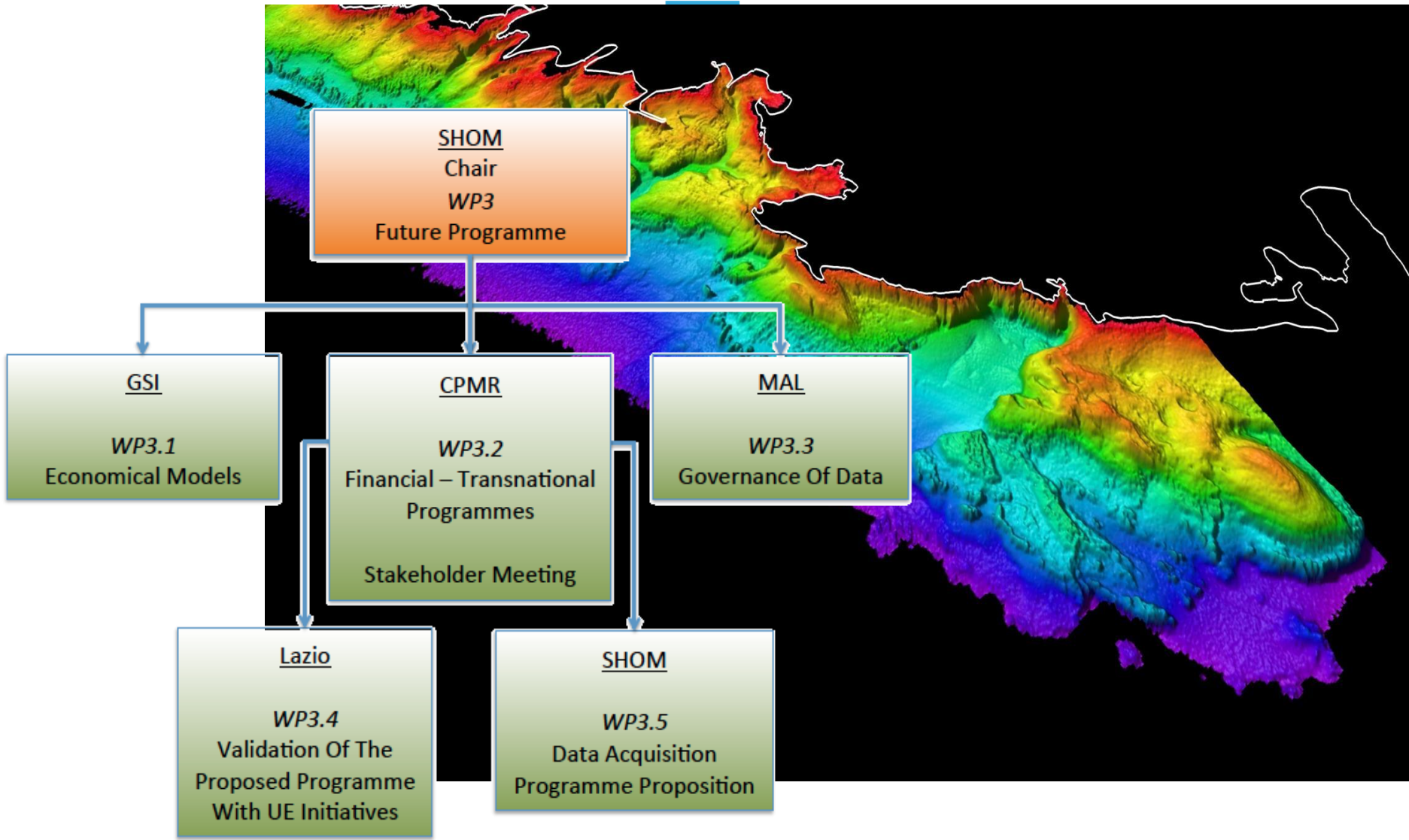
Coastal Mapping WP3 Proposition of a program and a strategy

All partners - coordination; SHOM

Objectives

- Propose a method to draw a Joint European Coastal Mapping Program in *the shallow waters for bathymetric data*, taking into account:
 - ✓ WP2 outcomes, giving a review of the technical inputs, the possibilities of interoperability and the *strategic algorithm*;
 - ✓ The *existing data*, at European, State and regional levels;
 - ✓ Organizations like European Environment Agency and programmes like *EMODnet* and *Copernicus*;

PROPOSITION FOR A FUTURE PROGRAM



Complementary Studies

- ✓ Economical models running in the partnership (representative panel)
- ✓ The governance of these data in the coastal zone ;
- ✓ The financial opportunities offered by European financial period 2014-2020,
- ✓ Validation of the proposed program with European initiatives; Bologna Charter Organization (*Lazio Region*)
- ✓ **Joint European Program *and Strategy***

Inventory of the current economic models within the partnership (GSI)

The diffusion of data free of charge is a key point for the development of an innovative management of the coastal zone in Europe.

However, it is not the common model in the EU and the financing of data acquisition for the different levels in the member States should be considered or reconsidered in order to ensure the continuity of activities of the concerned organizations and to preserve the European data acquisition capacity.

This will give strong orientations to suggest a common programme.

Financial - transnational programmes (CPMR)

The opportunities given by the EU fundings will be studied in the objective to maximize the rationalization of data acquisition in joint projects.

This will be a key point in the prospective proposal.

An analysis of how current EU funds are available to support the acquisition, sharing and use of marine bathymetric data will be conducted. It will focus on the use of relevant ESI funds

CPMR



6

2

3

1

5

4



Over 150 Member-Regions

Organisation at both european and sea-basin level

1



Atlantic Arc Commission

2



North Sea Commission

3



Baltic Sea Commission

4



Inter-Mediterranean Commission

5



Balkan & Black Sea Commission

6



Islands Commission

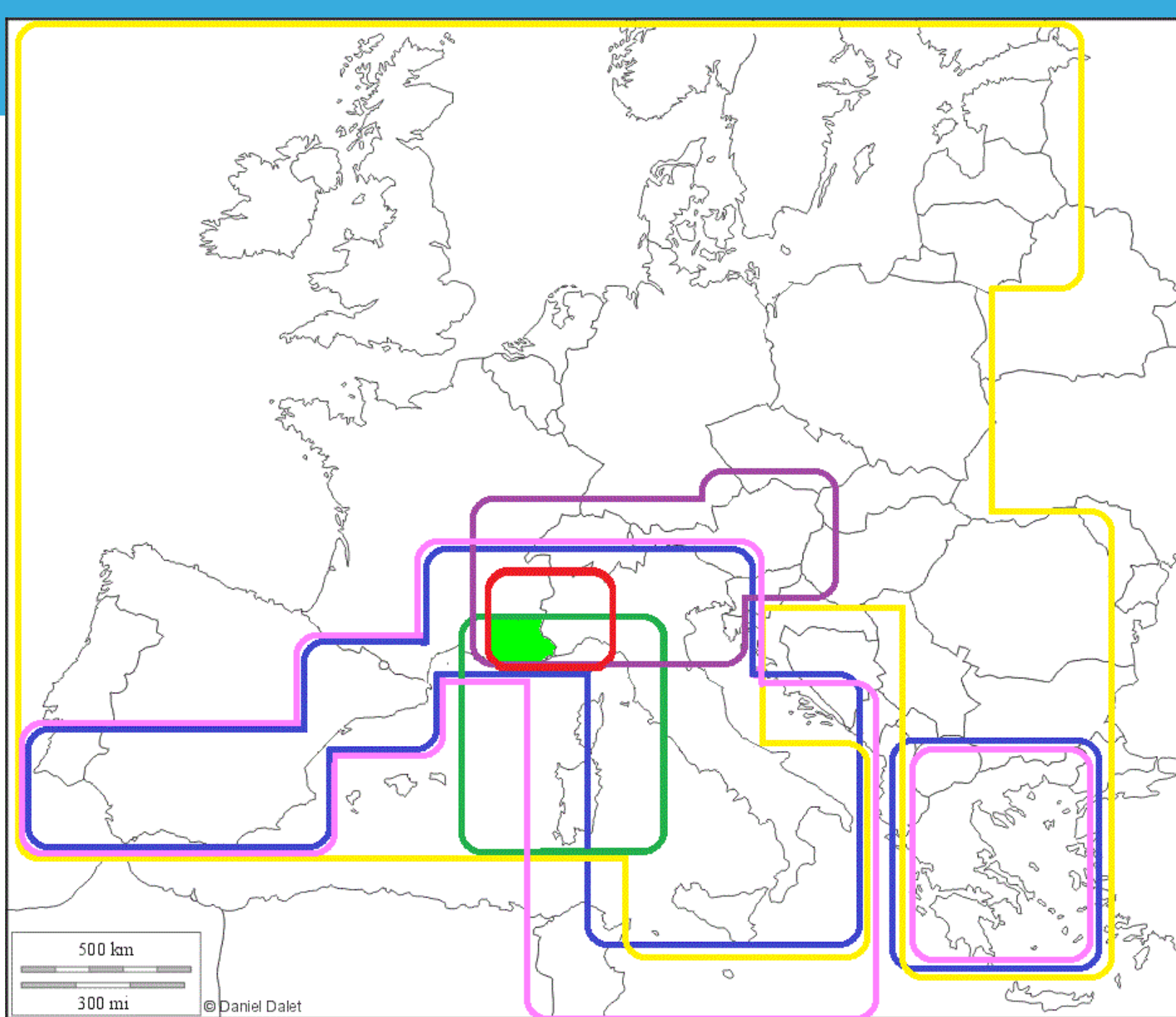
ANALYSIS OF EU PROGRAMMES

HOW WHERE WHEN HOW-MANY? DATA acquisition, diffusion, assessment

⇒ **On-going analysis**

- S3 strategies: analysis and networking
- ESI funds operational programmes
- Link between ESI funds operational programmes and other EU funds (e.g. Horizon 2020)

⇒ **Selecting Regions OP for case-studies**



- Alcotra
- Marittimo
- MED
- IEVP
- Espace Alpin
- Interreg IVC



August 2009

MEMORANDUM

on coastal and maritime indicators and data

Submitted by the member regions of Aquamarina's
Data and Indicators Working Group

Owing to the powers they have at their disposal, the regions often produce and use data in the design and delivery of policies on human activities: spatial planning, the coastal economy, coastal defence and adaptation to climate change, protection of the marine environment, pollution (the Water Framework Directive, Marine Strategy), fisheries management and aquaculture, and the management of port activities. They are also associated to implementing European directives on coastal issues. They draw up their cooperation projects based on available indicators and increasingly produce indicators themselves as part of monitoring and implementing cooperation projects.

They must therefore be considered as fully-fledged operational stakeholders in the field of maritime policy data and indicators.

Governance of data (MA Latvia)

- An inventory of the governance of bathymetric data in the shallow waters and on land-sea interface will be done within the partnership.
- A picture of the distribution of the legal competencies for the data management in the coastal zone in the European states is necessary to propose a realistic Joint Programme. A future programme, to be relevant, must take into account the needs of the key actors of the management of these areas and the capacity they have to cooperate and finance data acquisition.

Validation of the proposed program with EU initiatives; Bologna Charter Organization (Lazio Region)

Linked to the necessity of recent bathymetric data of good quality, several initiatives are currently in progress in the EU basins. The Bologna Charter (BC) is one of them and concerns the coastal sustainable management in the Mediterranean.

- The WP2 and WP3 results will be submitted to the BC coordination board in order to improve the possibilities of realization of this programme in its multi-level, transnational and crossborder context.

A Policy Paper and a participated process

...capitalising more than 10 years of regional cooperation

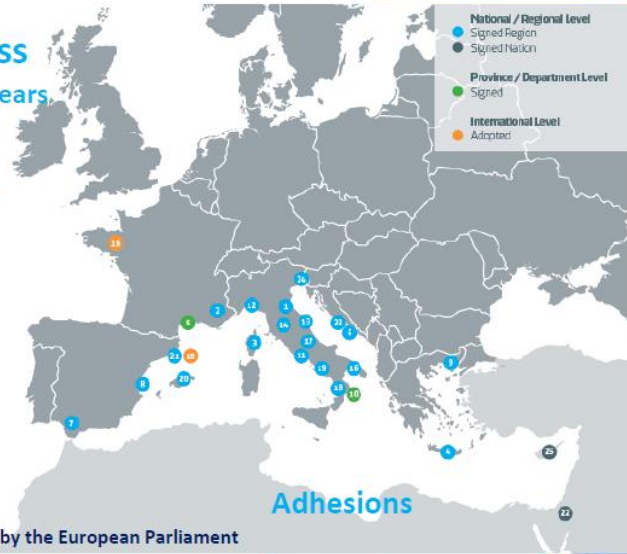


Preparation of the Joint Action Plan for the Macro-Project outlined in the Charter

...participated process



Signature in Brussels, 21 March 2013, within the MAREMED Project final event, by the European Parliament



- | | |
|---|---|
| 1 Emilia-Romagna Region | 18 Calabria Region |
| 2 Région Provence-Alpes-Côte d'Azur | 19 Campania Region |
| 3 Collectivité territoriale de Corse | 20 Govern de les Illes Balears |
| 4 Decentralized Administration of Crete | 21 Generalitat de Catalunya |
| 5 Département de l'Hérault | 22 Ministry of Environmental Protection of Israel |
| 6 Dubrovnik - Neretva County | 23 Split - Dalmatia County |
| 7 Junta de Andalucía | 24 Friuli Venezia Giulia Region |
| 8 Generalitat Valenciana | 25 Ministry of Communications and Works of Cyprus |
| 9 East Macedonia and Thrace Region | |
| 10 Crotone Province | |
| 11 Lazio Region | |
| 12 Liguria Region | |
| 13 Marche Region | |
| 14 Toscana Region | |
| 15 Intermittent Commission of the CPMR | |
| 16 Puglia Region | |
| 17 Abruzzo Region | |

Adhesions in the period 2013-2014

Bologna Charter Coordination Board



Brussels March 2015 meeting EU DGs

Rome, Nov '14



Barcelona Sept 2014 meeting UfM

Montpellier, Jun '14



Brussels May 2014 meeting EU DGs

Bologna, Feb '14



END OF THE WORK FOR CHRISTMAS 2016!