Coordination and Support Action

Horizon 2020 - BG-13-2016
Grant Agreement 727453

"BLUEMED meets Italian stakeholders"

Report on the Italian national event
Rome, CNR, 05 June 2017

Abstract

The BLUEMED Coordination and Support Action (CSA) has been funded by the European Commission within the H2020 framework programme with 3 M€ and it aims at supporting the implementation of the BLUEMED Initiative. The BLUEMED initiative offers a shared strategic framework for working towards a healthy, productive and resilient Mediterranean Sea that is better known and valued. It is designed to tap the full potential of the marine and maritime sectors, structuring transnational cooperation to create new 'blue' jobs and to promote and improve social wellbeing, sustainable prosperity and the environmental status of the region and its surroundings.

A key element of the project is the implementation of 4 Platforms, namely "Knowledge", "Technology", "Economy" and "Policy", where stakeholders from the Mediterranean basin, both from EU and non-EU countries, can interact and bring their expertise and competence to convey the message of national communities, sectors, agencies, institutions, to discuss and agree on gaps, needs, barriers and priorities, explore synergies, define implementation and funding schemes. They are **active observatories** providing a flexible framework for monitoring the system, update the needs and then promote solutions in an integrated way.

The **National Pivots (NPs)** are key contributors to Platforms operation. They are representatives of the partner countries whose expertise mirrors the specific platform themes. Acting as main interface between the BLUEMED CSA Consortium and the stakeholders at national level, they will contribute to increasingly mobilize other relevant national stakeholders by collecting and conveying their message and bring back the feedbacks.

The 5th June, in the CNR premises in Rome, the BLUEMED Italian national event has been the first moment of interaction between the CSA, the national stakeholders and the National Pivots.

![bluemed logo]

The meeting

Participants

Over 110 people from different marine sectors ranging from research institutes, ministries and public bodies, the Navy, private sector and NGOs joined the meeting "BLUEMED Meets Italian Stakeholders".

The composition of the participants is shown in the pie chart below.

Participants

- Research — 66%
- NGOs — 1%
- Public Bodies — 17%
- Private sector — 16%
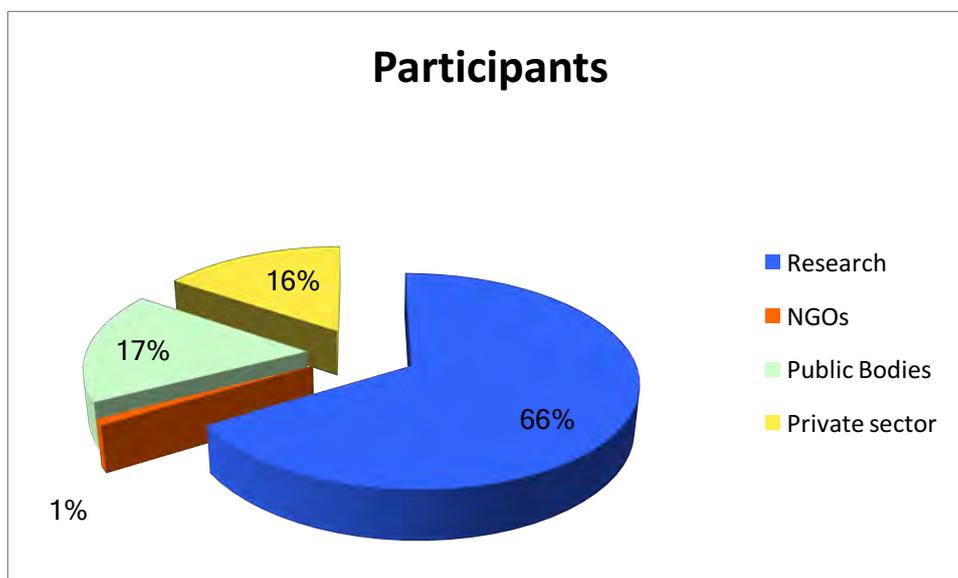
The sessions

The meeting was structured in three different sessions:

Session 1 –The Bluemed Initiative for the Blue Growth in Italy and the Mediterranean;

Session 2 – The BLUEMED Coordination and Support Action;

Session 3 – Launch of the BLUEMED National Platforms (in cooperation with the MARINA RRI project).

Session 1 –The Bluemed Initiative for the Blue Growth in Italy and the Mediterranean

Session 1 opened with the message of the representatives of the Italian Ministry of Education, University and Research, Marco Marcelli, and of the Ministry of Economic Development, Silvia Grandi. Both speakers stressed the importance of the Bluemed Initiative in the effort towards the fulfilment of the Blue Growth as already stated at the ministerial level in previous international summits.

Following their endorsement message Prof. Fabio Fava, Chair of the Bluemed Initiative Strategic Board, presented the Initiative, its history since its early stages in 2014, during the Italian Presidency of the EU Council, when R&I gaps and needs, opportunities and boundary conditions for their implementation were identified, the roadmap set and its goals and objectives agreed with stakeholders and the first version of the Strategic Research and Innovation Agenda (SRIA) drafted.

Some BLUEMED SRIA priorities were adopted by the EU Commission, DG MARE and DG RTD, and included in their R&I programmes.

DG MARE launched the Call for proposals: Blue Labs –innovative solutions for maritime challenges & Blue Careers in Europe (May, 2016) and Blue Technology - transfer of innovative solutions to sea basin economies (September 2016) and DG R&I included 6 BLUEMED R&I priorities in the 2016-2017 Working Programme of Horizon 2020 SC2 for about €50M allocated to the area.

Finally, the different levels where the CSA and the Initiative act were stressed.

The BLUEMED Initiative acts at political level, i.e. facilitating the adoption of the BLUEMED SRIA by the EU Member States of the area, promoting cooperation/joint actions with other regional initiatives (EUSAIR and WESTMED), and other MED R&I initiatives, promoting BLUEMED in the frame of the High Level/political events, and its R&I priorities and needs towards the EU Commission.

The BLUEMED CSA supports the Initiative, widening it in non-EU countries bordering the basin, updating the SRIA with the involvement of relevant stakeholders, promoting cooperation (via tailored meetings) among major EU projects (R&I, training, education, etc.), technology clusters and platforms, industries and SMEs, and networks/organisations active in the whole area.

The last part of the first session was dedicated to the presentation of 3 projects/initiatives that reflect the objectives of BLUEMED, i.e. the Summer School on Blue Growth in the Mediterranean, organised by OGS, the INNOBLUEGROWTH project, coordinated by CONISMA and the BlueNET project, coordinated by mareFVG, the Maritime Technology Cluster of Italy.

Maria Cristina Pedicchio, the President of OGS, introduced the **Summer School Sustainable Blue Growth in Mediterranean and Black Sea countries**, an initiative that tackles employment issue related to the Blue Growth.

INNOBLUEGROWTH is an Interreg Med Horizontal project where no research is envisaged, but the activities aim at increasing transnational activity of innovative clusters and networks of key sectors of the MED area, namely Blue Energy, Maritime Surveillance and Yachting.

BlueNET is an EASME and EMFF co-financed project coordinated by mareFVG, the Italian maritime cluster. It carries out networking activities among maritime clusters in the area from the East Med and the Black Sea with the aim of spreading innovation and creating opportunities for SMEs in the Blue Economy.

Session 2 – The BLUEMED Coordination & Support Action

Chaired by the Project Manager Margherita Cappelletto, the second session focused on the BLUEMED CSA.

The project coordinator, Fabio Trincardi, presented the structure and objectives of the project, its consortium, its governance and its range of action.

Mario Sprovieri illustrated the Strategic Research and Innovation Agenda, its structure, goals and actions and its updated version dated April 2017.

Andrea Barbanti explained the 4 Platforms that are the backbone of the CSA work for the update and implementation of the SRIA, the **Knowledge** Platform (Knowledge of Mediterranean Sea dynamics and ecosystems), the **Economy** Platform (Economic sectors of Blue Growth economy in the Mediterranean), the **Technology** Platform (Enabling technologies for Blue Growth in the Mediterranean) and the **Policy** Platform (Science to Policy for Blue Growth).

Each platform will have a coordinator appointed by the project Steering Committee and will have as permanent members the National Pivots appointed in each country and the CSA partners representatives and as non permanent members the stakeholders at basin level and the project partners.

The activities within the platforms will be carries out through meetings, workshops, questionnaires and consultations and will result in white papers and reports.

The platforms, acting at basin level, will have a mirror at national level (National Platforms) for each partner of the project.

In order to coordinate the work of the 4 platforms, two parallel tracks are foreseen:

•**Track 1: specific actions** to be carried out to support CSA workflow and expected outcomes

•**Track 2: specific cross-cutting issues** and challenges tackled by the Platform.

It will be the task of the project Coordinator and the Steering Committee to make sure that the platforms will not operate as separate streams.

At the end of session 2, the Italian National Pivots and National Platforms Coordinators were introduced to the audience.

The National Pivots are:

- Knowledge Platform: Maurizio Ribera d'Alcalà - Stazione Zoologica Anton Dohrn of Naples;
- Technology Platform: Federica Mastracci - E-geos, VP Product Management and Innovation;
- Economy Platform: Mara Manente - International Centre of Studies on the Tourism Economy;
- Policy Plattform: Silvia Grandi - Ministry for Economic Development – DG for Safety of mining and energy activities.

The National Platforms Coordinators are:

- Knowledge Platform: Bruno Buongiorno Nardelli, CNR;

- Technology Platform: Elena Ciappi, CNR;
- Economy Platoform: Monica Cariola, CNR;
- Policy Platform: Gemma Andreone, CNR.

Session 3 – Launch of the BLUEMED National Platforms (in cooperation with the MARINA RRI project)

Session 3 has been carried out using the technique of the Open Space Technology. The audience was randomly split in 4 groups (based on the meeting room sectors), each focused on one of the Bluemed platforms, and asked to provide a written (synthetic) answer to the following questions (same for all groups):

1) *Which missing themes/aspects would enrich the present SRIA? (MAX 2)*
   Please consider your previous experience within your sector; the results of previous R&I initiatives/programmes for Blue Growth in the Mediterranean and in the European framework; the present reference frame and expected technological/economical/political outcomes.

2) *Which actions would be important for an efficient implementation of the Bluemed SRIA?*
   What are the expected results with respect to the actions identified and clustered? Which tools would be more adequate to achive them? How could eventual critical aspects be mitigated?

This approach was chosen to enforce a cross-cutting feedback on the SRIA Challenges and Goals and to stimulate an initial discussion on BlueMed CSA and its implementation plan. The input received was very different depending on the platform considered, both in terms of quantity and characteristics of the suggestions received. Even within the single group, the feedback covered a wide range of levels, from main challenges to single, very specific actions. Nonetheless, the clustering and discussions within each group allowed to get some preliminary (though necessarily incomplete) output that will contribute to the process of revision of BlueMed SRIA.

For the **Knowledge platform**, the input received on the first question was analysed focusing on two main aspects: the extension of key enabling knowledge challenges and the revision of cross-platform challenges. The input was then analysed in details, suggesting the modification of the challenge on Mediterranean dynamics to include previously missing related applications (such as safe navigation, blue maritime transport, blue energy) and the inclusion of three new Challenges (related to the definition of observational needs and tools to advance knowledge frontiers, to the formation of new cross-disciplinary scientists, to the necessity to extend the scientific knowledge on aquaculture and biotechnology beyond purely technological aspects). The answers to the second question mainly evidenced the need to set up an efficient interaction between the scientific community/stakeholders and the Bluemed CSA, and included specific suggestions on the tools for an efficient implementation of the Bluemed objectives.

For the **Technology platform**, the contributions received have been gathered into the following 5 areas of intervention, that can be also viewed as a different representation of SRIA challenges:

AREAS OF INTERVENTION			
TECHNOLOGIES FOR ENVIRONMENTAL PROTECTION	TECHNOLOGIES FOR MARINE RENEWABLE ENERGY	TECHNOLOGIES FOR INTERMODAL, GREEN AND SAFE TRANSPORTS	TECHNOLOGIES FOR NATURAL AND CULTURAL HERITAGE
TECHNOLOGIES FOR CREATING AN INTEGRATED INFORMATION SYSTEM FOR THE MEDITERRANEAN			

According to the feedbacks received, the development of technologies for creating an integrated information system appears a common need. Specific actions regard (but are not limited to) the development of Integrated Med Portals for integration of multi-source \ multi-dimensional information and data for harbors, coastal areas and platform decommissioning.

For the other areas, some input represents a further specification of what is already included in the SRIA but some, truly represents missing points. In particular, with regard to sea transport technologies, the topic of intermodal transportation system was not explicitly considered in the present SRIA, as well as the development of cross-cutting biotechnologies for green transports. Specific actions proposed for this area are: *i)* the application of the ITS paradigm to the maritime transport and *ii)* the creation and the study of the impact of infrastructures for the management and the distribution of alternative fuels.

For what concern the impact of human activities on the marine environment, marine litter recovery and recycling, the identification and recovery of munitions dumped in the sea (involving also Policy interventions and Knowledge support) and the development of innovative continuous sediment dredging and control systems are all new specific MED topics worth to be considered.

A proposed new subject, naturally linked to the technology area for natural and cultural heritage, but candidate to become a cross-platform theme is the proposal to create Eco-sustainable *off-grid* seaside tourism along with the specific action to develop integrated infrastructures for the seaside tourism industry (*e.g.* blue marinas with nature based solutions).

Besides the specific actions directly linked to the proposed new themes or to the present SRIA ones, a number of general/transversal actions have been also suggested, with specific regards to instruments and tools that can support their implementation. For concretely tackle the key challenge 'Enabling technology and capacity creation', relevant policy and economy frameworks for technology development need to be understood and tailored and smart funding schemes to be developed accordingly.

For the **Economy platform** the input received on the questions was analyzed and three main aspects were highlighted: lack in business culture according to a triple helix model, a need for a new integrated tourism chain, the need to rethink fisheries and aquaculture in a more circular bioeconomic perspective.

The input was then analyzed in details, suggesting some modification/addition to the challenge on "Key sectoral enablers in the Mediterranean".

With reference to the challenge on Innovative businesses, the suggestion was to create a new goal to give more emphasis/support to whose researches and technologies which show greater economic impact, implementing actions for encouraging their technology transfer and diffusion, also supporting the crowdsourcing of ideas and scientific data from various sea users, so creating a new governance of the fisheries sector specific for the Mediterranean area, with a new centrality.

With reference to the challenge on Tourism, a goal to encourage the integration between tourism and "cultural heritage" should be added, also in order to foster the differentiation / innovation of traditional coastal tourism and to develop an information-statistical system able to detect new forms of coastal tourism, as well as to monitor/evaluate the impact of tourism (economic, social and environmental) in support for decisions.

With reference to the challenge on Fisheries and Aquaculture, some other actions should be included in the goals: to expand the bio prospective exploration to invertebrates and vertebrates, to develop multitrophic but also politrophic aquaculture, to use the by-catch as a source of bioactive molecules, to introduce innovative feed in aquaculture, to convert fishing activities into aquaculture and / or tourism activities

For the **Policy platform**, the general discussion has brought out the need of paying attention and focusing in depth some key importance governance principles aimed at building up an all encompassing policy which could contribute to the enhancement of the blue growth in the Mediterranean area.

in particular, four main areas of intervention were identified as additional aspects to the current Sria: Social awareness and participation in decision making, Data and information exchange (open access and open science, Cost effective technology innovation (and circular economy) and finally Transboundary and regional policy and extraterritorial action.

A number of goals and actions were proposed within these four areas of intervention that can be found in the roadmap below.

A synthetic presentation of the output for each platform, as elaborated by the National Pivot and National Platform coordinators, is included below.

RICERCA E INNOVAZIONE PER LA CRESCITA BLU IN ITALIA E NEL MEDITERRANEO
INCONTRO CON GLI STAKEHOLDER NAZIONALI
5 giugno 2017 – AULA MARCONI
Consiglio Nazionale delle Ricerche
P.le Aldo Moro, 7 – 00185 Roma

10.30 – 11.00   Registrazione

11.00 – 11.10   Introduzione e saluti (*Massimo Inguscio*, Presidente CNR)

Sessione 1 – L'iniziativa BLUEMED per la crescita blu in Italia e nel Mediterraneo (Chair: *Fabio Trincardi*)

11.10 – 11.30   L'iniziativa BLUEMED e la sua rilevanza per il Paese (*Marco Marcelli, MIUR; Silvia Grandi, MISE*)

11.30 – 11.45   L'iniziativa BLUEMED: genesi, obiettivi, primi risultati e prospettive (*Fabio Fava – Chair Strategic Board BLUEMED Initiative*)

11.45 – 12.00   Iniziative e progetti affini a BLUEMED:
  - Scuola Internazionale MED-Blue Growth (*Maria Cristina Pedicchio, OGS*)
  - INNOBLUEGROWTH (*Caterina Praticò, CONISMA*)
  - BlueNET (*Martina Rossi, mareFVG*)

Sessione 2 – La Coordination & Support Action BLUEMED (Chair: *Margherita Cappelletto*)

12.00 – 12.10   Presentazione della CSA BLUEMED (*Fabio Trincardi*)

12.10 – 12.20   Presentazione della SRIA (*Mario Sprovieri*)

12.20 – 12.40   Presentazione delle Piattaforme e delle loro modalità di funzionamento generale – ruolo delle piattaforme mirror nazionali vs piattaforme MED (*Andrea Barbanti*)

12.40 – 13.00   National Pivot e Coordinatori delle Piattaforme

13.00 – 14.00   Pranzo

Sessione 3 – Avvio delle Piattaforme nazionali BLUEMED (in collaborazione col progetto MARINA)

14.00 – 14.15   Manifestazione d'interesse/iscrizione ad una o più piattaforme

14.15 – 16.30   Gruppi di lavoro interattivi sulle Piattaforme "Knowledge", "Technology", "Economy", "Policy", raccolta di proposte e discussione

16.30 – 17.00   Sintesi della giornata e prime indicazioni per le Piattaforme MED (*Coordinatori Piattaforme Nazionali e National Pivot*)

Prossime attività e chiusura dei lavori
(*Fabio Trincardi*)

KNOWLEDGE PLATFORM
AREAS OF INTERVENTION

Extension of KEY ENABLING KNOWLEDGE CHALLENGES	Revision of CROSS-PLATFORM CHALLENGES		
Different **Implementation** processes/steps involved		Scientific community/ stakeholders involvement and interaction with the BLUEMED CSA	Tools/Funding Schemes for BLUE R&I
		Organize Thematic Worshops/Working Groups	-Startup Actions -Networks of SME/Research Inst. -Small/medium collaborative projects

FIRST INPUTS FOR THE SRIA

KEY ENABLING KNOWLEDGE FOR THE MEDITERRANEAN >> relevant knowledge gaps to be overcome

A. *Mediterranean Sea ecosystems: services, resources, vulnerability and resilience to natural and anthropogenic pressures*

B. *Mediterranean Sea dynamics:* **services for a sustainable adaptation to climate change and plans for mitigation,** *services in support of safe navigation, blue maritime transport, blue energy*

C. *Approaching new Knowledge frontiers: define/update the requirements for future observations/observing systems, harmonize open science/open data policy*

D. *Create a new generation of multidisciplinary scientists: from marine environment and technology to economic models and support to policy*

E. *Hazards and the protection of coastal areas in the Mediterranean*

F. *Aquaculture and sustainable use of Blue Biotechnologies*

CROSS-CUTTING ACTIVITIES TO BE HARMONIZED WITH TECHNOLOGY CHALLENGES

TECHNOLOGY PLATFORM
AREAS OF INTERVENTION

TECHNOLOGIES FOR ENVIRONMENTAL PROTECTION	TECHNOLOGIES FOR MARINE RENEWABLE ENERGY	TECHNOLOGIES FOR INTERMODAL AND SECURE TRANSPORTS	TECHNOLOGIES FOR NATURAL AND CULTURAL HERITAGE
TECHNOLOGIES FOR CREATING AN INTEGRATED INFORMATION SYSTEM FOR THE MEDITERRANEAN			
TRANSVERSAL TOOLS			

TECHNOLOGIES FOR CREATING AN INTEGRATED INFORMATION SYSTEM FOR THE MEDITERRANEAN ROADMAP

STAKEHOLDERS

Public Administrations at local and national level

Oil Companies

Navigation companies

ICT and GeoInformation Industry

GOALS

Optimization of operations (people and goods) in harbor areas, in terms of energy consumption, safety & security, automation

Reconversion of decommissioned off-shore platforms taking into account socio-economic, environmental and technical dimensions

Integrated observation capacity of coastal erosion and coastal risks taking into account flood directive, coastal management directive, urban and natural coastal areas protection, with seamless approach from Regional up to local scale

Cooperation among different Administrations (at local, national regional scale) with interoperability of data systems

ACTIONS

Develop Interoperable Med Portals for access and exploitation of multi-source \ multi-dimensional information and data focused on specific Thematic Areas:
- Harbors
- Coastal areas
- Decommissioned off-shore platforms

Users are: Public Adm. of different levels (national, regional, local) and to different stakholders

TECHNOLOGIES FOR ENVIRONMENTAL PROTECTION

STAKEHOLDERS

GOALS

ACTIONS

Researchers

Technologies for marine litter recovery and recycling

ICT, naval, sensor and biosensor industries

Technologies for identification and recovery of munitions dumped in the sea

Common effort from EU member states to detect and remove munitions in international waters and at the boarders of national waters

Navy, Public administrations at regional and national level, political decision-makers

Innovative continuous sediment dredging and control systems to:i) allow coastal replenishment and adaptation to climate change, ii)decrease erosion,iii) decrease the number of dredges in the ports

TECHNOLOGIES FOR INTERMODAL, GREEN AND SAFE TRANSPORTS

STAKEHOLDERS

GOALS

ACTIONS

Researchers

Naval, offshore, ICT industries and consultancy

Public administrations at regional and national level

Application of the ITS paradigm to the maritime transport for an integrated and intermodal transport system

Monitoring system for risk identification and emergency managment

Alternative fuel and electric power

Bio-inspired cross-cutting technologies for the design of green vessels

Development of a service center for the maritime transport

Coordination with port authorities and coastal guard

Design and creation of a network of coastal and offshore infrastructures for the managment and distribution

Integration of different solutions to increase the overall efficiency

Form multidisciplinary team

Design Optimization

TECHNOLOGIES FOR MARINE RENEWABLE ENERGY

STAKEHOLDERS

GOALS

ACTIONS

Researchers

Offshore industries, electricity suppliers

Efficient technologies for renewable energy from waves

Multifunctional platforms: *i)* renewable energy production from wind/wave/tides , *ii)* aquaculture and *iii)* docks

Cooperation among public/private organizations and laboratories and dedicated funding actions

Development of biological integrated inland acquaculture and offshore biological acquaculture

TECHNOLOGIES FOR NATURAL AND CULTURAL HERITAGE

STAKEHOLDERS

GOALS

ACTIONS

Tourism industry

Public administrations at regional and national level, political decision-makers

Eco-sustainable *off-grid* seaside tourism

Promote/plan underwater archeological park
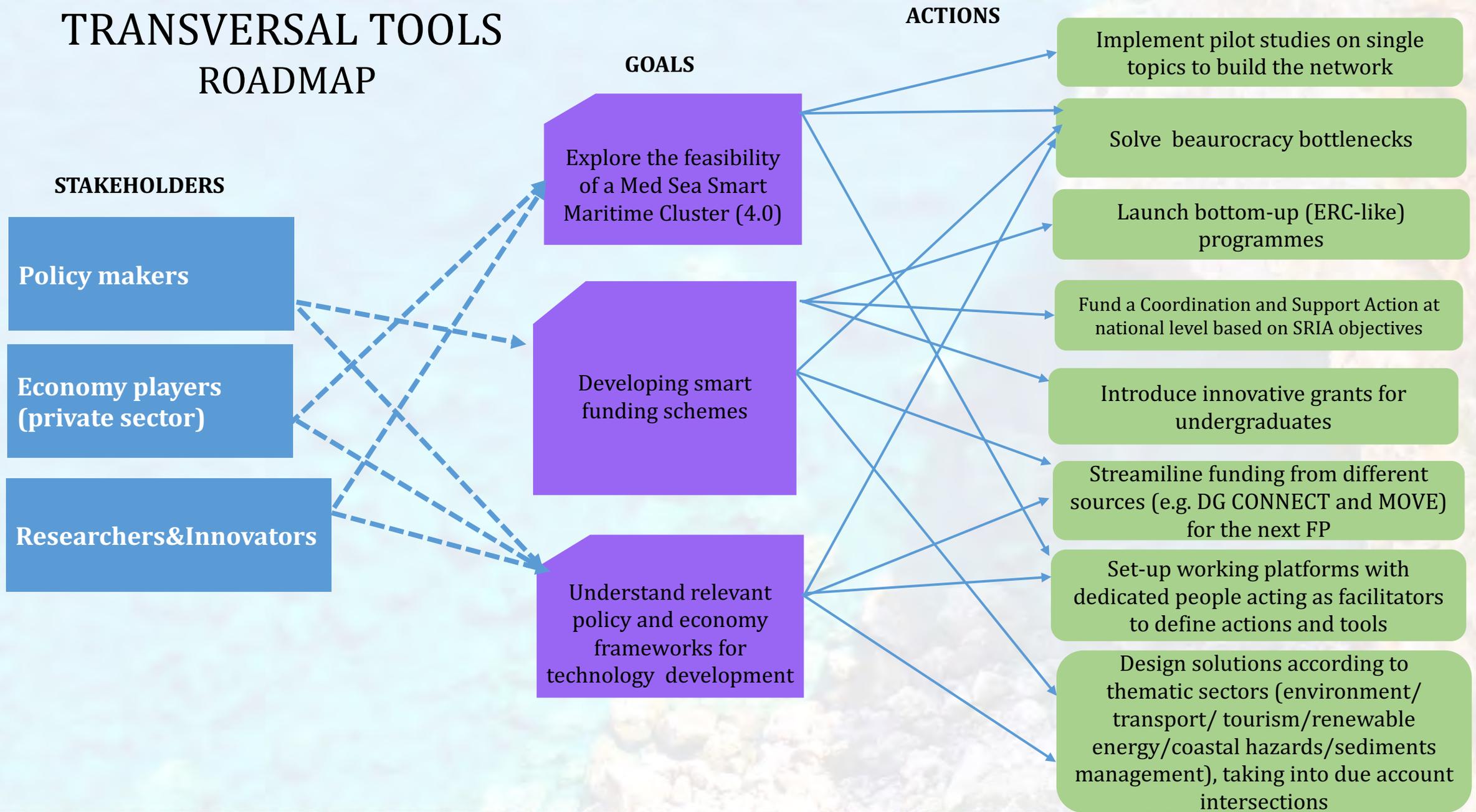
Blue Marinas with nature-based solutions

Development of integrated infrastructures for the seaside tourism system/industry

Golden rules for the eco-sustainable tourism of waterfront

Strong cooperation with Economy, Policy and Knowledge

TRANSVERSAL TOOLS ROADMAP

STAKEHOLDERS

GOALS

ACTIONS

Policy makers

Economy players (private sector)

Researchers&Innovators

Explore the feasibility of a Med Sea Smart Maritime Cluster (4.0)

Developing smart funding schemes

Understand relevant policy and economy frameworks for technology development

Implement pilot studies on single topics to build the network

Solve beaurocracy bottlenecks

Launch bottom-up (ERC-like) programmes

Fund a Coordination and Support Action at national level based on SRIA objectives

Introduce innovative grants for undergraduates

Streamiline funding from different sources (e.g. DG CONNECT and MOVE) for the next FP

Set-up working platforms with dedicated people acting as facilitators to define actions and tools

Design solutions according to thematic sectors (environment/ transport/ tourism/renewable energy/coastal hazards/sediments management), taking into due account intersections

INPUTS FOR THE SRIA

- In relation to the goal **'Towards an observing system of systems'**, Interoperable Med Portals have to be co-designed and developed for access and effective exploitation of multi-source\multi-dimensional information and data by different stakholders and public administrations from the local to the national level. Specific thematic Areas of intervetion include: harbors; coastal areas; and decommissioned off-shore platforms.

- In the 'area of intervention' on **Technologies for natural and cultural heritage** the following new goal and action were addressed:
  - New goal: Eco-sustainable *off-grid* seaside tourism
  - New action: Development of integrated infrastructures for the seaside tourism industry (blue marinas with nature based solutions)
- In the 'area of intervention' on **Technologies for environmental protection** the following new goal and action were addressed:
  - New goals: 1) marine litter recovery and reciclying 2) Identification and recovery of UXO (unexploded ordigns) 3) Innovative continuous sediment dredging and control systems
  - New actions: Common effort from EU member states to detect and remove munitions in international waters and at the boarders of national waters.

- In the 'area of intervention' on **Technologies for marine renewable energy and technologies for intermodal, green and safe transport,** the following new goal and action were addressed:
  - New goals: 1) **integrated and intermodal transport system** 2) Bio-inspired cross-cutting technologies for the design of green vessels
  - New actions: 1) application of the ITS paradigm to the maritime transport and development of a service centre 2) **create coastal and offshore infrastructures for the managment and distribution of alternative fuel.**

- In order to implement actions related to the key challenge '**Enabling technology and capacity creation**', relevant policy and economy frameworks for technology development need to be understood. Thus, smart funding schemes have to be developed, suitable for thematic actions and allowing a cross-cutting approach, e.g. by streamlining different sources. A focus also on undergraduates and the bottom-up component (through ERC-like programmes) is due.

ECONOMY: AREAS OF INTERVENTION

Business culture and triple helix	A new integrated tourism chain	Circular bioeconomy for fisheries and aquaculture

ACTIONS FOR CREATING AN INTEGRATED ECONOMIC APPROACH AND VISION FOR THE MEDITERRANEAN

Transversal tools

First Area (1): Business culture and triple helix

STAKEHOLDERS

GOALS

ACTIONS

E.g. Scientists & Researchers

Focus efforts mainly on research**es** and technolog**ies** with a major economic impact

Enhance IOT (Internet of Things) and additive manufacturing technologies

Industries, enterprises, production

Favour technology transfer and spread innovative technologies so to make them economically attractive

Training policy makers and innovation intermediaries for the marine sector also.

Institutional policymakers

Enhance the culture and values of fishing industry by developing its supply chain

Actions to favour tourism activities of family-run fishery enterprises; promote short chain for its higher sustainability

First Area (2): Business culture and triple helix

STAKEHOLDERS

GOALS

ACTIONS

E.g. Scientists & Researchers

Industries, enterprises, production

Institutional policymakers

Promote and support the crowdsourcing of ideas and scientific data from the various users of the sea

Create a new governance of the fishery sector for the Mediterranean

Spread among the public the idea that environmental protection can create new economic opportunities

Request of ideas, suggestions, opinions, data (ex. bathimetry) to economic and recreational users (ex. yachtsmen)

Engage the public in scientific findings and marine activities through the spread of knowledge

Engage the public in the environmental protection with specific actions (also market based)

Second Area (1): A new integrated tourism chain

STAKEHOLDERS

E.g. Scientists & Researchers

Industries, enterprises, production

Institutional policymakers

GOALS

Promote and check a knowledge-based approach to the marine environment

Promote the integration between tourism and "cultural heritage"

Promote the differentiation/innovation of the traditional coastal tourism

ACTIONS

Spread information (results of research, studies, etc.) and marine literacy in schools, media, scientific press

Develop actions of training/update (on sustainability as well) for tour operator

Develop tourism products that promote the cultural heritage, both material and immaterial (eg. traditional knowledge and crafts) of the coast and the inland

Develop tourist products based on sustainable and alternative forms of shore and sea use (educational underwater tourism, cyclotourism, etc.) also through the integration of tourism and typical productive activities (fishing, crafts, etc.)

Second Area (2): A new integrated tourism chain

STAKEHOLDERS

E.g. Scientists & Researchers

Industries, enterprises, production

Institutional policymakers

GOALS

Foster the development of an information-statistical system that helps to detect new forms of coastal tourism

Foster the monitoring and evaluation of the impacts of tourism (economic, social and environmental) in support of decisions making process

ACTIONS

Integrate official statistics sources on tourism with other quantitative and qualitative data on tourism in coastal destinations, involving stakeholders (focus groups, etc.), research on big data, etc.

Set up an appropriate monitoring system with appropriate indicators, starting from systems developed at European and international level (eg ETIS)

Third Area (1): Circular bioeconomy for fisheries and aquaculture

STAKEHOLDERS

E.g. Scientists & Researchers

Industries, enterprises, production

Institutional policymakers

GOALS

Expand the bioperspective survey to vertebrates and invertebrates.

Use the bycatch as a source of bioactive molecules

Develop both multitrophic AND politrophic aquaculture

Introduce innovative feed in aquaculture

ACTIONS

Explore and exploit new metabolites and bioactive molecules from invertebrates and vertebrates (fish) for biotechnological use, including the use of bycatch.

Develop aquaculture facilities that with reduced environmental impacts and waste products

Develop and introduce innovative feed in aquaculture characterized by low fish content

Third Area (2): Circular bioeconomy for fisheries and aquaculture

STAKEHOLDERS

GOALS

ACTIONS

E.g. Scientists & Researchers

Industries, enterprises, production

Institutional policymakers

Convert fishing activities into aquaculture and/or tourism activities

Foster integrated aquaculture projects

Streamline the bureaucratic procedures both in aquaculture and in fishing-tourism

Promote the marine equivalent of the agritourism

Develop projects that integrate multitrophic aquaculture plants, environmental monitoring systems, and energy production systems.

Transfer the research results to aquaculture facilities

Training for integrated projects

INPUTS FOR THE SRIA

POLICY PLATFORM
AREAS OF INTERVENTION

Social awareness and participation in decision making: from public consultation to public engagement	Data and information exchange, open access and open science	Cost effective technology innovation and circular economy	Transboundary and regional policy and extraterritorial action

Emerging governance principles for an all encompassing policy in the Mediterranean area

First area of intervention: Social awareness and participation in decision making: from public consultation to public engagement

STAKEHOLDERS

- Eu, national and local decision makers and administrators

- Private entities and civil society

- Non governmental organizations

- Research and innovation technology sector

- Enforcement and judicial authorities

GOALS

- Identifying real economic, social and cultural needs of society

- Involvement of people in all the steps of the decision making process at Eu, national and local level

- Enhancing social awareness in the application process of Eu, national and local decisions

- Development of responsible research and innovation improving public engagement

- Improving cooperation among decision makers, administrators and enforcement and judicial authorities

- Build up a responsible community as reference model

ACTIONS

- ADOPT AND APPLY INDICATORS ABLE TO EVALUATE INTEREST OF STAKEHOLDERS AND AFFECTED COMMUNITIES
- ENHANCE STRATEGIES TO INVOLVE STAKEHOLDERS EX ANTE AND EX POST
- IMPROVE CAPACITY BUILDING AND MOBILISATION MUTUAL LEARNING
- FROM ENVIRONMENTAL IMPACT ASSESSMENT (EIA) TO ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT (ESIA)
- CITIZEN SCIENCE PROJECTS

Second area of intervention: Data and information exchange, open access and open science

STAKEHOLDERS

GOALS

ACTIONS

Eu, national and local decision makers and administrators

Private entities and civil society

Non governmental organizations

Research and innovation technology sector

Enforcement and judicial authorities

Improving access and exchange of scientific data

Implementing integrated observation systems

Identifying areas where information and data are particularly scarce

Enhancing social awareness in data management

Improving local communities information about scientific data

- MANDATORY OPEN ACCESS FOR PUBLIC FUNDING RESEARCH RESULTS
- SPECIFIC CAPACITY BUILDING ACTIONS FOR IMPROVING SEA DATA MANAGEMENT
- CREATION OF AN UNIFIED INFORMATION EXCHANGE SYSTEM

Third area of intervention: Cost effective technology innovation and circular economy

STAKEHOLDERS

- Eu, national and local decision makers and administrators

- Private entities and civil society

- Non governmental organizations

- Research and innovation technology sector

- Enforcement and judicial authorities

GOALS

- Developing cost effective and cheap technology

- Enhancing circular economy: the Mediterranean Sea economy as a living organism

- Evaluate the economic potential of reusing and recycling activities

- Multiple use of offshore platforms

- Build up engineering ecological systems and identity ecosystem functioning cells

ACTIONS

- REUSE AND RECYCLE BEACH WASTE: PILOT PROJECTS
- INTRODUCE AND VALORISE NEW JOB COMPETENCES: BLUE SKILLS
- COSTS AND BENEFITS ANALYSIS IN A SCENARIO ZERO
- GUIDELINES ON TERRITORIAL IMPACT ASSESSMENT
- CREATION OF EXCELLENCE CENTRE AND NETWORKS
- CREATION OF AN EXPERIMENTAL CENTRE TO TEST HITHECH DEVICES TO TRANSFORM SEA ENERGIES

Fourth area of intervention: Transboundary and regional policy and extraterritorial action

STAKEHOLDERS

- Eu, national and local decision makers and administrators
- Private entities and civil society
- Non governmental organizations
- Research and innovation technology sector
- Enforcement and judicial authorities

GOALS

- Improve shared governance of marine areas within and beyond national jurisdiction
- Involvement of non EU communities in improving intergovernmental cooperation
- Enhancing social awareness and public engagement in extraterritorial actions in areas beyond national control
- Improving application of international (non EU) environmental tools and enhance national participation to international bodies and mechanisms
- Approaching the Mediterranean Sea as a unique place to be protected

ACTIONS

- BUILD UP MARINE PROTECTED AREAS WITHIN AND BEYOND NATIONAL JURISDICTION
- MARINE PROTECTED AREAS AS ECOLOGICAL ZONES BUT ALSO SCIENTIFIC AND RESEARCH CENTRES IN OPEN SEA
- IMPLEMENT THE MED REGIONAL ACTION PLAN ON MARINE LITTER
- BUILD UP A NETWORK AND SUPPORT ACTION FOR THE CREATION OF AN EMISSION AND CONTROL AREA (ECA) IN THE MED
- BUILD UP A MEDITERRANEAN BLUE ECONOMIC ZONE FOR FISHERIES PURPOSES.