

**Alignment at Trans-Regional
Level: Case Study No. 7
The BLUEMED
Initiative**



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ABSTRACT

This case study examines the key features, overall strengths and weaknesses of research and innovation collaboration developed at regional level among EU Mediterranean Countries: **Blue Growth research and Innovation Initiative for the Mediterranean - BLUEMED Initiative**.

The BLUEMED initiative is the result of the efforts of 9 EU member states bordering the Mediterranean sea, to foster a sustainable blue growth in the Mediterranean sea area. Its final goal is to contribute to align or integrate the funding strategies, R&I funds and infrastructures at regional, national and EU level, by avoiding duplication, improving the effectiveness in the use of resources and maximizing the leverage effects.

The peculiarity of this initiative relies on the collaboration initiated by EU Mediterranean countries at political level and developed informally, without the support of a defined organisational structure. The adoption of a **common vision** and common strategic research priorities is a key factor to foster the alignment of national/regional research programmes. The BLUEMED initiative elaboration of the **Strategic Research and Innovation Agenda** grounded on the strong **political endorsement** and ownership of the countries involved.

BLUEMED represents a good practice of **alignment at strategic level**, involving from one side the EU Mediterranean Countries, who committed at political level to adopt common research priorities and strategic agenda, and from the other side, the European Commission DG RTD and MARE, which facilitated and supported the process. The BLUEMED SRIA has becoming a driving pillar mentioned in several EU and international initiatives and actions, such as the European Strategy for Adriatic and Ionian Region (EUSAIR), the Union for the Mediterranean (UfM) and the “Initiative for the sustainable development of the blue economy in the western Mediterranean” (WESTMED), then contributing to align the strategies relating to R&I in the Mediterranean and drive the actions towards the shared priorities.

Yet, the BLUEMED initiative has been confronted with: i) Region’s geographical complexity; ii) Challenges due to its informal organisational structure.

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1. Introduction

This case study analyses the main features of a specific modality of research and innovation collaboration for blue jobs and growth developed among EU member states bordering the Mediterranean (*Cyprus, Croatia, France, Greece, Italy, Malta, Slovenia and Spain*), plus Portugal¹.

The blue growth, intended as the sustainable growth in the marine and maritime sectors, is a key driver for the European economy. The recognition that regional sea diversity from the Atlantic Ocean to the Baltic Sea, North Sea, Black Sea and the Mediterranean Sea, is a European asset to be valued to promote the blue growth. The specificity and sensitivity of the Mediterranean Sea called for particular attention which was the driver for the adoption of the Blue Growth research and Innovation Initiative for the Mediterranean – BLUEMED.

In this specific case study, the regional dimension has been the motivation for developing a collaboration among countries and adopt common research and innovation priorities.

This case study examines the collaboration initiated by EU Mediterranean countries at political level and developed informally, without the support of a defined organisational structure. The analysis focuses in particular on the elaboration of the Strategic Research and Innovation Agenda thanks to the strong political endorsement and ownership of the countries involved. The process was facilitated by the DG RTD and DG MARE of the EU commission. The adoption of a common vision and common strategic research priorities is a key factor to foster the alignment of national/regional research programmes. The set-up of the BLUEMED initiative, the draft and finalisation of the Strategic Research and Innovation Agenda has involved the delegates of the governments of EU Mediterranean countries, which thanks to a strong political endorsement started to regularly meet and jointly work to develop a shared strategic framework on the Mediterranean sea.

The BLUEMED initiative is an instrument intended to channel existing funding instruments and funds, available at regional, national and European level, towards common identified research priorities. It has not developed as a mechanism to directly finance research, but it can be effective in mobilizing existing funding and thus fostering the alignment of funding while avoiding duplications and reducing fragmentation.

According to the Typology of Alignment (ERA-LEARN 2020 Task 4.1), the development of a common vision and the identification of common strategic R&I priorities relates to the strategic level and the research strategy phase. In this specific case, it relies on mapping of national and regional research projects, on the identification of national and regional R&I needs, gaps and opportunities and the bordering conditions for implementing them.

2. Key features of BLUEMED

2.1 Overview

The BLUEMED initiative is the result of the efforts of 9 EU member states of the Mediterranean sea, to foster a sustainable blue growth in the Mediterranean sea area. The initiative has been supported and facilitated by the European Commission Directorate-General for Research & Innovation (DG RTD) and the Directorate-General for Maritime Affairs and Fisheries (DG MARE).

The process driving to the development of the BLUEMED initiative started informally in 2014 within the Horizon 2020 Programme Committee on Food Security, Sustainable Agriculture and Forestry, Marine, Maritime and Inland Water Research, and Bioeconomy (so-called Societal Challenge 2 - SC2) meetings, where the delegates and experts of national governments, assist the European Commission in Horizon 2020 implementation². The societal challenge 2 includes a pillar on the blue growth, the strategy to support sustainable growth in the marine and maritime sectors. At the beginning of 2014, the need to define common European priorities on research and innovation focusing on the Mediterranean Sea and its peculiarities, paved the way to the adoption of the

¹ Portugal joined the initiative in June 2014.

² Discussion on strategic planning and on ensuring links to national funded activities, as well as providing opinions on the Work Programmes is an essential part of their work. Meetings are organised by the European Commission and usually take place 3 to 4 times a year.

BLUEMED initiative and to the definition of an EU MS common vision on the potential of blue growth in the area and a shared R&I strategic agenda.

The need to have a specific focus on the Mediterranean grounded on the peculiarities of this sea, its importance for EU economy and the blue growth as well as the challenges that is facing³. Climate change, growing maritime traffic and pollution, overexploitation of fish stocks and invasions of alien species are among the stressors placing the region at risk. At the same time, the Mediterranean's unique features provide major local opportunities for blue growth and jobs, ranging from fisheries to tourism. This called for an integrated approach across the different sectors and disciplines and a long-term oriented, strategic coordination of R&I activities *in primis* between the European Countries bordering the Mediterranean Sea coasts and the whole EU.

On the basis of these premises, under the coordination of Italy, in May 2014 the BLUEMED initiative was set up and the roadmap defined, in the framework of the Blue Growth Strategy. After 2.5 years of actions at the national, regional, EU and international level, the BLUEMED Initiative was formally recognized by the EU 28 and the Union for Mediterranean (UfM) member countries during the ministerial event organized by the Maltese presidency in Valletta (Malta) on May 4, 2017.

2.2 Mission and activities

The BLUEMED initiative aims to advance a shared vision for a more healthy, productive, resilient, better known and valued Mediterranean Sea. This initiative seeks to promote the social well-being, prosperity of both local and EU citizens now and for future generations and to boost economic growth and jobs.

The BLUEMED Initiative fosters integration of knowledge and efforts of EU member states of the Mediterranean Basin to jointly create new "blue" jobs and industrial growth in the marine and maritime sectors of the area. The initiative addresses cross-cutting marine and maritime strategic research themes, around which joint innovation programmes can be constructed⁴.

According to the Vision Document, presented at the EU Competitiveness Council of 5 December 2014, BLUEMED pursues the following objectives:

- developing innovative marine-based technologies, methodologies and approaches with a view to boosting the sustainable economic growth of the European maritime sectors and the conservation and upgrading of the marine environment, resources and cultural heritage;
- fostering innovative multidisciplinary research and cooperation activities addressing the relevant Mediterranean challenges;
- providing knowledge-based support for the implementation of EU policies and directives on marine and maritime issues in the Mediterranean;
- promoting public awareness and understanding of how important sustainably prosperous resources of the Mediterranean Sea for the surrounding countries and for Europe as a whole;
- training a new generation of scientists, professionals, technicians and entrepreneurs able to tackle complex ecological, economic and societal challenges in a holistic way, thus creating new and qualified "sea-based" jobs⁵.

³ The Mediterranean sea prominently contributes to the EU economy, with 30% of global sea-borne trade, 450 ports/terminals, the 2nd World's largest market for cruise ships, half of the EU's fishing fleet, 400 UNESCO sites and 250 protected areas. Among the seas of Europe, the Mediterranean has no match as regards biodiversity and the links between human activities and environmental characteristics. It is changing fast in response to both natural and anthropogenic pressures.

⁴ Explicit reference is made to the principles of the European Union's Integrated Maritime Policy, as well as the sea-related European Directives, and it is fully consistent with the aims of the EU Blue Growth strategy and other relevant policies adopted by the European Union.

⁵ The documents produced have taken into account the recommendations put forward by the SEAS-ERANET Project, other major finished or ongoing EU funded R&I projects and the inputs from the important pertinent European Technology Platforms and private associations (e.g. EATiP, Waterborne, Cruising).

The BLUEMED research and innovation initiative for blue jobs and growth in the Mediterranean Area is intended to offer 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 boost the Blue Economy, and promote and improve social wellbeing, sustainable prosperity and the environmental status of the region and its surroundings. The BLUEMED SRIA identifies three major groups of twelve key challenges that need to be addressed, as well as a set of goals and a wide list of actions to achieve those goals.

The activities foreseen in the BLUEMED SRIA include:

- Joint action, including coordinating, planning and programming research and innovation activities
- Bilateral/multilateral research and innovation initiatives and programming tools
- Cooperation between the public and private sectors
- Fine-tuning of data, knowledge, capacities and projects
- Effective and efficient use of resources and infrastructure
- Maximisation of the leverage effects of research investments and their influence on public policy
- Public understanding of the value of the Mediterranean blue economy
- Improved skills for a well-equipped workforce⁶.

The ultimate objective of the BLUEMED initiative is to contribute to align or integrate the funding strategies, R&I funds and infrastructures at regional, national and EU level, by avoiding duplication, improving the effectiveness in the use of resources and maximizing the leverage effects.

2.4 Governance structure

The BLUEMED initiative started and developed at political and strategic level between the representatives of 9 EU countries, and the European Commission. Since the beginning it has not foreseen a dedicated governance structure, leading or supporting the process. This “self-governing” initiative has been involved, since the first steps of the process, the countries’ delegates of the Societal Challenge 2 programming committee of Horizon2020 and some experts, and representatives of the EC DG RTD and DG MARE.

The initiative recently turned into two instruments with a specific governance structure:

1. Strategic Board

It is composed of representatives of 8 Countries (Croatia, Cyprus, France, Greece, Italy, Malta, Portugal, Slovenia, Spain) plus experts (one also from Belgium), coordinated by Italy together DG RTD and DG MARE of the European Commission. With one chair and two vice-chairs, the Strategic Board is in charge of i) the BLUEMED SRIA adoption by the EU Regions and MS of the area ii) promotion cooperation/joint actions with the “EU Strategy for the Adriatic Ionian Region” (EUSAIR) and “Western Mediterranean initiative” (WESTMED); iii) Promote cooperation with the other Mediterranean R&I initiatives, with the joint adaptive implementation of agendas, such as UfM, CIESM, CIHEAM, CPMR, etc; iv) Promote BLUEMED in the frame of the High Level/political events and v) Promote BLUEMED R&I priorities and needs towards the EU Commission (DG RTD, DG MARE, DG REGIO, other DGs).

2. Coordination and Support Action (CSA) BLUEMED

The coordination and support action (CSA) BLUEMED, funded by the European Commission, was officially launched in November 2016. The project is intended to directly support the BLUEMED initiative, by promoting the concrete and operational implementation of the BLUEMED SRIA, converting its outputs into actions⁷. As the

⁶ BLUEMED SRIA is available at http://www.bluedmed-project.eu/wp-content/uploads/2016/12/Bluedmed-SRIA_A4.pdf.

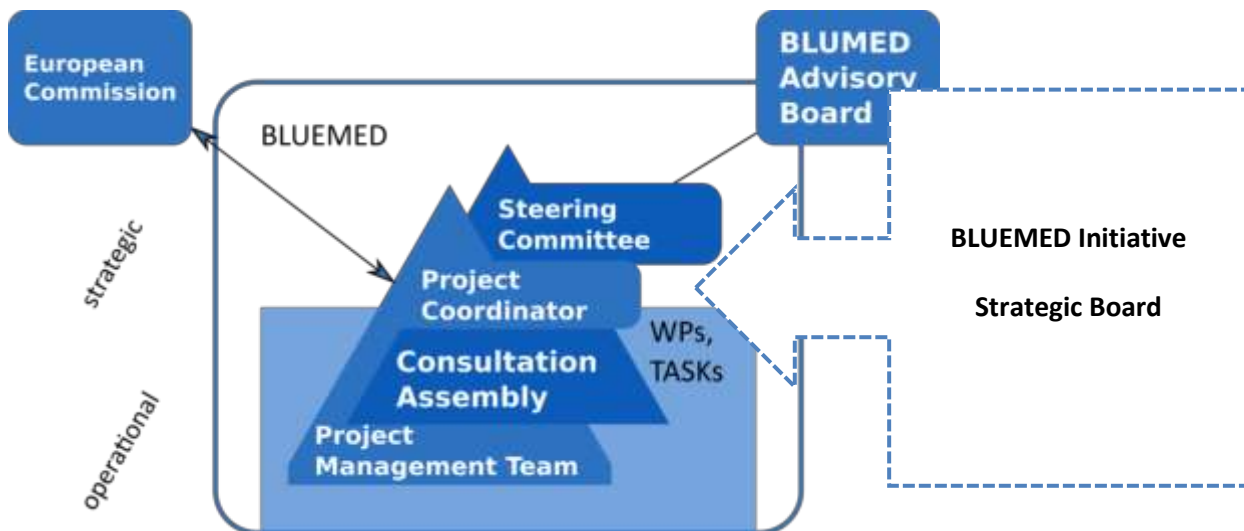
⁷ The specific objectives of the project are to: Consolidate and update the BLUEMED SRIA; Identify and define key framework conditions for the SRIA implementation, addressing a roadmap for the deployment of Research Infrastructures (RIs), assessing data policies and improving strategies for human resources in the ‘blue’ careers perspective; Establish a detailed and realistic Implementation Plan of the SRIA, to be developed together and from the beginning with national research funders and all stakeholders concerned; Support and facilitate the cooperation and coordination in all the Mediterranean countries, in order to promote the alignment of Programmes and pooling of resources and investments to address the

operative instrument of the BLUEMED initiative, the CSA, under the coordination of the National Research Council of Italy, is composed of eleven partners from the nine European countries involved in the BLUEMED initiative (Croatia, Cyprus, France, Greece, Italy, Malta, Portugal, Slovenia, Spain)⁸. The organizational structure of the CSA includes the Project Coordinator and the Project Management Team, the Steering committee and the Advisory Board. The Project Coordinator (PC) represents the project and with the European Commission, while the Project Management Team (PMT) is in charge of day-to-day project's management and administration. The Project Management Team, the work package leader and all participants in the Consortium are in charge of implementing the scientific and technical activities necessary to reach the goals of the project. The Consultation Assembly (CA), is the body where the 11 partners of the Consortium and linked third parties are represented, to discuss the developments of the activities.

At strategic level, the Steering Committee (SC) – the highest level and ultimate decision-making body - and the Project Coordinator (PC) are responsible for the development of policies and plans, provide scientific and technical directions, and review the project progress. The Advisory Board (BAB) is the official strategic, advisory body which assists the Steering Committee on scientific, technical and policy issues⁹. PC, SC and BAB are closely interacting with the coordinator of the BLUEMED Initiative Strategic Board. In particular, the chair and vice-chair are members of the Advisory Board.

Figure 1. BLUEMED CSA Governance structure

BLUEMED project website (www.bluemed-project.eu).



The CSA will work to make the SRIA implemented in the EU and non-EU Mediterranean countries.

challenges identified in the BLUEMED SRIA; Support the design and implementation of new transnational joint activities through the execution of Start-up Actions and the preparation of feasibility studies on specific and crucial challenges for the Mediterranean of the future; Support the consolidation of the role of the BLUEMED Initiative as a key policy reference for all actors of Blue Growth in the area, including administration, private sectors and society, focusing and improving the role of Research and Innovation; Contribute to the implementation of Regional Seas, EU and National policies; Promote the extension of the BLUEMED Initiative to other EU countries and non-EU Mediterranean countries.

⁸ Partners of the Consortium are: National Research Council of Italy (CNR), Hellenic Centre for Marine Research (HCMR), Research Promotion Foundation of Cyprus (RPF), Iza Oceanografiju Ribartsvo of Croatia (IZOR), Ministerio de Economia Y Competitividad of Spain (MINECO), the Malta Council for Science & Technology (MCST), Instituto Espanol de Oceanografia (IEO), Direcao-Geral de Politica do Mars of Portugal (DGPM), Centre National de la Recherche Scientifique of France (CNRS), National Institute of Biology of Slovenia (NIB), Institut Francais de Recherche pour l'exploitation de la mer (IFREMER).

⁹ The CSA will work for four years, with a financial contribution of 3 M euros.

3. Overall strengths of this tool, including key achievements

The adoption of common research and innovation priorities and the SRIA was the result of strong political commitment and ownership of the EU Mediterranean countries. This strong commitment characterizes the entire process driving from the initiative set up to the adoption of the SRIA. It relies on the effective and efficient collaboration among the delegates, started and continued informally without the support of a dedicated organisational structure, based on strong political mandate, mutual trust and shared vision on the need to define a common approach to R&I in the Mediterranean.

The key achievements of the BLUEMED initiative include:

- 1) The EU MS are aligning their research priorities to the BLUEMED SRIA. Some EU MS are adopting BLUEMED SRIA priorities in their national/regional R&I agendas, in line with the Venice Declaration. In Italy, BLUEMED SRIA is quoted in the “National Plan for Research” and in the Italian Strategy for Bioeconomy¹⁰. Furthermore, the Blue growth, one of the 12 specialisation areas of the national research system, is included in the call for proposals dedicated to industrial research and to foster public-private collaborations¹¹.
- 2) The BLUEMED initiative and the SRIA have been endorsed by the European Commission. Some BLUEMED SRIA priorities were adopted by the European Commission, DG RTD and DG MARE, and included in their R&I Work Programmes. DG MARE issued, in 2016, 3 calls: Blue Labs – innovative solutions for maritime challenges¹²; Blue Careers in Europe¹³; Blue Technology – transfer of innovative solutions to sea basin economies¹⁴ (published on February the 29th, deadline for the submission of proposals on May 31st, 2016). DG RTD included six BLUEMED R&I priorities in the Horizon 2020 Work Programme 2016-17, Societal Challenge 2, with a total budget of 43 M euros¹⁵. The BLUEMED SRIA thus contributed to channel the existing funding.
- 3) The BLUEMED SRIA has become a driving pillar mentioned in several EU and international initiatives and actions, such as the European Strategy for Adriatic and Ionian Region (EUSAIR), the Union for the Mediterranean (UfM) and the “Initiative for the sustainable development of the blue economy in the western Mediterranean” (WESTMED), then contributing to align the strategies relating to R&I in the Mediterranean and drive the actions towards the shared priorities.
- 4) Adoption of a BLUEMED Coordination and Support Action (CSA) promoting the implementation of SRIA in the whole Mediterranean. The BLUEMED CSA, active since October 2016, will back the Initiative by spreading the BLUEMED concept, promoting common priorities, maximizing impacts, meeting future challenges and guaranteeing the BLUEMED sustainability. The BLUEMED initiative SRIA could then become, in the forthcoming years, a guiding pillar for the blue growth of the broad Mediterranean Sea area.

3.1 Adoption of SRIA via political commitment

BLUEMED's unique feature relates to the adoption of the Strategic Research and Innovation Agenda via pure political commitment of the Countries involved.

¹⁰ The Italian Strategy for Bioeconomy has been updated on the 20th of April 2017. The document is available at http://www.agenziacoazione.gov.it/opencms/export/sites/dps/it/documentazione/S3/Bioeconomy/BIT_v4_EN.PDF

¹¹ The call for proposals dedicate a budget of 497 million euros, of which 29.525.969 M€ are allocated to the Blue Growth. More information are available at <http://www.miur.gov.it/web/guest/-/avviso-per-la-presentazione-di-progetti-di-ricerca-industriale-e-sviluppo-sperimentale-nelle-12-aree-di-specializzazione-individuate-dal-pnr-2015-2020>.

¹² <https://ec.europa.eu/easme/en/call-proposals-blue-labs-innovative-solutions-maritime-challenges>.

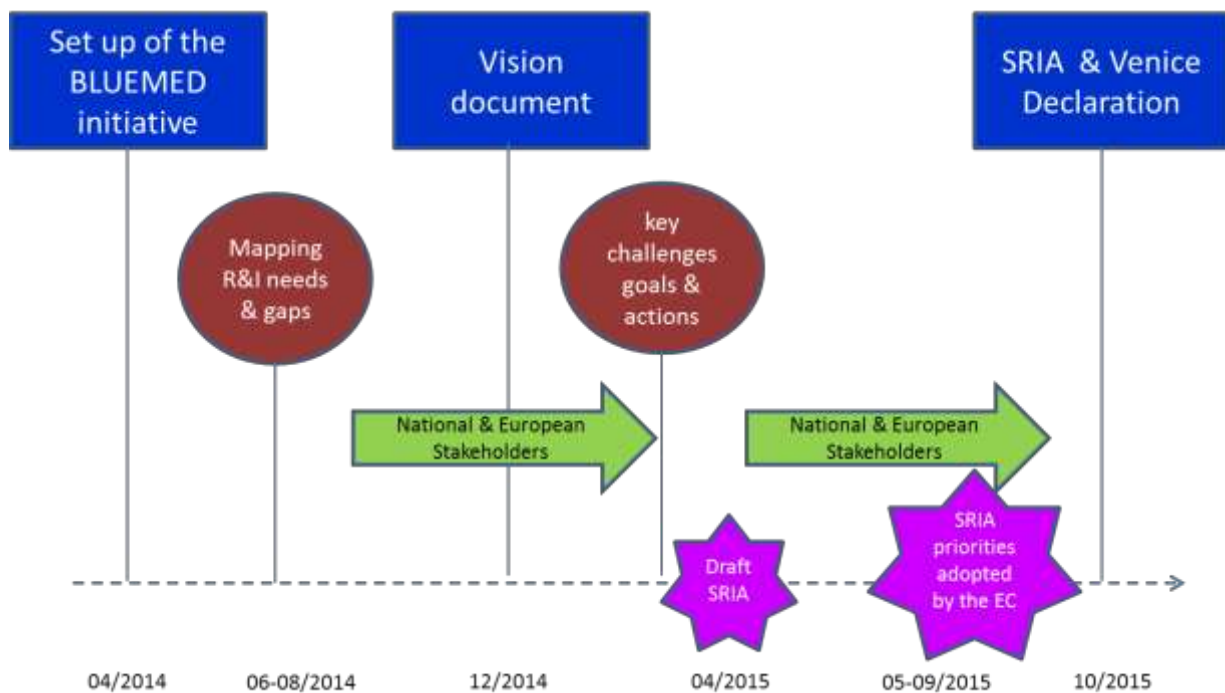
¹³ <https://ec.europa.eu/easme/en/call-proposals-blue-careers-europe>.

¹⁴ <https://ec.europa.eu/easme/en/call-proposals-blue-labs-innovative-solutions-maritime-challenges>.

¹⁵ Horizon 2020 Work programme 2016-2017, Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy, available at http://ec.europa.eu/research/participants/data/ref/h2020/wp/2016_2017/main/h2020-wp1617-food_en.pdf.

It represents a good practice of alignment at strategic level, involving from one side the EU Mediterranean Countries, who committed at political level to adopt common research priorities and strategic agenda, and from the other side, the European Commission, which facilitated and supported the process via the involved DGs (DG RTD, MARE supported by the JRC). The entire process started and developed at political level, with no support from an organisational structure that usually assists the Public to public partnerships (as for instance the secretariat of the Joint Programming Initiatives) or a defined coordinating structure.

Figure 2. BLUEMED initiative SRIA key steps



The process of developing the BLUEMED initiative driving to the adoption of the Strategic Research and Innovation Agenda has consisted of numerous steps, including several meetings. The process started with the regular consultations of Member States delegates organised alongside the Horizon 2020 Programme Committee on Food Security, Sustainable Agriculture and Forestry, Marine, Maritime and Inland Water Research, and Bioeconomy meetings, among the 8 EU Mediterranean Countries, with the support of the European Commission DG’s RTD and MARE, which find a consensus on the necessity and opportunity to define common research priorities and advance a shared vision and research agenda on the Mediterranean.

Several meeting during 2014 supported discussion and consensus building among the Countries involved as well as consultation with stakeholders including industry representatives, private and public associations. The starting point has been on the one hand the mapping of existing/ongoing regional, national and European projects and initiatives by the Countries involved together with the participation of experts, major public and private stakeholders including maritime clusters, and policy makers; on the other hand, the identification of the knowledge and technology/innovation gaps and of the “boundary conditions” that allow these gaps to be addressed¹⁶. About 900 projects were mapped, and the collected information were merged, the needs and gaps

¹⁶ BLUEMED, A blue jobs and growth research and innovation for the Mediterranean. Analysis of the information collected from Med countries through the mapping to identify: gaps and research & innovation opportunities for overcoming them, and related justification; regional and national boundary/framework conditions for the R&I needs and opportunities for successful implementation.

identified, as well as the opportunities and boundary conditions for their implementation¹⁷. The findings have then been shared at national level with local stakeholders and at EU level with European stakeholders, the European Technological Platforms, European innovation and technology cluster, main public-private partnerships, relevant scientific communities and industrial associations at national and EU level.

The initiative became a priority of the Programme of the Italian Presidency of the European Union (1 July-31 December 2014), and the work among Member States and the Commission intensified to delineate a Blue growth flagship initiative for the Mediterranean. The consultation at national and EU level was fundamental to define and elaborate the BLUEMED Vision Document, which was endorsed by the Italian Presidency of the EU Council, presented at the Competitiveness Council of 04-05 December 2014 and approved by the 28 EU Ministers of Research. The document reflected the intent of the “Mediterranean vision”, identified the objectives and the challenges to be addressed. The document, that was presented to major marine and maritime public and private stakeholders as well as policy makers for further feedback, was the basis for developing the Strategic Research and Innovation Agenda.

From February 2015, the Countries participating in the process, on the basis of the mapping and the Vision document, started picking up the specific research and innovation priorities. The key challenges were in particular consolidated, as well as indications of goals and actions according to the drivers of boosting blue jobs and growth. Following the approach used in all the previous steps of the process, the abovementioned priorities were shared at national level and afterwards at European level with relevant stakeholders.

By April 2015 the Strategic Research and Innovation agenda was finalised. An task force involving a restricted number of people abridged the contributions of the 9 Countries and finalised the SRIA.

The consultation process¹⁸ further developed along the two main axes: at national level, a consultation with Ministers, Regions and private sector of the Member States on their research funding priorities and strategies (e.g. smart specialisation) aimed at favouring alignment and implementation of the SRIA; at EU level the SRIA was presented at the Union for Mediterranean (UfM) Stakeholders Conference and Maritime Day, held in Athens in May 2015¹⁹ and at the 7th meeting of the *ad hoc* BLUEMED working group in June 2015. The BLUEMED SRIA priorities were adopted by the European Commission, DG RTD and DG MARE, and included in their R&I programmes.

On the basis of the feedback and comments of the regional, national, EU and international stakeholders, the SRIA was further refined and shared at EU level. In October 2015, the BLUEMED SRIA was published and officially presented to the EU Ministers for R&I and education in Venice²⁰ for the political endorsement. The Agenda was endorsed by 14 EU Countries while 10 countries (Cyprus, Croatia, France, Greece, Italy, Malta, Portugal, Romania, Slovenia and Spain²¹) signed the Venice Declaration the 16th of October. In the Venice Declaration, the Countries agreed to coordinate and integrate efforts to implement the BLUEMED SRIA by actively promoting synergies and complementarities among all the involved stakeholders at local, regional and national level, as well as among Member States at European level, in order to provide added value to regional, national and EU investments by removing barriers, avoiding duplication and reducing fragmentation²².

¹⁷ Mapping of Research & Innovation and other initiatives (from 2007 to date with a budget higher than € 50,000) in the marine and maritime sectors at the regional and national level relevant to the objectives of this blue growth initiative. Annex 1 to the Bluemed Vision Document.

¹⁸ The SRIA was shared with regional, national, EU and international public/private stakeholders between May and September 2015.

¹⁹ Union for Mediterranean Stakeholder’s Conference “Towards a Roadmap for Blue Investment and Jobs in the Mediterranean”, Athens 27-29 may 2015, <http://ufmsecretariat.org/union-for-the-mediterranean-ufm-stakeholders-conference-towards-a-roadmap-for-blue-investment-and-jobs-in-the-mediterranean/>.

²⁰ The event “The BLUEMED initiative for growth and jobs in the Mediterranean” was held at Aquae Venice 2015, the universal exhibition focused on water.

²¹ Belgium took part to several meeting, but it did not signed the Venice Declaration.

²² In the Venice declaration the Countries committed in particular to: promoting the cooperation in research and innovation between all Mediterranean countries; engaging with public and private stakeholders, including small and medium enterprises, in R&I actions of cooperation; supporting knowledge-based policy making; prioritizing the implementation of cross-cutting actions with high societal impact; ensuring the effective and efficient use of resources and infrastructures by Member States cooperation and joint actions; developing innovative sea-related competences, particularly at technical, doctoral and first stage researchers level.

The Strategic Marine and Maritime Research and Innovation Agenda for Blue Growth has been the result of a political commitment of the Member states involved and of a the contribution of the main national and European stakeholder, showing that the SRIA symbolizes a widely-backed “instrument” of the marine and maritime community.

The added value of BLUEMED as purely politically driven initiative grounded on the strong political commitment of the Countries involved. On the other side, this peculiarity requires the maintenance of the high political commitment and ownership of the Countries. This strong endorsement was maintained via regular meetings organised also after the adoption of the SRIA, namely at ECOMONDO, The green technology Expo (held in November 2016 in Rimini, Italy²³) and under the auspices of the Maltese Presidency of the Council of the European Union. Regarding the latter, a first event, “BLUEMED – A basin of research and innovation for sustainable growth”²⁴, aimed in particular to open up the BLUEMED initiative to non-EU Mediterranean Partner Countries. The main goal was to initiate regional cooperation within the Mediterranean by joining all efforts to unlock the potential for Blue Growth and job creation at local, regional and international level. Following a second main conference on “Strengthening Euro-Mediterranean Cooperation through Research and Innovation” held in Valletta, the Ministers responsible for Research and Innovation from the Member States of the Union for the Mediterranean (UfM) and of the European Union released the Valletta Declaration²⁵, as a basis for enlarging the BLUEMED SRIA to the southern shores of the Mediterranean. They also formally recognized BLUEMED as key initiative for promoting blue jobs and growth in the EU 28 and the UfM member countries.

3.2 Creating synergies with regional initiatives: Union for Mediterranean, EUSAIR and WESTMED

The BLUEMED initiative process originates from the need to address the blue growth issues concerning the Mediterranean and its unique features. In order to face the common challenges and define effective responses to natural and anthropogenic pressures of the Mediterranean sea and promote its blue growth, a macro-regional approach was necessary.

With the final objective to contribute to align funding strategies, R&I funds and infrastructures in the Mediterranean at regional, national and EU level, BLUEMED initiative has been developing an intensive dialogue and collaboration with EU macro-regional and trans-national initiatives, in particular the European Strategy for the Adriatic Ionian Region (EUSAIR), the Union for Mediterranean (UfM), and the Initiative for the sustainable development of the blue economy in the western Mediterranean (WESTMED).

As far as the EU Strategy for the Adriatic Ionian Region is concerned, complementarities and mutual benefits relates to the common efforts to develop the blue economy in the region. EUSAIR and the BLUEMED initiative fulfil all the pre-existing conditions to be aligned in terms of identified challenges, actions and stakeholders. BLUEMED and EUSAIR share the same objective of making the region (the Mediterranean in the first, the Adriatic and Ionian in the latter) more healthy, valued, known, resilient and sustainable. While they differ in the geographical coverage and R&I agendas, their objectives are strongly interconnected. Among the 12 key

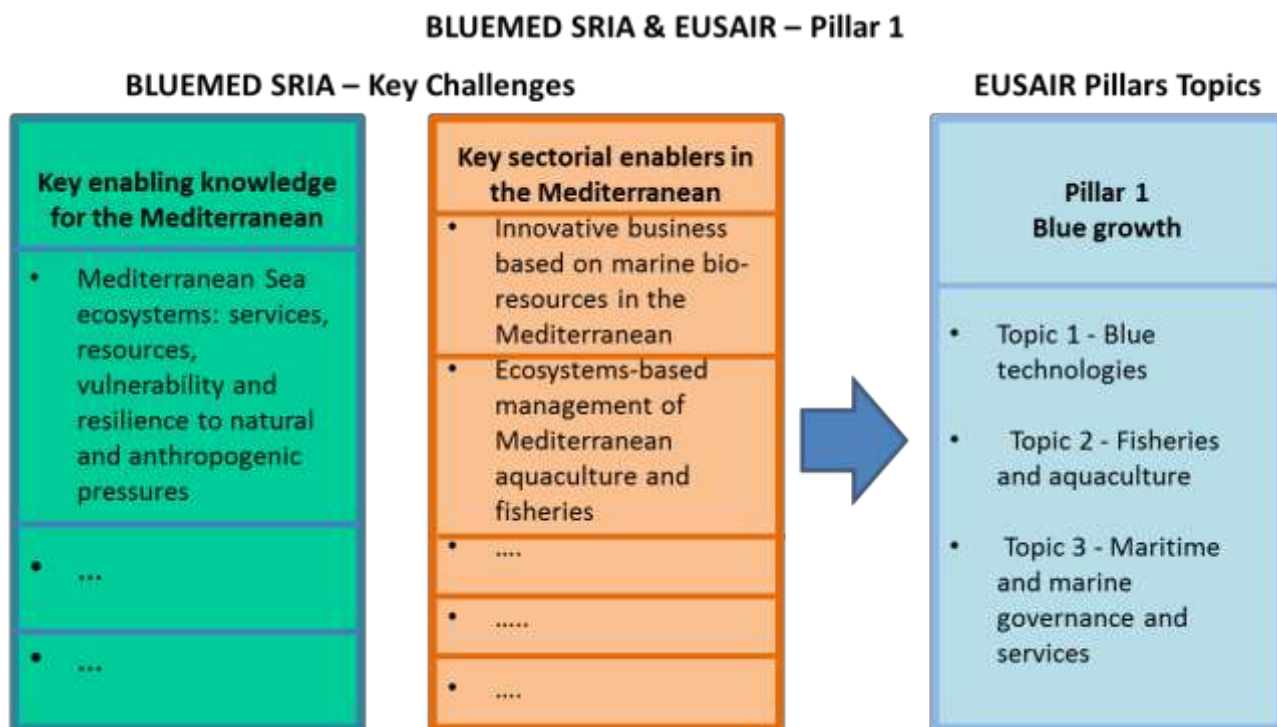
²³ ECOMONDO expo “Biobased industry, bioeconomy and blue growth”, took place in Rimini, Italy on November 8-11. At ECOMONDO was also officially launched the BLUEMED CSA.

²⁴ A Basin of Research and Innovation for Sustainable Growth Conference, 18-19 April 2017, Sliema, Malta. Agenda and presentations are available at <http://www.bluedmed-project.eu/a-basin-of-research-and-innovation-for-sustainable-growth-conference-presentations/>.

²⁵ Valletta Declaration on Strengthening Euro-Mediterranean Cooperation through Research and Innovation, adopted in Malta the 4th of May 2017. http://www.bluedmed-project.eu/wp-content/uploads/2017/05/Declaration_EuroMed-Cooperation-in-RI_1772.pdf

challenges identified in the BLUEMED SRIA, synergies and complementarities emerged with the EUSAIR 4 pillars²⁶. Some of the identified topics by BLUEMED are relevant for the EUSAIR, in particular those concerning the EUSAIR first pillar “blue growth”²⁷, such as fisheries regionalisation, aquaculture and seafood processing, and blue and green innovation. The specific objectives for the EUSAIR first pillar include fostering research, innovation and businesses opportunities in blue economy sectors, by facilitating the brain circulation between research and business communities and increasing their networking and clustering capacity.

Figure 3. BLUEMED SRIA 12 key challenges & EUSAIR Pillars



²⁶ EUSAIR strategy is structured around 4 pillars: pillar 1 - blue growth (coordinated by Greece and Montenegro); pillar 2 – connecting the region (coordinated by Italy and Serbia); pillar 3 – environmental quality (coordinated by Slovenia and Bosnia Herzegovina); pillar 4 – sustainable tourism (coordinated by Croatia and Albania). For more details visit <http://www.adriatic-ionian.eu/about/pillars>.

²⁷ Pillar 1 - blue growth objectives are: To promote research, innovation and business opportunities in blue economy sectors, by facilitating the brain circulation between research and business communities and increasing their networking and clustering capacity; To adapt to sustainable seafood production and consumption, by developing common standards and approaches for strengthening these two sectors and providing a level playing field in the macro-region; To improve sea basin governance, by enhancing administrative and institutional capacities in the area of maritime governance and services. To reach these objectives, the pillar focuses on three topics: blue technologies; fisheries and aquaculture; maritime and marine governance and services.

BLUEMED SRIA & EUSAIR – Pillar 2

BLUEMED SRIA – Key Challenges

Enabling technology and capacity creation for the Mediterranean
<ul style="list-style-type: none"> • Smart, greener maritime transport and facilities in the Mediterranean
<ul style="list-style-type: none"> • Multi-purpose off-shore platforms in the Mediterranean
<ul style="list-style-type: none"> •
<ul style="list-style-type: none"> •



EUSAIR Pillars Topics

Pillar 2 Connecting the region
<ul style="list-style-type: none"> • Topic 1 - Maritime transport
<ul style="list-style-type: none"> • Topic 2 - Intermodal connections to the hinterland
<ul style="list-style-type: none"> • Topic 3 - Energy networks

BLUEMED SRIA & EUSAIR – Pillar 3

BLUEMED SRIA – Key Challenges

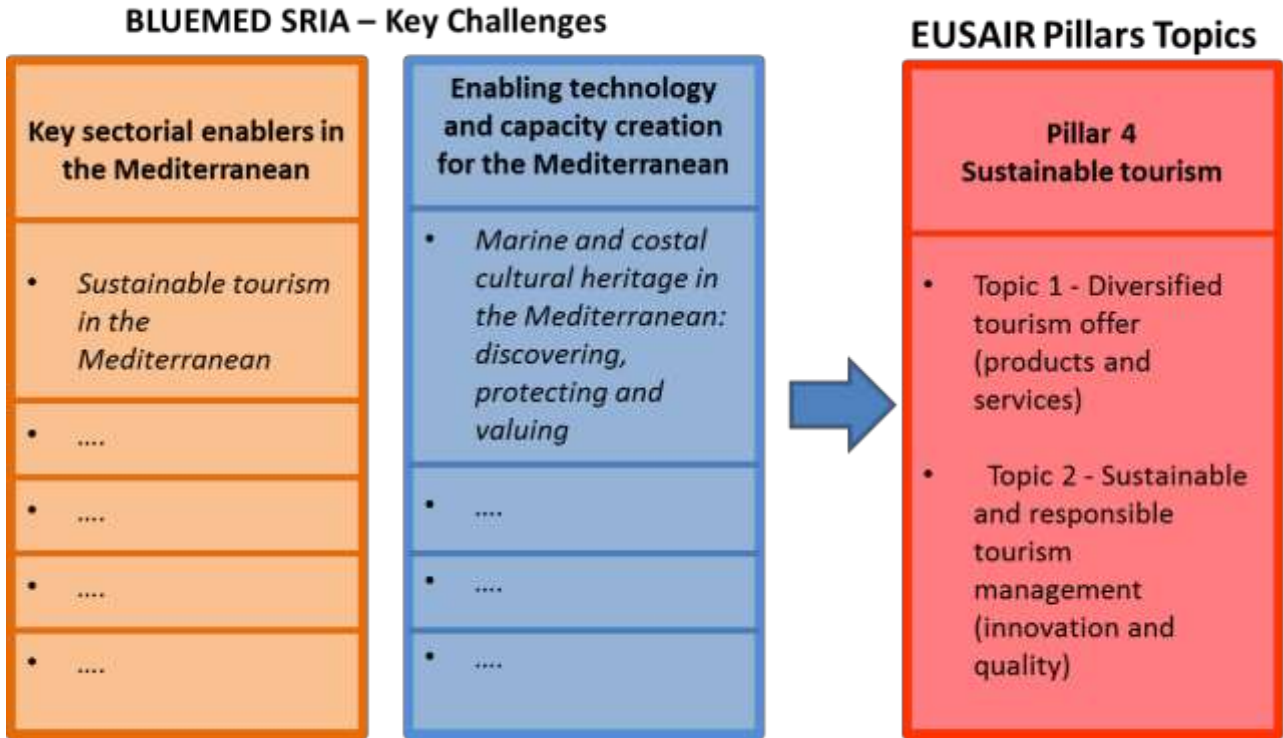
Key enabling knowledge for the Mediterranean	Key sectorial enablers in the Mediterranean	Enabling technology and capacity creation for the Mediterranean
<ul style="list-style-type: none"> • Mediterranean Sea ecosystems: services, resources, vulnerability and resilience to natural and anthropogenic pressures 	<ul style="list-style-type: none"> • <i>Maritime Spatial Planning & Integrated Coastal Zone Management in the Mediterranean</i> 	<ul style="list-style-type: none"> • <i>Observing systems and operational oceanography capacities in the Mediterranean</i>
<ul style="list-style-type: none"> • Mediterranean Sea dynamics: developing services in the field of sustainable adaptation and to climate change and plans for mitigation; 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> •
<ul style="list-style-type: none"> • Hazards and protection of coastal areas in the Mediterranean 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> •



EUSAIR Pillars Topics

Pillar 3 Environmental quality
<ul style="list-style-type: none"> • Topic 1 - The marine environment
<ul style="list-style-type: none"> • Topic 2 - Transnational terrestrial habitats and biodiversity

BLUEMED SRIA & EUSAIR – Pillar 4



BLUEMED and EUSAIR pay particular attention to the Blue jobs. BLUEMED aims at training a new generation of scientists, professionals, technicians and entrepreneurs able to tackle complex ecological, economic and societal problems from a holistic perspective for new and qualified “jobs of the sea”. EUSAIR cross-cutting issues include “capacity building”²⁸.

Due to these complementarities, the representatives of BLUEMED strategic board and of EUSAIR initiative have been sharing research and innovation priorities and actions, in close cooperation with DG REGIO and DG MARE, in order to define common R&I agendas. At ECOMONDO expo, a working group involving representatives of BLUEMED and EUSAIR started discussing and sharing respective priorities, in order to align the strategies. An information flow between key actors working on implementing the BLUEMED SRIA and EUSAIR Action Plan as well as the representatives of Croatia, Greece, Italy and Slovenia working in BLUEMED and the EUSAIR National Coordinators and Pillars Coordinators has thus been set up. Being an instrument devoted to channelling existing funding, the BLUEMED initiative in coordinating with EUSAIR can effectively help in aligning marine and maritime R&I funds in the broad Mediterranean sea area.

BLUEMED initiative is quoted in the Union for Mediterranean (UfM) declaration and road-map. The Union for Mediterranean, intergovernmental organisation bringing together the 28 EU MS and 15 Countries from the Southern and Eastern shores of the Mediterranean, provides forum to enhance regional cooperation and dialogue in the Euro-Mediterranean region²⁹. Gathering 43 MS representatives together on a regular basis, the UfM serves as a framework for policy dialogue and exchange of project ideas, experiences and best practices among governments, key international institutions and cooperation structures³⁰. Project and initiatives are implemented

²⁸ The second EUSAIR cross-cutting issue focuses on « Research, innovation and small-and-medium-size enterprise (SME) development.

²⁹ The Secretariat of the Union for the Mediterranean is the structure dedicated to the intergovernmental Mediterranean partnership. Based in Barcelona, it is the operation institution that empowers the regional dialogue between the UfM member states and stakeholders, fostering synergies among them and promoting cooperation projects and initiatives.

³⁰ For more information, <http://ufmsecretariat.org>.

within the framework of UfM in six strategic priority areas: business development, social and civil affairs, higher education and research, transport and urban development, water and environment, energy and climate action³¹. Following the Conference on “Strengthening Euro-Mediterranean Cooperation through Research and Innovation” held on 4 May 2017 in Valetta under the auspices of the Maltese Presidency of the Council of the European Union with the support of the European Commission, the Ministers responsible for Research and Innovation from the Member States of the Union for the Mediterranean (UfM) and of the European Union (EU) released the Valletta Declaration. The Valletta Declaration recognizes the “work performed by the countries in the Western Mediterranean and the Adriatic and Ionian Region that aim at a joint and common definition of research priorities” and reaffirms the importance of developing and promoting a shared vision of the Mediterranean Sea as a healthy, safe and productive common resource, so as to promote security, safety and prosperity of present and future generations, via the BLUEMED initiative³². BLUEMED CSA and the BLUEMED Strategic Board are currently involved in promoting the SRIA in all Countries bordering the Mediterranean, in close cooperation with the Union for Mediterranean.

BLUEMED is also a reference initiative for the new “Initiative for the sustainable development of the blue economy in the western Mediterranean” (WEST MED), launched in April 2017 by the European Commission³³. The initiative is the fruit of years of dialogue between ten countries of the Western Mediterranean region ready and willing to work together on shared interests for the region: five EU Member states (France, Italy, Portugal, Spain and Malta) and five Southern partner countries (Algeria, Libya, Mauritania, Morocco and Tunisia)³⁴. It builds on the Union for the Mediterranean process and its Ministerial Declaration on the Blue Economy adopted on 17 November 2015, which invites the UfM countries to explore the added value and feasibility of maritime appropriate strategies, including at sub-regional level³⁵. In defining the goals of the initiative, in particular relating to “a smart and resilient blue economy”, the EC communication specifies that “this goal largely builds on existing initiatives such as BLUEMED and its Strategic Research and Innovation Agenda”³⁶. Furthermore, concerning the initiative priorities’, the EC Framework for Action identifies the actions covering a range of strategic areas of research and innovation “in line with the BLUEMED Strategic Research and Innovation Agenda”³⁷. The forthcoming months will be essential for the European Commission and the Union for the Mediterranean to discuss the next steps to obtain full political endorsement and start implementation of the initiative. This is of particular value in the perspective of the BLUEMED initiative and CSA to promote the alignment of programmes and pooling resources and investments of non-EU Mediterranean Countries.

³¹ The Union for Mediterranean was created in 2008 as a direct continuation of the Barcelona Process, to reaffirm the political ambition to strengthen regional cooperation in the Euro-Mediterranean area.

³² The Declaration is available at http://www.bluemed-project.eu/wp-content/uploads/2017/05/Declaration_EuroMed-Cooperation-in-RI_1772.pdf.

³³ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Initiative for the sustainable development of the blue economy in the western Mediterranean, COM(2017) 183 final. https://ec.europa.eu/maritimeaffairs/sites/maritimeaffairs/files/com-2017-183_en.pdf.

³⁴ The initiative follows up on Ministerial Declaration on the Blue Economy endorsed by the Union for Mediterranean on 17 November 2017, which invited the participating countries to explore the added value of the feasibility and appropriate maritime strategies at sub-regional level..

³⁵ The initiative builds on the experience of the 5+5 dialogue, forum officially launched in Rome in 1990 as an informal sub-regional forum with the main aim of fostering relations between EU countries and the Arab Maghreb Union. The 5+5 dialogue concerns Algeria, France, Italy, Libya, Malta, Mauritania, Morocco, Portugal, Spain and Tunisia. More information are available at <http://westmediterraneanforum.org/about-the-55-dialogue/>.

³⁶ COM(2017) 183 final.

³⁷ Communication from the Commission to the European Parliament and the Council, the Committee of the Regions and the European Economic and Social Committee, Initiative for the Sustainable Development of the Blue Economy in the Western Mediterranean. COM(2017) 183 final. https://ec.europa.eu/maritimeaffairs/sites/maritimeaffairs/files/swd-2017-130_en.pdf.

The BLUEMED initiative is also coherent with the EuroOCEAN 2014 Rome Declaration³⁸ which supports the vision and the objectives of the BLUEMED initiative as a regional action which promotes an integrated approach to managing maritime space and resources.

Finally, the BLUEMED initiative, in line with the goal of creating synergies and avoiding duplications, developed in complementarity with the Partnership for research and innovation in the Mediterranean Area (PRIMA) in terms of addressed topics, focusing the latter on the solutions for more sustainable management of internal water and agro-food systems³⁹, involving since the beginning EU and non-EU Mediterranean Countries.

4. Overall limitations with this tool, including difficulties encountered during implementation

4.1 Region's geographical complexity

The limitations of the BLUEMED initiative mainly relates to the region's geographical complexity. The heterogeneous character of the Mediterranean region, in particular the different dimension and structure of the EU Mediterranean countries (as for instance Malta/Cyprus compared to France and Spain) may be a limitation to attain the objectives of the initiative and define an implementation plan.

Furthermore, taking into consideration the Non-EU Mediterranean countries, the region's geopolitical complexity may represent a constraint on sharing the SRIA with non-EU Mediterranean countries and align R&I programmes and strategies. The heterogeneous character of the region makes cooperation between the countries and sectors challenging. While existing cooperation structures in the Mediterranean region pursue objectives in a range of different sectorial activities, they struggle to achieve common goals when passing to concrete action in the development of a sustainable blue economy and need a more integrated approach and a more geographically focused scope to gain increased efficiency and consistency.

Nevertheless, joint efforts and a global Mediterranean perspective are required to successfully address present and future challenges. A stepwise approach developed at regional level, involving EU and non-EU Mediterranean Countries and a greater integration at Mediterranean level of marine and maritime research agendas and policies is then essential to implement the blue growth and stabilise the entire area.

4.2 Informal organisational structure

The BLUEMED was launched with a strong political support and for years worked without an organisational structure. This has been a limitation and required a high political endorsement and persistently. Working on a voluntary basis and without a dedicated budget has been challenging. The BLUEMED CSA is addressing part of the needs by acting as "operational instrument" of the initiative, by implementing the Strategic Board planning and supporting the ownership and political commitment at the required level to share, revise and implement the SRIA in the whole Mediterranean area.

³⁸ EuroOcean2014, Connecting Science, Policy and People, held in Rome on 7-9 October 2014. Conference Report and Rome Declaration available at <http://www.eurooceanconferences.eu>.

³⁹ In December 2014, following the adoption of the Competitiveness Council's conclusions of the 5 December 2014, 9 EU MS submitted a proposal for the participation of the EU in a joint research and innovation programme focused on the development and application of innovative solutions for food systems and water resources in the Mediterranean basin, as art. 185 initiative under H2020. On 13th June 2013, the European Parliament adopted the PRIMA Basic Act and on 26 June, the Council endorsed the initiative. The initiative will be launched in January 2018.

5. Conclusions: Suitability and key factors of success

The foundation of the success of the BLUEMED initiative is the strong political endorsement provided by the 9 EU MS involved and the constant and effective interest expressed in it by the EU Commission via DG RTD and DG MARE. It represents a good practice example of coordination, at strategic level, between research, policy and industry at national, regional and EU level. It relies on an informal process involving the national delegates and the EC representatives, with the continuous involvement of the regional, national and European stakeholders in the process.

The SRIA reflects the agreement on long term R&I priorities and strategies needed to face common great challenges concerning the specific area of the Mediterranean Sea.

At funding level, the initiative developed to mobilize regional, national, macro-regional and EU existing funding and to channel future R&I funding. It is a good example of alignment of research and innovation funding on the identified and shared priorities. This is an ongoing process that will explain its full impact and potential in the forthcoming years, as the smart specialisation strategies under revision at the national, regional and macro-regional will take BLUEMED priorities into account.

Key factors of success:

1) At strategic level:

- Have a **strong political commitment** of the Countries involved in the Strategic Board. The countries' delegates and representatives composing it need to have an explicit political mandate to negotiate and develop new strategies and actions. As a politically driven process, the maintenance of the high political commitment and endorsement of the Countries is required. This political endorsement, not supported by a defined organisational structure, needs to be maintained via regular consultations and/or official meetings and events.
- Develop a **common vision and strategic objectives** among Countries and initiatives of the whole area. Discussion and consensus building among the Countries involved, as well as consultation with other initiatives and stakeholders, developed via regular meetings, contribute to develop and advance a long term strategic coordination of R&I activities.
- Develop **synergies and complementarities** with regional and international initiatives and programmes, will provide added value to regional, national and EU investments, avoiding duplication and reduce fragmentation. Consultation and establishment of ad hoc working groups involving representatives of the EU, regional and international initiatives will contribute to share and define long term common strategic priorities and foster the alignment of R&I programmes.

2) At financial level:

- Define shared strategic R&I innovation priorities to effectively channel funding at EU, national and regional level. Align national and regional programmes will contribute **mobilize the R&I funding** towards the shared priorities. Create synergies with regional initiatives and use the Smart specialisation strategy will foster the convergence of funds.

3) At operational level:

- **Jointly agree on countries responsibilities and on the coordination of the initiative**, to ensure that, without a secretariat or an organisational structure, the process efficiently develops.
- Develop a **collaboration with relevant stakeholders**, collect their inputs on the needs and gaps, on the R&I priorities and on the SRIA. The consultation of the national and European stakeholders and the elaboration of a stakeholders-oriented SRIA will contribute to advance a share vision reflecting the entire R&I community as well as its effective implementation.

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Interview

Fabio Fava, Chair Blued-med Initiative Strategic Board

Margherita Cappelletto, National Research Council of Italy

ANNEX 1 – BLUEMED STRATEGIC RESEARCH AND INNOVATION AGENDA

The BLUEMED **Strategic Research and Innovation Agenda** (SRIA) is a tool for addressing twelve identified key challenges. It is designed to be a living document offering a handbook for interested implementing bodies, bearing in mind that the BLUEMED initiative:

- allows for different types of action to be taken at different levels, as regards geographical coverage, critical mass, joint funding, coordination of national/regional efforts or the use of EU instruments;
- is designed to involve relevant players and stakeholders such as national ministries, regional authorities, international organisations, organisations that undertake research, research infrastructure, academia, the private sector, non-governmental organizations and the general public.

It details the scope, level and duration of specific joint actions to be taken in order to achieve a particular goal falling within a key challenge.

BLUEMED IDENTIFIES THE FOLLOWING KEY CHALLENGES

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: developing services in the field of sustainable adaptation to climate change and plans for mitigation*
- C. Hazards and the protection of coastal areas in the Mediterranean*

Key sectoral enablers in the Mediterranean

Specific subsections of the blue growth path

- A. Innovative businesses based on marine bio-resources in the Mediterranean*
- B. Ecosystem-based management of Mediterranean aquaculture and fisheries*
- C. Sustainable tourism in the Mediterranean*
- D. Maritime clusters in the Mediterranean*
- E. Maritime Spatial Planning and Integrated Coastal Zone Management in the Mediterranean*

Enabling technology and capacity creation for the Mediterranean

Innovative human potential and infrastructure required

- A. Smart, greener maritime transport and facilities in the Mediterranean*
- B. Observing systems and operational oceanography capacities in the Mediterranean*
- C. Multi-purpose offshore platforms in the Mediterranean*
- D. Marine and coastal cultural heritage in the Mediterranean: discovering, protecting and valuing*