



**D3.6 Revised handbook of relevant
Black Sea projects, initiatives and
entities,
including the modes of engagement**

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DELIVERABLE ID:	WP No/Del No/TASK No 3.6
DELIVERABLE TITLE:	Revised handbook of relevant Black Sea projects, initiatives and entities, including the modes of engagement
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TYPE	Report
DISSEMINATION LEVEL:	PU
FILE:	Black Sea CONNECT_D3.6
REVISION:	V1
DUE DATE OF DELIVERABLE:	30.06.2023
ACTUAL SUBMISSION DATE:	29.06.2023
CALL	H2020-BG-2018-2020 (Blue Growth) Coordination of marine and maritime research and innovation in the Black Sea
TOPIC	LC-BG-09-2019 Focus area: Building a low-carbon, climate resilient future (LC)

Document History

REVISION	DATE	MODIFICATION	AUTHOR
0.1		Document Creation	

Classification

This document is:

Draft	
Final	x
Confidential	
Restricted	
Public	x



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 860055.

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Executive Summary

This deliverable “Revised Handbook of existing and recent past 'activities' (projects, initiatives and entities)” is an important resource that provides a comprehensive overview of ongoing projects, initiatives, and entities operating in the Black Sea area. The Revised Handbook, presented in a well-organised and accessible format, enables a holistic understanding of the activities taking place in the region. It covers both, the activities that involve the Black Sea directly, as well as those on other European seas and rivers. These activities span a range of projects, initiatives and entities, with the majority being intergovernmental and international. The largest category is related to the European Union Framework and Horizon Programmes. While preparing this document, projects collected for D2.1 and D2.7 are also integrated and D2.7 also uses this document for the EU level projects for the database.

This Handbook provides a mechanism for tracking the outcomes of various activities in the Black Sea region. It served, and could be used in the future, as a valuable tool for the work that has been done in the region and beyond. It helped the Black Sea Connect consortium partners engaging with stakeholders, raising awareness about the Black Sea region, and ultimately contributing to the Black Sea SRIA and Implementation Plan development.

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The Handbook can be considered as a bridge, facilitating dialogue and fostering collaboration among various actors working towards common goals. It serves as a comprehensive guide for all those involved in the development and cooperation efforts within the Black Sea region, ultimately contributing to its sustainable growth and prosperity.

Stakeholders' identification and connecting with the CSA was ongoing process throughout the Black Sea CONNECT. The stakeholders listed here were invited to various project. In addition, most of them are working in close collaboration with members of the Black Sea CONNECT consortium to identify the needs and required actions that could support the update and proper implementation of the SRIA. These actors are also kept informed of the CSA achievements throughout the Black Sea CONNECT newsletters and invitation to events/questionnaires.

The CSA members also actively took part in the relevant process of other projects mentioned here to ensure synergies and the uptake of the Black Sea SRIA and its Implementation Plan. Additionally, some actors mentioned here are invited to involve in the Operational Network of Funders for the implementation of the SRIA who played a key role in preparation of the Implementation Plan and further its uptake at the policy level. (More information on how is provided under D2.5) Based on these interactions, many of these actors are engaged and included in the Black Sea SRIA as key initiatives/organizations to contribute to the uptake of SRIA IP.



Beyond the CSA, these stakeholders will be integrated into the Black Sea CONNECT website alongside the final IP to allow as a go-to platform for those who are interested in the Black Sea SRIA and its Implementation Plan, funding agencies, etc.

1. Context

The underpinning concept of Black Sea CONNECT is to develop and update the SRIA and the Implementation Plan by establishing an Operational Network of Funders (ONF) and key players and to support the implementation through a series of transnational joint activities. Key to this, throughout the project lifetime, is to link the Black Sea Initiative with similar processes in other sea basins and to build on successful past and ongoing projects. This involved both identification of and interaction with relevant projects and involving them in workshops and other events. In this way, the Black Sea CONNECT project:

- built on existing achievements of the community;
- accessed experiences in other seas;
- widened collaboration networks;
- acquired advanced expertise;
- identified additional key emerging stakeholders; and
- increased visibility to influence policy in the Black Sea basin and other European sea basins.

This Deliverable provides an up-to-date list of linked and other relevant entities, such as projects, organisations and initiatives. These entities are not only directly concerning the Black Sea, but there are also about other seas and rivers across Europe, where experience and expertise is likely to be beneficial to Black Sea studies and actions.

The results that the Black Sea CONNECT has achieved are briefly described below, grouped under different categories. It has to be noted that some entities could be included in more than one category.

The Annex to this Deliverable is a detail spreadsheet with contact details and other key information on each of the entities.

2. Black Sea Commissions, Initiatives, Networks and Forums

The Black Sea region is a distinct geographical area rich in natural resources and strategically located at the junction of Europe, Central Asia and the Middle East. With a large population, the region faces a range of opportunities and challenges. It is also a region with many environmental problems and insufficient supporting mechanisms. In spite of significant positive developments in the last years, differences still remain among the different countries of the region. The sea's unique position makes it a case study on the benefits of cross-border cooperation – among Black Sea countries and with the EU. A dynamic, coordinated, regional response to its issues can greatly benefit the Black Sea and the citizens of the Black Sea riparian countries.

2.1 **The Commission on the Protection of the Black Sea Against Pollution (The Black Sea Commission, BSC)** is the inter-governmental body established to implement the Convention on the Protection of the Black Sea Against Pollution. The Convention has



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three specific Protocols: 1) control of land-based sources of pollution; 2) dumping of waste; and 3) joint action in the case of accidents (such as oil spills). The BSC supports the Black Sea Blue Growth Initiative and has already declared its support to the Black Sea CONNECT project. As a linked to the Black Sea CONNECT project/initiative, BSC could be the main “user” and “provider” of and to Black Sea CONNECT actions. The BSC was a contributor to the Black Sea Blue Growth Initiative (Black Sea Senior Officials Working Group for the implementation of the Black Sea Strategic Research and Innovation Agenda, Black Sea WG-GSO), and as such, Black Sea CONNECT and BSC use to work very well before 2022, especially on existing knowledge and expert base.

- 2.2 The **Organisation of the Black Sea Economic Cooperation (BSEC)** is a representative regional organization promoting economic cooperation in the wider Black Sea area. BSEC serves as a trusted vehicle for cooperation in a wide range of areas (environmental protection, agriculture, culture, tourism, science and technology, education, energy, SMEs, emergency assistance, transport and etc.) for its 12 Member States (Albania, Armenia, Azerbaijan, Bulgaria, Georgia, Greece, Moldova, Romania, Russia, Serbia, Turkey and Ukraine) and beyond. It has 4 other autonomous entities (the Parliamentary Assembly of BSEC (PABSEC), the Black Sea Trade and Development Bank (BSTDB), the International Centre for Black Sea Studies (ICBSS) and the BSEC Business Council), which greatly contribute to the promotion and implementation of the Organization's objectives.

BSEC is a partner of Black Sea CONNECT consortium and involved in the Black Sea CONNECT Joint Actions. Additionally, BSEC is also involved as an observer in the Black Sea WG-GSO, having the mandate to steer the SRIA implementation.

- 2.3 The **International Centre for Black Sea Studies (ICBSS)** is an independent research and training institution focusing on the wider Black Sea region, and a related body of the Organisation of the Black Sea Economic Cooperation (BSEC), serving as its think-tank. It aims to enhance knowledge, empower people and enable synergies in the wider Black Sea region both within and beyond its boundaries. The fact that ICBSS was from the beginning in the Black Blue Growth Initiative and now partner of Black Seas is very beneficial to the Black Sea CONNECT outcomes.

- 2.4 The **Black Sea Synergy** is the main EU initiative dedicated to the Black Sea region. It was officially launched on February 14, 2008, in Kiev, on the occasion of a meeting of the ministers of foreign affairs of the EU Member States and the states in the region covered by the Synergy (Armenia, Azerbaijan, Georgia, the Republic of Moldova, the Russian Federation, Turkey, Ukraine). The main objective of the Black Sea Synergy is to strengthen cooperation in the area, with EU's involvement in a constructive agenda of dialogue and cooperation with the region. It provides guidelines for “pragmatic” cooperation projects between countries in the region and the EU, in the areas of democracy, human rights, good governance, border management, frozen conflicts, energy, transport, environment, maritime policy, fisheries, trade, migration, development, education, research and development. The value added by the Synergy lies in its inclusiveness and in encouraging a bottom-up, flexible approach, and on participation in projects on a voluntary basis.



2.5 The **Common Maritime Agenda for the Black Sea (CMA)** is a sea basin initiative that supports regional cooperation towards a more sustainable Blue Economy related to oceans, seas, and coasts and interlinked sectors.

The CMA for the Black Sea recognises the need for coordinated approach to address common maritime and blue economy challenges. It is the first initiative of its kind in the region, resulting from a bottom-up process initiated by the countries involved and backed by the European Commission. CMA aims at reinforcing regional dialogue between participating countries and stakeholders to jointly address the challenges and opportunities of blue economy sectors in the area, ensuring environmental sustainability while fostering growth and promoting blue economy projects.

The CMA for the Black Sea was endorsed on 21 May 2019, by the Ministers of the seven Black Sea Countries, as a follow-up to the commitment of the 2018 Burgas Ministerial Declaration “Towards a Common Maritime Agenda for the Black Sea”. In response to Russia’s unprovoked and unjustified military aggression against Ukraine, the participation of the Russian Federation in the CMA has been suspended, as well as all forms of cooperation at regional and national level with Russian stakeholders.

To support the implementation of the EU sea basins initiatives, the European Commission has established an Assistance Mechanism to the sea basin strategies.

2.6 The **Black Sea Assistance Mechanism (BSAM)** has an executive management team to support the implementation process of CMA in the Black Sea. BSAM assists stakeholders at regional and national level to implement events, develop projects, provides guidance on funding opportunities on Blue Economy. The Black Sea Assistance Mechanism is supported by the European Maritime, Fisheries and Aquaculture Fund (EMFAF); it is implemented by the European Climate Infrastructure and Environment Executive Agency (CINEA) and the Directorate-General for Maritime Affairs and Fisheries (DG MARE) of the European Commission.

Key elements of the Black Sea Assistance Mechanism are the National Hubs (NH), established in each participating country. NHs are staffed with national experts on maritime and marine issues and function under the steer of the central team. Their role is to raise awareness of the opportunities created by the CMA and to establish dialogue and active exchange between national key stakeholders. In close liaison with the central team, the NHs establish network partnerships on thematic areas and contribute to the CMA goals and priorities by analysing barriers, promoting the CMA thanks to a dedicated communication stream, supporting national stakeholders in projects and organising dedicated national events.

Black Sea CONNECT CSA operates closely with the BSAM team. IMS/METU, the co-coordinator team of the Black Sea CONNECT also acts as the BSAM NH for Turkey.

2.7 The **General Fisheries Commission for the Mediterranean (GFCM)** is a regional fisheries management organization of FAO. Its main objective is to ensure the conservation and the sustainable use of living marine resources and the sustainable development of aquaculture in **both** the Mediterranean and Black Sea. GFCM is a linked Black Sea CONNECT project/initiative, with its existing projects and results used for development of fisheries management.



2.8 In the framework of the Black Sea Synergy, Romania proposed and launched in 2008 the **Black Sea NGO Forum**, which continues throughout the years to be a driving force for change in the region. The Black Sea NGO Forum has been organized by the Romanian Ministry of Foreign Affairs in close partnership with the Federation of Non-Governmental Organizations for Development of Romania (FOND), with the support of the European Commission. The Forum focuses on good practices in various fields and countries as well as on successful cooperation initiatives, the main challenges and opportunities in the region. It aims at increasing the level of dialogue and cooperation among NGOs in the wider Black Sea Region, strengthening the NGOs capacity to influence regional and national policies and to increase the number and quality of regional partnerships and projects.

Since its launch in 2019, Black Sea CONNECT CSA partners have attended the forum each year to share the update on the Black Sea SRIA Implementation and highlight the role of the civil society in the process.

2.9 The **Cross-Border Maritime Spatial Plan for the Black-Sea – Romania and Bulgaria (MARSPLAN-BS and MARSPLAN-BS II)** aimed at supporting the coherent, cross-sectoral MSP in Bulgaria and Romania and to establish a long-lasting mechanism for the Black Sea Basin cross-border cooperation on MSP, addressing Land-Sea Interactions and Multi-Use concepts. They are providing effective stakeholder participation in the design of national and cross-border MSP process, and sharing of good practices for the Black Sea from Bulgaria and Romania.

Partners in Black Sea CONNECT (GeoEcoMar, INCDM Grigore Antipa and IO-BAS) have also been involved as scientific partners in MARSPLAN-BS and MARSPLAN-BS II projects – and they brought to the consortium the best practice, presentation of workflow, difficulties and solutions to overcome bottlenecks.

2.10 The **Black Sea Network for Sustainable Tourism – strategies for joint marketing in tourism and development in the Black Sea Region (Black Sea Tourism Net)** has partners from Bulgaria, Georgia, Moldova, Ukraine and Turkey, creating a joint marketing strategy for promoting tourist products and services. The aim is not only to improve the quality of tourist services but also focus on those tourist services that need to be further developed.

2.11 The **Black Sea NGO Network (BSNN)** was established in 1998 as a regional association of NGOs from all Black Sea countries with more than 60 members as of today. Its mission is to contribute to the protection and rehabilitation of the Black Sea, including the Azov Sea. One of its main objectives is to increase the potential of the sustainable development of the Black Sea countries, through increased participation of NGOs, governments, businesses and other institutions, as well as the general public.

2.12 The **Ocean Data and Information Network for the Black Sea (ODINBLACKSEA)** was established as a Pilot Project, by IODE Committee of IOC. It has been proposed by the riparian countries to: (i) provide assistance in the development, operation and strengthening of National Oceanography Data Centres (NODCs); (ii) provide training and education in marine data and information management; (iii) enhance national and regional awareness for Marine Data and Information Management; (iv) assist in the development and maintenance of national and regional marine data, metadata and



information databases; (v) assist in the development and dissemination of marine data and information products and services; (vi) undertake its activities in close collaboration and networking with other relevant organizations, programmes and projects operating in the Black Sea region; and (vii) applying modern technologies for data collecting, processing, storing and disseminating.

Links with the ODINBLACKSEA were maintained via the Black Sea CONNECT partner INCDM Grigore Antipa.

3. River Basin Commissions

Two of the major rivers (Danube, Dniester) flowing into the Black Sea have Commissions for international cooperation. The existing links between Black Sea CONNECT partners and the Danube and Dniester commissions were used for effective information exchange and cooperation. Since the river outputs (in terms of water, sediments, particulate matter, living organisms) become inputs into the Black Sea, a direct collaboration of the consortium team with the two riparian river commissions was, and still is, crucial for the identification of common points of action and significant issues.

- 3.1 The **International Commission for the Protection of the Danube River (ICPDR)** is a transnational body working to ensure the sustainable and equitable use of waters in the Danube River Basin. Its work is based on the Danube River Protection Convention, the major legal instrument for cooperation and trans-boundary water management in the Danube River Basin.
- 3.2 The **Commission on Sustainable Use and Protection of the Dniester River Basin (the Dniester Commission)** is a body for intergovernmental cooperation between the Moldova and Ukraine for protection, sustainable use and development of the Dniester River Basin. Its main objective is to implement measures for the rational and environmentally sound use and protection of water and other natural resources and ecosystems of the Dniester River Basin.

The Commissions for the Black Sea-flowing rivers were included in the relevant CSA actions such as bilateral meetings, Joint Workshops, Stakeholders meetings and workshops on the future marine science.

4. Other Relevant Commissions/Organisations and Initiatives

- 4.1 The **European Marine Research Network (EuroMarine)** is a member-based network of European marine organisations and research institutes. It was established in 2014 as a merger of three former European Networks of Excellence: EUR-OCEANS, Marine Genomics Europe and MarBEF.
- 4.2 The **European Marine Science Educators Association (EMSEA)** is a network of marine science educators acting as one voice across Europe and beyond. EMSEA supports its members by sharing good practice and training opportunities through annual international conferences. Working on grant funded projects, it ensures its



members can benefit from this work. EMSEA organises events within regional groups and provides ways for the network to connect through digital platforms.

- 4.3 The **Mediterranean Science Commission (CIESM)** was created early in the last century to promote international research in the Mediterranean Sea and the Black Sea. CIESM acts as a centre for the exchange of ideas, the communication of scientific information and the development of scientific standards across the 2 Basins. It promotes communication and active cooperation among marine scientists of various disciplines and from diverse horizons engaged in research on both the Mediterranean and the Black Seas.
- 4.4 The **European Marine Observation and Data Network (EMODnet)** is a network of organisations, supported by the EU's integrated maritime policy, working together to observe the sea, process the data according to international standards and make that information freely available as interoperable data layers and data products. EMODnet provides access to European marine data across seven discipline-based themes: bathymetry, geology, seabed habitats, chemistry, biology, physics and human activities. Most partners in Black Sea CONNECT are also active contributors to the EMODnet Network and direct contacts followed by importing best practice is the most effective way of engagement.
- 4.5 The **European Centre for information on Marine Science and Technology (EurOcean)** is an independent scientific non-governmental organisation whose membership comprises leading European marine research, funding and outreach organisations. Its aim is to facilitate information exchange and generate value-added products in the field of marine sciences and technologies between a wide range of governmental and non-governmental bodies.
- GeoEcoMar is part of the EurOcean network and has been actively involved in its activities. In the following years it will be able to engage and discuss more about the topics of mutual interests in the Black Sea.
- 4.6 The **European Global Ocean Observing System (EuroGOOS)** is an international non-profit organization committed to European-scale operational oceanography within the context of the Global Ocean Observing System of the Intergovernmental Oceanographic Commission of UNESCO (IOC GOOS). Six regional sea areas operate within EuroGOOS: Arctic; Baltic; North West Shelf; Ireland-Biscay-Iberian area; Mediterranean; and Black Sea.
- 4.7 The **Global Earth Observation System of Systems (GEOSS)** facilitates the sharing of environmental data and information collected from the large array of observing systems contributed by countries and organizations within GEO.
- 4.8 The **Global Ocean Observing System (GOOS)** leads the ocean observing community and aims to create the partnerships needed to grow an integrated, responsive and sustained observing system.
- 4.9 The **Joint Programming Initiative "Connecting Climate Knowledge for Europe" (JPI Climate)** is a pan-European intergovernmental initiative gathering European countries to jointly coordinate climate research and fund new transnational research



- initiatives that provide useful climate knowledge and services for post-COP21 Climate Action.
- 4.10 The **Joint Programming Initiative Healthy and Productive Seas and Oceans (JPI Oceans)** is an intergovernmental platform to increase the impact of national investments in marine and maritime research and innovation, focussing on long-term collaboration between EU Member States, Associated Countries and international partners. It addresses complex societal challenges that cannot be solved at national level. It adds value to national investments by aligning national priorities and implementing joint actions.
 - 4.11 The **Joint Programming Initiative on Water challenges for a changing world (JPI Water)** deals with research in the field of water and hydrological sciences, with a focus on the pan-European and global environmental challenge of water availability in sufficient quantity and quality. It addresses complex societal challenges that cannot be solved at national level. It adds value to national investments by aligning national priorities and implementing joint actions.
 - 4.12 **Copernicus** is the EU's Earth observation programme in partnership with the European Space Agency to provide a global, continuous, autonomous, high quality Earth observation capacity producing accurate, timely and easily accessible information for environmental management, climate change mitigation and public security. The **Copernicus Marine Environment Monitoring Service (CMEMS)** provides regular, systematic reference information on the physical and biogeochemical state, variability and dynamics of the global ocean and the European regional seas. The observations and forecasts support all marine applications, including: marine safety; marine resources; coastal and marine environment; weather, seasonal forecasting and climate, which could be very relevant for the Black Sea,
 - 4.13 The **European Environment Agency (EEA)** provides sound, independent information on the environment for those involved in developing, adopting, implementing and evaluating environmental policy, and also the general public.
 - 4.14 The **Mediterranean Strategy for Sustainable Development (MSSD)** 2016-2025 has been created by UNEP/MAP and provides an integrative policy framework for all stakeholders, including MAP partners, to translate the 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs) at the regional, sub-regional, national and local levels in the Mediterranean region. The MSSD was adopted by all Mediterranean countries at the 19th Meeting of the Contracting Parties to the Barcelona Convention (COP 19) (Athens, Greece, 9-12 February 2016) (Decision IG.22/2).
 - 4.15 The **Mediterranean Action Plan of the United Nations Environment Programme (UNEP/MAP)** is a regional cooperation platform established in 1975 as the first regional action plan under the UNEP Regional Seas Programme.
 - 4.16 The **SUBMARINER Network** promotes innovative approaches to the sustainable use of marine resources and offers a cooperation platform to related actors and initiatives in the Baltic Sea region and beyond. It operates across the whole knowledge triangle integrating perspectives from local to international scale, different science disciplines, as well as policy and economic stakeholders.



- 4.17 The **Baltic Marine Environment Protection Commission (HELCOM)** is the governing body of the Helsinki Convention on the Protection of the Marine Environment of the Baltic Sea Area, and a platform for environmental policy making at the regional level to protect the marine environment of the Baltic Sea from all sources of pollution through intergovernmental cooperation.
- 4.18 The **International Commission for the Protection of the Rhine (ICPR)** harmonizes the many interests of use and protection in the Rhine area. Focal points of work are sustainable development of the Rhine, its alluvial areas and the good state of all waters in the watershed.
- The direct communication with the Rhine River Commission is important as possible "best practice" regarding the identification of solutions and lessons learned from other basins.
- 4.19 The **Board of European Environmental Research Infrastructures (BEERi)** is an advisory panel consisting of directors or coordinators of the environmental Research Infrastructures giving direct guidance to the ENVRIplus project management and giving strategic view to the project progress, acting as internal advisory board representing the needs of environmental Research Infrastructures.
- 4.20 The **'Sustainable Blue Economy' Partnership (SBEP)** is a Horizon Europe co-funded partnership, launched in late 2022, aiming to combine and align pan-European, regional and national investments and the identified socio-political priorities for marine and maritime research and innovation. Its strategy takes into consideration the R&I agendas of the sea basins (Mediterranean, Black Sea, Baltic and North Sea) and the Atlantic Ocean and builds on lessons learned from previous initiatives. Currently, the SBEP consortium (60 Partner institutions from 25 countries and the European Commission), under the coordination of Italy and co-coordination of Norway, can be described as Horizon Europe's blue arm of the Green Deal, uniting research and innovation efforts to aid the transition to a sustainable Blue Economy.

The SBEP Draft Strategic Research and Innovation Agenda has been prepared by a drafting group on the basis of input and feedback from representatives of Member States and Associated Countries, key stakeholders - including representatives from the regional sea-basin coordination and support actions, associated experts and in close collaboration with the European Commission, under coordination by the Directorate-General for Research and Innovation. The SBEP SRIA drafting group, led and coordinated by the JPI Oceans Secretariat and representatives from France and Ireland, is comprised of nominated volunteers from Member States and Associated Countries, representatives of the European Commission and representatives of the regional sea-basin coordination and support actions.

The activities of the Sustainable Blue Economy Partnership build on a Strategic Research and Innovation Agenda (SRIA). The SBEP SRIA contains 39 R&I objectives agreed and validated by MS/AC and the European Commission for the future development of the European blue economy. The R&I objectives of the SRIA are organized in 4 pillars and seven crosscutting enablers. Within each thematic pillar there are three to four R&I clusters, and within each cluster there are three to four R&I objectives. The SBEP SRIA also builds on the agendas of the sea-basins initiatives.



Romanian (GeoEcoMar experts - nominated by the Romanian Ministry of Research, Innovation and Digitization), Bulgarian (BFU) and Turkish partners (TUBITAK) are also involved in the SBEP process. Working in close collaboration with SBEP representatives from other countries and connecting the Black Sea SRIA and its Implementation Plan with different calls coming from the SBEP, will elevate the connection with other SBEP partners in Europe and increase the output of the scientific results in the Black Sea region.

- 4.21 The **Conference of Peripheral Maritime Regions (CPMR)** brings together more than 150 Regions from 24 States from the European Union and beyond. Through its extensive network of contacts within the EU institutions and national governments the CPMR has, since its creation in 1973, been targeting its action towards ensuring that the needs and interests of its Member Regions are taken into account in policies with a high territorial impact. It focuses mainly on social, economic and territorial cohesion, maritime policies and blue growth, and accessibility. European governance, energy and climate change, neighbourhood and development also represent important areas of activity for the association. CPMR's internal structure contains six Geographical Commissions (the Atlantic Arc, the Baltic Sea, the North Sea, the Intermediterranean, the Balkan and Black Sea and the Islands). Each Geographical Commission has its own organisational structure, so that it can promote its specific identity and cooperate on subjects of common interest, while contributing to the cohesion and unity of the Conference.

The Black Sea and Balkans Commissions were created in 2002 and 2003 respectively. They merged in 2004 in order to develop joint projects. The objective of the **CPMR Balkan and Black Sea Regional Commission (CPMR BBRC)** is to encourage dialogue and cooperation with a view to stepping up the relations between EU and non-EU Regions in the South-Eastern neighbourhood. It contributes towards peace and stability in the area, promotes regionalisation and encourages the application of the principles of subsidiarity.

The **SEARICA (Seas, Rivers, Islands and Coastal Areas) Intergroup** is one of the 27 Intergroups that were approved on 11 December 2019 by the Conference of Presidents for the 9th legislature of the European Parliament. Intergroups can be formed by MEPs from any political group and any parliamentary committee with a view to holding informal exchanges of views on particular issues and promoting contact between MEPs and civil society.

The Seas, Rivers, Islands and Coastal Areas Intergroup brings together more than 100 MEPs from 7 different political groups and 23 Member States

- 4.22 The **EU Maritime Spatial Planning (EU MSP)** is a sea basin initiative that supports regional cooperation for the European stakeholders (project holders, institutions, public and private entities, general audience).
- 4.23 The **EU Aquaculture Assistance Mechanism** supports the EU Member States, the EU aquaculture industry, and other relevant stakeholders in implementing the "Strategic guidelines for a more sustainable and competitive EU aquaculture".
- 4.24 The **WestMED Blue Economy Initiative** has been created to help public institutions, academia, local communities, small and medium-sized enterprises and entrepreneurs



- from both sides of the Western Mediterranean develop local and regional maritime projects together. It focuses on local and regional challenges, provides knowledge on the blue economy, shares opportunities in the region with the WestMED Community, helps match stakeholders with the right partners, and supports them in developing successful projects. Although the initiative focuses on the western Mediterranean region and the 10 countries that constitute the 5+5 Dialogue (France, Italy, Portugal, Spain, Malta and five Southern partner countries – Algeria, Libya, Mauritania, Morocco and Tunisia), its scope of action and potential benefits extends beyond this sub-basin. Therefore, depending on the needs to be addressed and on the willingness to cooperate, actions may involve partners in the whole Mediterranean while remaining open to others. The WestMED initiative aims to increase maritime safety and security, promote sustainable blue growth and jobs, and preserve ecosystems and biodiversity.
- 4.25 The **WestMED Assistance Mechanism** offers participating countries practical support to help meet the Blue Economy Goals of the WestMED Initiative.
- 4.26 The **All-Atlantic Ocean Research Alliance** is the result of science diplomacy efforts involving countries from both sides of the Atlantic Ocean which aims at enhancing marine research and innovation cooperation along and across the Atlantic Ocean, from the Arctic to Antarctica. It aims to advance the shared vision of an Atlantic Ocean that is healthy, resilient, clean, safe, transparent, predictable, productive, understood and treasured so as to promote the well-being, prosperity and security of present and future generations. It has 3 main initiatives: AORA-CSA, AANhHOR-CSA and the All-Atlantic Ocean Research Projects (such as Blue-Action, Blue Cloud, ATLAS, AtlantOS, ASTRAL, AtlantECO, SO-CHIC, Mission Atlantic).
- 4.27 The **Atlantic Maritime Strategy**, approved by the European Commission in 2011, identifies challenges and opportunities in the region and takes stock of existing initiatives that can support growth and job creation. The strategy is implemented through the *Atlantic Action Plan*, which was developed in 2013. The revised *Atlantic Action Plan 2.0* was communicated by the European Commission on 23 July 2020. Its main objective is to unlock the potential of blue economy in the Atlantic area while preserving marine ecosystems and contributing to climate change adaptation and mitigation.
- 4.28 The **EC Atlantic Assistance Mechanism** provides a series of services aimed at keeping stakeholders informed of the latest news on the action plan and new funding opportunities generated under the scope of the maritime strategy. It also encourages stakeholder's participation through the organization of specialized events, mapping of funded projects that contribute to the strategy and its action plan (datahub), as well as promote development of new projects and ideas.
- 4.29 The **EC Maritime Forum** aims to improve communication amongst EU maritime policy stakeholders. It allows parties interested in the EU maritime policy to communicate on a common platform. They can publish events, documents and follow developments in their areas of interest. Information can be shared amongst a closed community or published openly. Anybody can register to the forum and comment on its content.
- 4.30 The **Future Ocean Network** is an association of Kiel researchers who, as successors to the "Future Ocean" Cluster of Excellence, are jointly implementing research projects



- that contribute to the sustainable use of ocean resources on an interdisciplinary and cross-institutional basis. These include, in particular, activities for the targeted transfer of research results to stakeholders from various interest groups including politics, business and civil society as well as joint concepts for the promotion of young scientists.
- 4.31 **ICOS Ocean Thematic Centre (OTC)** currently coordinates 22 ocean stations in seven countries, monitoring carbon uptake and fluxes in the North Atlantic and the Nordic, Baltic and Mediterranean Seas. The measurement methods include sampling from research vessels, moorings, buoys and commercial vessels, so called Ships of Opportunity (SOOP). They all have been equipped with state-of-the-art carbonate system sensors.
- 4.32 **D4Science** is an organisation which hosts ca. 180 Virtual Research Environments (VREs) to serve the biological, ecological, environmental, social mining, culture heritage, and statistical communities world-wide.
- 4.33 The **Climate Partnerships 2030** were created based on the ambitious climate goal set by the Danish government to reduce greenhouse gas emissions by 70 per cent by 2030. Building on the Danish tradition for public-private partnerships and recognising the private sector as a central actor, the Danish government has formed 14 climate partnerships. Each representing the different sectors in the Danish economy. The 14 partnerships had been tasked with presenting a proposal on how their individual sector could contribute to CO₂e reductions in a just way, supporting Danish competitiveness, exports, jobs, welfare and prosperity. This resulted in more than 400 recommendations. While the public sector provides the ambitious long-term goals and stable framework conditions, the private sector supplies the innovation, solutions and investments needed to achieve the visions.

Partners of the Black Sea CONNECT consortium engaged with each of the above-mentioned international organisations and initiatives in the search for best practice and expertise to specific Black Sea problems.

5. Relevant Linked Projects

Most of the major European initiatives, both present and past, are projects with funding from the European Union's (EU) Framework (including Horizon) programmes. In addition, there are several relevant projects funded by other EU programmes.

Within this group is the ERA-NET scheme with the objective to enhance coordination of national or regional research programmes in EU Member States and Associated Countries.

The European landscape for marine data management is well established and based on three main components: SeaDataNet, EMODnet and the Copernicus Marine Environment Monitoring Service (CMEMS).

Although the linked projects come from a variety of scientific disciplines and Member States/Associated Countries, they all share a commitment to protecting the Black Sea's unique habitats, developing vibrant sea-based sectors, and finally boosting the blue economy.

- 5.1 The **SESAME** project EU (FP6 Project - **Southern European Seas: Assessing and Modelling Ecosystem Changes**), which ended in 2011, merged for the first time the



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 860055.

- economic and natural sciences to predict ecosystem responses to changes in climate and anthropogenic forcing in the western and eastern Mediterranean and the Black Sea within the period of 50 years and created a platform for disseminating the research results to all levels of society. Knowledge provided by SESAME is used by the CSA especially on ecosystem services. The large network of scientists created in SESAME will continue working together and ease the dialogue between researchers and users on Blue Growth.
- 5.2 The ERA-NET project for **Networking on Science and Technology in the Black Sea Region (BS-ERA.NET)**, which ended in 2012, gave a framework for networking and mutually open national and regional research. BSRP funded several projects that were considered within the scope of the SRIA to be developed for the Black Sea and were used as a reference for the Joint Actions.
 - 5.3 The ERA-NET project for **Integrated Marine Research Strategy and Programmes (SEAS-ERA)**, which ended in 2014, had a Work Package on the Black Sea region. It produced a research and innovation agenda, which was used as a reference document.
 - 5.4 The **ERA.Net RUS** project contributed to the success of the European Research Area (ERA) by improving the coherence and coordination across Europe of international S&T cooperation programmes with Russia. The project focus was on exploring options for linking bilateral S&T programmes in a variable geometry. Its successor (**ERA.Net RUS Plus**) ended in 2019.
 - 5.5 **SeaDataNet** is a distributed pan-European marine data infrastructure for the management of large and diverse sets of data deriving from in situ studies of seas and oceans. Because the regional knowledge of the water bodies is of primary importance for the quality of the data sets and products, the generation of SeaDataNet 2 products will be conducted at sea basin level by regional groups, including the Black Sea. SeaDataNet project standards were implemented by the BlackSeaScene projects. Multiple CSA partners are involved in the SeaDataNet infrastructure.
 - 5.6 **SeaDataCloud** - Further developing the pan-European infrastructure for marine and ocean data management: SeaDataCloud's priority was to upgrade SeaDataNet's Common Data Index (CDI) service, alongside related tools and services. Technical testing of the newly developed components and integrated systems was first performed by the developers. These were followed by two project-training workshops with representatives from over 100 participating data centres. One of the drivers for the project was to accommodate the rapid increase in SeaDataNet's data. For example, within the CDI's European directories for European marine organisations, the catalogue of marine and oceanographic in-situ data sets for physics, chemistry, biology, geology and bathymetry increased from 1.87 million to 2.62 million entries in the 4-year period of the project. Thanks to SeaDataCloud's efforts, the SeaDataNet CDI cloud environment is now operational, hosting all the CDI's public data. Multiple CSA partners are involved in the SeaDataCloud infrastructure.
 - 5.7 The **Black Sea Horizon (BSH)** project, completed in 2018, supported the EU's external relations with the Black Sea by significantly contributing to ongoing bi-regional and regional Science, Technology and Innovation policy dialogues, and by increasing the



- knowledge base about the EU's external environment. It stimulates bi-regional STI cooperation and strengthened the EU's economic competitiveness as well as facilitating the pooling of resources and identifying challenging thematic areas for mutual STI cooperation.
- 5.8 The **Building Research environments fostering Innovation, Decision making, Governance and Education to support Blue Growth (BlueBRIDGE)** project supports capacity building in interdisciplinary research communities actively involved in increasing scientific knowledge of resource overexploitation and environmental and ecosystem degradation to improve advice to competent authorities and to increase the range of growth opportunities addressed by the Blue Growth Societal Challenge. The results of the BlueBridge supported the education/outreach related tasks of WP4 (Visibility and Dissemination).
- 5.9 The **PERSEUS (Policy-oriented marine Environmental Research for the Southern European Seas)** FP7 project, ended in 2016 and had overall scientific objectives to identify the interacting patterns of natural and human-derived pressures on the Mediterranean and Black Seas. It assessed their impact on marine ecosystems and, using the objectives and principles of the Marine Strategy Framework Directive, tried to design an effective and innovative research governance framework based on scientific knowledge. It engaged scientists, policymakers and the public.
- 5.10 The **CoCoNET (Towards COast-to-COast NETworks)** FP7 project was about marine protected areas (from the shore to the high and deep sea), coupled with sea-based wind energy potential identified groups of putatively interconnected marine protected areas in the Mediterranean and the Black Seas, shifting from local to regional and basin scales. It enhanced policies of effective environmental management, ascertained if the existing MPAs are sufficient for ecological networking, and suggested how to design further protection schemes. The coastal focus was widened to offshore and deep-sea habitats. Areas were identified where Offshore Wind Farms might become established, avoiding too sensitive habitats.
- 5.11 The **Up-Grade Black Sea Scene** project built on, and extended the previous **Black Sea Scene**, which established a Black Sea Scientific Network of leading environmental and socio-economic research institutes, universities and NGOs in the region and developed a distributed virtual data and information infrastructure. The Up-Grade project improved and harmonised the marine data management practices in the region, and expanded coverage of the data infrastructure.
- 5.12 The **Aquaculture Infrastructures for Excellence (AQUA EXCEL)** in European fish research towards 2020 project is a research infrastructure project. It aims to further support the sustainable growth of the European aquaculture sector, integrating a large group of leading European aquaculture research facilities and advancing aquaculture research and innovation in Europe. A key aspect is to provide subsidised access to top-class aquaculture facilities, as well as numerous highly pertinent services for researchers from academia and industry.
- 5.13 The **Danube Macroregion: Capacity Building and Excellence in River Systems (DANCERS)** project, through a combination of stakeholder engagement, review of historical projects and programmes, and state-of-the-art science, developed a Strategic



- Research and Innovation Agenda to focus scientific effort across the entire Danube-Danube Delta-Black Sea system. It is a linked Black Sea CONNECT project/initiative. The DANCERS project will be engaged via the CSA Partner GeoEcoMar who was also the coordinator of DANCERS.
- 5.14 The **ANEMONE project (Assessing the vulnerability of the Black Sea marine ecosystem to human pressures)** aimed to deliver, through collaborative efforts among partners, a common strategy related to the Joint Monitoring of the Black Sea, using the most adequate common agreed assessment criteria and indicators, in order to assess the status of the Black Sea, as a basis for further actions. ANEMONE built upon the monitoring related provisions of the Black Sea Commission, taking into account existing regional (BSIMAP) and national monitoring programs, the best practices of other Regional Sea Conventions, and last, but not least, Marine Strategy Framework Directive (MSFD) principles, aiming to contribute further to harmonization of methodologies and filling of knowledge gaps identified in the region.
- 5.15 The **Environmental Monitoring in the Black Sea (EMBLAS)** has UNDP and EU funding. The overall objective of the project is to help improve protection of the Black Sea environment, through further technical assistance focused on marine data collection and local small-scale actions targeted at public awareness raising and education.
- 5.16 The **HYPOX project (In situ monitoring of oxygen depletion in hypoxic ecosystems of coastal and open seas, and land-locked water bodies)** aimed to better understand dynamics and drivers of oxygen depletion, and built a global observation system for continuous oxygen monitoring. HYPOX further included experimental and modeling studies on hypoxia drivers and consequences for ecosystems, to gain predictive and decision-making capabilities from the obtained monitoring data. All activities were embedded into the framework of the Global Earth Observation System of Systems (GEOSS).
- 5.17 The EU-funded **SUST-BLACK project (Sustainable development at the Black Sea)** supported the official launch of the Strategic Research and Innovation Agenda in the Black Sea region. This occurred within the framework of the Sustainable Development at the Black Sea Conference that took place under the auspices of the Romanian Presidency of the EU Council in 2019 and that ended with the Bucharest Declaration on the Black Sea Strategic Research and Innovation Agenda (SRIA). The conference brought together policymakers, academics, NGOs and professionals aiming to establish a sustainable and innovative society in the Black Sea region focusing on the smart connection between Europe and Asia.
- 5.18 **Protecting streams for a clean Black Sea by reducing sediment and litter pollution with joint innovative monitoring and control tools and nature-based practices (Protect-Streams-4-Sea)** was financed by the European Union through European Neighborhood Instrument (ENI) - Cross-border cooperation (CBC) - in the frame of the Joint Operational Programme BLACK SEA BASIN, (2020-2022). The project focused on a joint environmental monitoring of nonpoint source pollutants and litter that end up in the Black Sea.. Most cleaning efforts focused on the sea itself or along the coastal areas. The watersheds that end in the Black Sea have not been focal points, despite providing many of the pollutants and litter.



- 5.19 **Blueing the Black Sea GEF Regional project (BBSEA)**, financed by the World Bank and implemented by the Permanent International Secretariat of Black Sea Economic Cooperation (BSEC), aims to to strengthen economic, technical and communication tools to promote regional collaboration and private sector engagement for pollution prevention in the Black Sea.
- 5.20 **Raising Public Awareness and Reducing Marine Litter for Protection of the Black Sea Ecosystem (LitOUTer)** aimed at enhancing awareness on the marine litter issue, based on neighborhood cooperation, cross-border information exchange, usage innovative awareness methods between six partners (NGOs, higher education and scientific research institutes) from 4 (Turkey, Romania Bulgaria, and Georgia).
- 5.21 The **Black Sea React! Project** aimed at contributing to the regional dialogue on mitigating and effectively tackling marine pollution and marine litter, while at the same time seeking innovative solutions to salient problems. The Project activities piloted an innovative circular economy solution to marine (plastic) litter by involving local fishermen, a coastal municipality and a business association from the Black Sea region. In parallel, it developed a strong and positive narrative on marine litter prevention targeting specifically young people.
- 5.22 The **Black Sea Virtual Knowledge Centre (BSVVC)** is a project supported by the European Commission and managed by the Permanent International Secretariat of the Black Sea Economic Cooperation Organization (BSEC PERMIS). BSVVC aimed to provide a centralized platform for information on the Blue Economy in the Black Sea and to improve synergies between stakeholders and Blue Economy related projects in the region. The BSVVC provided means to disseminate information, ensure synergies and to raise awareness about opportunities in the Blue Economy sector.
- 5.23 The **B-SEENOVA project (Enhancement of Black Sea Innovation Capacity)** aimed at helping local SMEs improve their innovation management capacity in the Middle and East Black Sea regions providing services for enhancing innovation management capacity (EIMC).
- 5.24 The **ARSINOE project** is an EU-H2020 funded project aimed at creating climate resilient-regions through systemic solutions and innovations. ARSINOE shapes the pathways to resilience by bringing together the Systems Innovation Approach (SIA) and the Climate Innovation Window (CIW) to build an ecosystem for climate change adaptation solutions. This approach is showcased in 9 demonstrators, as a proof-of-concept with regards to its applicability, replicability, potential and efficacy.
- 5.25 The **KEAC-BSR project (Knowledge Exchange and Academic Cultures in the Humanities: Europe and the Black Sea Region, late 18th – 21st Centuries)** funded under Marie Skłodowska-Curie Actions established a network consisting of 12 research institutions from 11 Black Sea Region countries and Austria. It includes representatives of all the core disciplines of the humanities emerging around 1900. Innovative aspects of the project consist of 1) drawing attention to an emerging region (BSR) consisting of countries previously considered as belonging to separate historical regions, 2) systematic investigation of knowledge and culture exchange within and beyond the region, 3) innovative theoretical framework, 4) inter/multidisciplinary methodology and 5) explicit gender perspectives.



- 5.26 The overarching aim of the EU-funded (H2020) **BRIDGE-BS project (Advancing Black Sea Research and Innovation to Co-Develop Blue Growth with Resilient Ecosystems)** is assessing the current state of the Black Sea ecosystems, their services, and resilience to the multi-stressors, and create the necessary means to manage these ecosystems sustainably. An interdisciplinary approach will be used, based on three nodes: service dynamics, blue growth incubators, and empowered citizens. The project will use pilot study sites at the regional level, with findings contributing to work packages addressing the four pillars of the Black Sea SRIA. This way, BRIDGE-BS strives to achieve a healthy, resilient and productive Black Sea by 2030.
- 5.27 The EU-funded **DOORS project (Developing Optimal and Open Research Support for the Black Sea)** (H2020) implements part of the SRIA in close cooperation with stakeholders and other projects in the region. It will harmonise research data, deliver the System of Systems (SoS) infrastructure required to understand the Black Sea ecosystems, develop a structure to support Blue Growth and the early development of start-ups, and provide evidence to shape policy and increase the in line with the Black Sea SRIA.
- 5.28 The EU-funded project **DANUBE4all (Restoration of the Danube River Basin Waters for Ecosystems and People from Mountains to Coast)** will develop a comprehensive restoration action plan for the Danube River basin lighthouse. The project will engage stakeholders, integrating citizens' interests to support the EU Mission 'Restore Our Ocean and Waters by 2030' in an unprecedented cocreation process. The action plan will rely on solid scientific knowledge and new findings to promote ecological status, biodiversity, and ecosystem connectivity improvement.
- 5.29 Delivering on the European Green Deal and the EU Mission 'Restore our Ocean and Waters by 2030' requires integrated solutions and clear targets. The EU-funded project **EcoDaLLi (ECOsysteM-based governance with DANube lighthouse Living Lab for sustainable Innovation processes)** aims to centralise the governance structures of the Danube basin and its Delta through innovative solutions for ecological restoration, protection and preservation. The project will support the creation of an innovation ecosystem and a digital portal linked to the Mission Implementation Platform, delivering innovative solutions and tools for ecosystem services. This will contribute to the Green Deal goal of decarbonisation for cleaner water, improved environment, and job creation in sensitive areas.
- 5.30 Beyond protecting the Danube river's ecosystems, projects such as **DALIA (Danube Region Water Lighthouse Action)** are working to support local communities through the creation of sustainable employment opportunities and by enhancing the river's cultural importance. The project is unique in that it brings together trusted experts from eight Danube countries with a shared goal of implementing harmonised actions from source to sea. The project will provide an integrated tool for better decision-making and improved restoration of fresh and transitional water ecosystems in the Danube River Basin. DALIA will contribute to the EU Water Framework Directive. It will also collaborate with a wider network of ecosystems and related EU Missions and projects.
- 5.31 The **EUROqCHARM project (EUROpean quality Controlled Harmonization Assuring Reproducible Monitoring and assessment of plastic pollution)** aims at



establishing harmonised methodologies for long-term solutions to reduce plastic pollution. Blueprints for standards, recommendations for policy and legislation and support for the establishment of acceptable reference levels and environmental targets will be given. This will include a roadmap for harmonised data collection and management, where policy analysis and coherence will be integral parts. To maximise impact, EUROqCHARM will also establish and consolidate an operational network for plastic monitoring, stimulating Transnational Joint Actions built on existing and future European and international initiatives.

- 5.32 **EmpowerUs project (Socio-economic Empowerment of coastal communities as users of the sea to ensure sustainable coastal development)** is also focused on building resilient coastal communities. To do this, it is creating a coastal transition lab to empower Danube-Black Sea communities as they make the transition towards sustainable coastal development.

All projects on this category are listed in the ANNEX with contact information and other details.

6. Other Relevant Projects

- 6.1 The overarching goals of the **SeaChange EU project** (H2020) are to bring about a fundamental “Sea Change” in the way European citizens view their relationship with the sea, by empowering them – as ‘Ocean Literate’ citizens - to take direct and sustainable action towards healthy seas and ocean, healthy communities and ultimately - a healthy planet.
- 6.2 The **Research and Innovation for Blue Jobs and Growth in the Mediterranean Area (BLUEMED)** initiative supports: implementation of EU Policies and Directives; sustainable growth of the EU Mediterranean maritime economy; innovative multi-disciplinary research; new tools to mitigate the impacts of global climate change and environmental stress; new marine based technologies for economic growth of the maritime sectors; an interoperable, fully integrated observing and forecasting capability; citizen awareness; and training.
- Close contact has already been established through the BlueMed GSO in which the coordinator of CSA takes part. Further dedicated meetings will take place throughout the CSA life-cycle.
- 6.3 The **Sustainable management of mesopelagic resources (SUMMER)** project is establishing a protocol to accurately estimate mesopelagic fish biomass, quantify the ecosystem services provided by the mesopelagic community (food for aquaculture, for humans, for other wild fish, climate regulation and potential for bioactive compounds) and develop a decision support tool to quantitatively balance the trade-offs between the different services for any given exploitation scenario. Its overall objective is to evaluate whether and how mesopelagic resources can be exploited without compromising the essential ecosystem services they provide.
- 6.4 The **Multiscale Observation Networks for Optical monitoring of Coastal waters, Lakes and Estuaries (MONOCLE)** project aims to create sustainable *in situ* observation solutions for Earth observation of optical water quality in inland and transitional waters, which are of great economic importance and are crucial to



sustainable food, energy, and clean water supply yet are particularly vulnerable to direct human impacts. MONOCLE is developing essential research and technology to lower the cost of acquisition, maintenance, and regular deployment of *in situ* sensors in these aquatic ecosystems, which represent areas of the weakest performance in current EO capability.

- 6.5 The **EurofleetsPlus** project brings together a significant group of key marine research actors (in particular research vessel operators) in Europe, North America and Oceania. With a fleet of 27 state-of-the-art research vessels (including the Black Sea research vessels of Romania and Turkey), and new autonomous underwater and remotely operated vehicles, the EurofleetsPlus project integrates and opens existing national and regional research infrastructures of European interest. In doing so, the project ensures scientists have ready and cross-border access to the tools they need to conduct in-depth underwater research and develop innovative ideas for protecting our oceans.

The experience of EurofleetsPlus is used in joint actions that involve joint, multinational research expeditions.

- 6.6 The **Measuring Impact of Citizen Science (MICS)** project brings together six partners to develop an integrated platform of metrics and instruments to measure costs and benefits of citizen science. These metrics will consider the impacts of citizen science on the following domains: society, governance, the economy, the environment, and science. It adopts and adapts the best practice generated by the Ground Truth 2.0 project in the co-creation of hands-on citizen science validated in four case-study sites across Europe, resulting in a comprehensive conceptual framework and clear recommendations for those involved in citizen-science projects. The four sites explore the co-creation of citizen science in regions with differing needs, contexts, and approaches to environment management (for example, river restoration and nature-based solutions), and with various levels of citizen-science application.

- 6.7 The **Marine Biotechnology ERA-NET (ERA-MarineBiotech)** is a consortium of **national funding bodies** seeking complementarities between national activities to pool resources to undertake joint funding of transnational projects in the area of Marine Biotechnology.

- 6.8 **Climate Change and European Aquatic Resources (CERES)** is a project investigating how climate change will influence Europe's most important fish and shellfish resources and the economic activities depending on them. It is developing tools and strategies that help fisheries, aquaculture sectors and governments to prepare for the adverse changes or future benefits of climate change.

- 6.9 The **New Cross Sectoral Value Chains Creation across Europe (NEPTUNE)** project is an accelerator, supporting the development of new cross-sectoral and cross-border industrial value-chains mixing water, aerospace, ICT and agriculture technologies, through a direct support scheme to SMEs. Three key aspects of Blue Growth are considered with high potential: water management in urban and rural environments; fluvial and maritime transport and port logistics; and environment and renewable marine energy.



- 6.10 The **Marine Ecosystem Restoration in Changing European Seas (MERCES)** project is focused on the restoration of different degraded marine habitats, aiming to: assess the potential of different technologies and approaches; quantify the returns in terms of ecosystems services and their socio-economic impacts; define the legal-policy and governance frameworks needed to optimize the effectiveness of the different restoration approaches. MERCES has created a multi-disciplinary consortium with skills in marine ecology, restoration, law, policy and governance, socio-economics, knowledge transfer, dissemination and communication.
- 6.11 The aim of the **Maritime and Marine Technologies for a New Era (MarTERA)** project is to strengthen the European Research Area (ERA) in maritime and marine technologies as well as Blue Growth. The focus of development in MarTERA is given to technologies (instead of sectors) due to their potentially large impact to a wide range of application fields.
- 6.12 The **ResponSEAbLe** project has been looking at ways to help people understand their connection to the sea. Whether they live on the coast or inland, the project's goal has been to figure out how to encourage Europeans to take a more interest in their oceans, improve their understanding and to treat them with greater respect. The project has developed of several innovative 'ocean literacy tools' for different audiences.
- 6.13 The **GoJelly** project is developing, testing and promoting a gelatinous solution to microplastic pollution by developing a TRL 5-6 prototype microplastics filter made of jellyfish mucus. This addresses commercially and ecologically destructive sea and coastal pollution. The green innovation can provide a novel, valuable resource for the food and feed industry as well as agro-biological fertilizer for organic farming. The GoJelly prototype products are tested and demonstrated in the Norwegian, Baltic and Mediterranean seas.
- 6.14 The **Baltic Organisations' Network for Funding Science (BONUS)** brought together the research communities of marine, maritime, economical and societal research to address the major challenges faced by the Baltic Sea region through research, technological development and demonstration.
- 6.15 **Seas, Oceans and Public Health in Europe (SOPHIE): a Strategic Research Agenda for Europe and Beyond.** SOPHIE consortium brought together an international multidisciplinary European team of marine, health, social and economic science experts and practitioners aiming to: a) deliver a clear, evidence-informed Oceans and Human Health Strategic Research Agenda (SRA) within the European context, based on extensive involvement by diverse stakeholders; and b) ensure that the structures needed to develop and implement this SRA are in place and will exist as a legacy beyond the life of the project. These aims will be achieved by: (i) systematic synthesis of the current evidence base; (ii) developing and coordinating a European community of OHH stakeholders; (iii) identification of innovative solutions to sustainably reduce risks and promote benefits; (iv) scenario modelling and horizon scanning; (v) knowledge exchange through bespoke training and skills programmes; and (vi) a global OHH Conference to present SOPHIE's findings and enhance European leadership and global cooperation in OHH research.



- 6.16 The ERA-NET Cofund **BlueBio** builds upon the networks, achievements and strategies obtained in the COFASP and ERA-MBT ERA-NETs and JPI Oceans, and will leverage the JPI Oceans role as a coordination platform. The main objective of the BlueBio is to establish a coordinated R&D funding scheme that will strengthen Europe's position in the blue bioeconomy. BlueBio aims to implement a range of related activities which can add value to the cofounded projects and better address the impact of R&I projects.
- 6.17 **Blue-Cloud**, as the *Future of Seas and Oceans Flagship Initiative* of H2020 programme, is the thematic EOSC for the marine domain. Blue-Cloud developed a collaborative web-based environment in support of the EU Mission Ocean that, that enables open science, providing simplified access to an unprecedented wealth of marine data resources and interoperable tools. Blue-Cloud innovative core services were deployed through a smart federation of leading European marine data and infrastructures, bringing an unprecedented amount of multidisciplinary data repositories, analytical tools, and computing facilities to EOSC. It enables researchers to retrieve data from marine infrastructures including SeaDataNet, EMODnet, Copernicus, Ecotaxa. Data acquired can be exploited in the Virtual Research Environment, accessible via the EOSC federated login, while Blue-Cloud analytical services and interdisciplinary Virtual Labs are available through the EOSC Exchange.
- 6.18 **Blue-Cloud 2026** aims at a further evolution of the pilot **Blue-Cloud project** into a Federated European Ecosystem to deliver FAIR & Open data and analytical services, instrumental for deepening research of oceans, EU seas, coastal & inland waters. It develops a thematic marine extension to EOSC for open web-based science, serving the needs of the EU Blue Economy, Marine Environment and Marine Knowledge agendas
- 6.19 **ENVIRONMENTAL RESEARCH INFRASTRUCTURES BUILDING FAIR SERVICES ACCESSIBLE FOR SOCIETY, INNOVATION AND RESEARCH (ENVRI-FAIR)**. European environmental research infrastructures are key providers of high-quality digital assets like research data and services. Understanding the Earth needs an interdisciplinary approach based on harmonised and easy-to-use data and services from the contributing environmental research infrastructures. The overarching goal of EU-funded ENVRI-FAIR is to advance the findability, accessibility, interoperability and reusability (FAIRness) of these digital assets and connect them to the emerging European Open Science Cloud. ENVRI-FAIR targets the development and implementation of a technical and policy framework to overcome discipline boundaries within the ENVRI community.
- 6.20 Funded by the European Union's Horizon Europe program, **PREP4BLUE (Preparing the Research & Innovation Core for Mission Ocean, Seas & Waters)** project aims at setting the foundations for co-creating and co-implementing the research and innovation required to achieve Mission Restore our Ocean and Waters by 2030. PREP4BLUE overarching objective is to facilitate a successful first phase (2022-2025) of the Mission, by developing the co-creation and co-implementation R&I modalities required to achieve the Mission objectives and preparing the ground for inspiring and engaging citizens and stakeholders. The project is designed to deliver a series of tools, guidelines, methodologies and recommendations tested through pilots, which will interlink, leverage and optimise activities among the projects funded under the Mission.



- 6.21 **Innovative SOft SkillS to Maritime Education and Training (iSOL-MET)** is a European project, funded by the Erasmus+ program under section KA2-Cooperation for innovation and the exchange of good practices (2014-2020) that promoted cooperation between six countries: France, Bulgaria, Turkey, Romania, Poland and Greece (University of the Aegean - Lead). The overall objective of the iSOL-MET project was to bridge the gap between shipping world requirements, in respect to human resources soft skills and competences, through developing innovative educational material on the case study methodology. Project addressed the needs of the students for obtaining the required skills for entering the shipping market and provided to educators new educational tools. Furthermore, it addressed the needs of the shipping industry for qualified personnel.
- 6.22 The project **Maritime Innovative Network of Education for Emerging Maritime Issues (MINE-EMI)** focused on elaborating a Joint Master Program (JMPs) that facilitate developing skills and competences to raise awareness on emerging maritime issues in order to promote sustainable management of the maritime sector. It focuses on the Black Sea basin and involves representatives from the business sector and local administrations in order to fill the gap between the requirements in the maritime sector (management of marine areas, transport operations, logistics) and the current lacking of updated courses in that matter.
- 6.23 **PIONEER (Plasma catalysis for CO₂ recycling and green chemistry)** is a Marie Skłodowska-Curie actions (MSCA) Innovative Training Network (ITN) funded through the EU H2020 program aiming at educating a generation of experts in the multidisciplinary field of plasma/catalysis for CO₂ conversion. 14 Early-Stage Researchers (ESRs) work together in a joint training and doctoral programme, within a consortium of 15 academic and 5 industrial partners, in 10 different countries, to conceive new systems of plasma/catalysis for an efficient conversion of CO₂ molecule.
- 6.24 **SeaChanges** is a Marie Skłodowska-Curie actions (MSCA) Innovative Training Network (ITN) funded through the EU H2020 program. SeaChanges provides state-of-the-art doctoral training to forge a new generation of interdisciplinary researchers able to operate at the interface of archaeology and marine biology. The seas are crucial to European economy, identity, and food security. Marine resource use has influenced European societies for millennia, and we in turn have impacted the seas. SeaChanges brings together experts from 7 leading institutions in archaeology, zoology, marine ecology and conservation biology, united by the recognition of this gap.
- 6.25 The EU-funded **DarkLife (The Black Sea Basin, a Cradle and Refuge of European Biodiversity) project** aimed at improving existing knowledge on the origins and diversification of terrestrial invertebrates in this unique region. In tackling this goal, the project combined integrative taxonomic research with high-throughput DNA sequencing techniques and state of the species distribution modelling tools, helping to reveal the factors and mechanisms that shaped the Black Sea basin's unique biodiversity and to predict its future viability under a global warming scenario.
- 6.26 The **BlueMissionMed Coordination and Support Action (CSA)** will design, structure and support a well-functioning basin scale innovation ecosystem, ensuring fast progress towards the achievement of Mission "Restore Our Oceans and Waters by 2030" objectives and important impact on the society. The project builds on, connect



and structure existing initiatives and activities to disseminate and upscale solutions and mobilise relevant actors with the specific aim of addressing the Objective 2 of the Mission, namely “prevent and eliminate pollution of our ocean, seas and waters”.

- 6.27 The **European Ocean Coalition (EU4Ocean)** connects diverse organisations, projects and people that contribute to ocean literacy and the sustainable management of the ocean. Supported by the European Commission, this bottom-up inclusive initiative aims at uniting the voices of Europeans to make the ocean a concern of everyone. The EU4Ocean coalition combines EU-wide activities with actions dedicated to the Arctic Ocean, the Atlantic Ocean (including the North Sea), the Baltic Sea, the Black Sea, the Mediterranean Sea and the global ocean. The coalition is made up of three components: a Platform for organisations and individuals engaged in Ocean Literacy initiatives, a European Youth Forum for the Ocean and a Network of European Blue Schools.
- 6.28 Bringing together ocean knowledge, modeling and technological expertise, the EU-funded **EDITO-Model Lab project (Undelying models for the European Digital Twin Ocean)** is designing next-generation ocean models as part of the European Digital Twin Ocean initiative. The aim is to enable stakeholders to develop ocean management scenarios. The project will deliver a virtual ocean model lab (VOML) that will feature an interactive and codevelopment environment. The VOML will be based on modeling software, AI algorithms and special tools. The project will support the sustainable blue economy and explore ‘what-if scenarios’ to find solutions to natural and man-induced hazards.
- 6.29 The EU-funded **EDITO-Infra project (EU Public Infrastructure for the European Digital Twin Ocean)** will build the EU Public Infrastructure backbone for the Digital Twin Ocean (DTO). It will upgrade, combine and integrate the key service components of the Copernicus Marine Service and the European Marine Observation and Data Network into a single digital framework. This will provide the foundation for the further development of Europe’s DTO initiative and provide public access to the widest possible range of open ocean observation datasets.
- 6.30 **H2020 REST-COAST project (Large scale RESToration of COASTal ecosystems through rivers to sea connectivity)** aims at assessing ecosystem services from coastal marshes, seabed meadows and coastal dunes, to reduce erosion and flooding risks while enhancing biodiversity and blue carbon. It will develop large-scale river-coast connectivity and increase the nearshore accommodation space for the resilient delivery of coastal ecosystem services. The project will conduct nine pilots in the main EU regional seas (Baltic, Black, North, Atlantic and Mediterranean) with the aim of increasing the commitment of citizens, stakeholders and policymakers. Creating a healthy Danube-Black Sea region not only involves clean and free-flowing water, but also requires protecting coastal areas.

More projects on this category are also listed in the ANNEX herein, with more details and website connections.

All these projects play an important role in helping the EU Mission Ocean and Waters protect and restore the health of our waters and adjacent regions and economies become more sustainable and resilient. By regularly updating the information, the Handbook provided a



mechanism for tracking their outcomes in the Black Sea region, identify areas for improvement, enabling collaboration and engaging stakeholders.

7. Stakeholders for Black Sea CONNECT CSA

European Research Infrastructures

European Research Infrastructures, even where there is no direct Black Sea involvement, provide a major resource of facilities, experience and expertise of huge potential benefit to research and innovation in the Black Sea region. They also provide links to individual scientists and institutions across Europe with relevant skills and opportunities.

The research infrastructures described below are all on the **ESFRI (European Strategy Forum for Research Infrastructures)** Roadmap. Often referred to as 'ESFRIs' they are either ESFRI Landmarks or ESFRI Projects. Most ESFRIs either have attained, or are working towards, the status of **European Research Infrastructure Consortium (ERIC)** which is a legal identity under the EU. The ESFRI Roadmap's importance for the Black Sea region lies in its ability to foster research collaboration, strengthen scientific capacity, promote innovation and economic growth, address regional challenges, and integrate the region into the broader European Research Area.

The **Board of European Environmental Research Infrastructures (BEERi)** is an advisory panel consisting of directors or coordinators of the environmental Research Infrastructures representing the needs of environmental Research Infrastructures.

Black Sea CONNECT partners have active connections with all these research infrastructures and were able to consult them and involve them in meetings.

7.1 The **International Centre for Advanced Studies on River-Sea Systems (DANUBIUS-RI)** is a pan-European distributed research infrastructure supporting interdisciplinary research and other activities from river source to coastal sea. It is on the ESFRI (European Strategy Forum for Research Infrastructures) Roadmap, moving from its Preparatory to Implementation Phase and applying for ERIC (European Research Infrastructure Consortium) status. Two institutions (GeoEcoMar and Hereon, previously known as HZG) are members of both the DANUBIUS-RI and Black Sea CONNECT consortia.

7.2 The **Joint European Research Infrastructure network for Coastal Observatory (JERICO RI)** research infrastructure is a long-term framework providing high-quality marine data (multidisciplinary, standardised, quality controlled, sustained, interoperable and free to access and use), expertise and infrastructures for Europe's coastal seas. The vision is to improve and innovate the cooperation in coastal observatories in Europe by implementing the coastal part of a European Ocean Observing System, to cooperate with other European initiatives. JERICO is a linked Black Sea CONNECT project/initiative. IO-BAS is also member of the JERICO initiative.

The WP3 coordinator – as coordinator of DANUBIUS-RI and member of the BEERi – already collaborates tightly with the above-mentioned research infrastructures and a



series of joint planned events that would bring the services of the European Research Infrastructures to the attention of the Black Sea community are underway.

European Research Infrastructures Consortium (ERIC)

- 7.3 The **European Multidisciplinary Seafloor and Water Column Observatory (EMSO-ERIC)** is a pan-European Research Infrastructure Consortium consisting of a system of regional facilities at key sites around Europe. Observatories are platforms equipped with multiple sensors, placed along the water column and on the seafloor. They constantly measure different biogeochemical and physical parameters, that address natural hazards, climate change and marine ecosystems. It is a linked project/initiative. GeoEcoMar is in charge with the Romanian contribution to EMSO ERIC and hence in a position to mediate optimum contacts.
- 7.4 The **Integrated Carbon Observation System (ICOS-ERIC)** is a pan-European Research Infrastructure Consortium which provides harmonised and high-precision scientific data on carbon cycle and greenhouse gas budget and perturbations. It has more than 100 measurement stations in twelve European countries, measuring greenhouse gas concentrations in the atmosphere and fluxes over the terrestrial and marine ecosystems. It is a linked project/initiative.
- 7.5 **Euro-Argo ERIC** is Europe's contribution to the International Argo programme, providing, deploying and operating an array of around 800 floats contributing to the global array. This allows continuous monitoring of the temperature, salinity and velocity of the upper ocean, with all data being relayed and made publicly available within hours after collection. IO-BAS is the EURO ARGO ERIC representative in Bulgaria, in charge with operations in the Black Sea as well.
- 7.6 The **European Marine Biological Resource Centre (EMBRC-ERIC)** is a pan-European Research Infrastructure Consortium for marine biology and ecology. With its services, it aims to answer fundamental questions regarding the health of oceanic ecosystems in a changing environment, enable new technologies to further investigation capabilities, support life-science breakthrough discoveries with the use of marine biological models, and continue long-term marine monitoring efforts.
- 7.7 **LifeWatch ERIC** is a pan-European Research Infrastructure Consortium providing e-Science research facilities to scientists investigating biodiversity and ecosystem functions and services in order to support society in addressing key planetary challenges. LifeWatch ERIC tackles the constraints affecting biodiversity and ecosystem research, such as the pressing need for increasingly diverse data, larger and more advanced models, open data and open science clouds, making it possible to explore new frontiers in ecological science and support society in addressing planetary challenges.

Research Centres

- 7.8 The **Centre for Marine Ecosystems and Climate Research (DEKOSIM)** was established by the coordinator of Black Sea CONNECT, the Institute of Marine Sciences of the Middle East Technical University (IMS-METU), with the infrastructure support provided in 2012, by the State Planning Organization (DPT), which now serves as the Turkish Ministry of Development. The center will provide information and



technical infrastructure support to all Turkish marine related institutions and organizations and has been designed at a level to compete scientifically with European countries in the fields of marine ecosystem and climate research. Within the scope of DEKOSIM, observation systems that can undertake long-term, continuous measurements in Turkish seas are being established. Such systems include time series, passive measuring devices drifting with currents (ARGO floats) and float systems.

- 7.9 The **European Centre for information on Marine Science and Technology (EurOcean)** is an independent, non-profit, scientific organization that aims to support European Marine Science and technology advances, by fostering information exchange, cooperation and collaboration among its members, the ocean community and society. EurOcean has two types of members, covering all European sea basins: a) Full members are European marine research, innovation and entrepreneurship, funding and b) outreach bodies that are public or non-profit organizations. Cooperating members are organisations with a regional or global reach involved in activities complementary to those of EurOcean. EurOcean's Full Members are in 10 European countries and have outstanding expertise, technology and experience. They count with reputed experts in many key fields such as Biodiversity, Aquaculture, Renewable Energies and Climate Change, among others. Their technology comprises 135 marine research infrastructures. Their experience includes the participation, over the last 11 years alone, in 246 projects of European Commission Research Framework Programmes, in various fields.

Innovation and business clusters

- 7.10 **Pôle Mer Méditerranée - Toulon Var Technologies (PMM-TVT)** is a sea innovation and business cluster concerned with sustainable development of the maritime and coastal economy in the Mediterranean basin and elsewhere. PMM-TVT is a Third Party in the Black Sea CONNECT consortium linked to Ifremer. It supported the project activities concerning innovation for blue economy, in particular through the organisation of a very successful workshop on innovation opportunities in the Black Sea.
- 7.11 **FUGRO** is the world's leading Geo-data specialist, collecting and analysing comprehensive information about the Earth and its structures. With expertise in site characterisation and asset integrity, its clients are predominantly in the energy and infrastructure industries, both offshore and onshore. It has a track record of offshore oil and gas exploration work in the Mediterranean, Caspian, Red Sea and Black Sea regions.
- 7.12 **Marine Cluster Bulgaria (MCB)** is an NGO involving SMEs, branch associations and chambers, educational institutions and R&D organizations covering a wide range of marine and maritime activities in the value chain of the Blue Growth sectors in Bulgaria: shipping, ports, logistics and complementary services; shipbuilding and ship repair, ship design; environmental R&D; education and training.

Inter-governmental bodies



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 860055.

- 7.13 The **Commission on the Protection of the Black Sea Against Pollution (the Black Sea Commission or BSC)** via its Permanent Secretariat in Istanbul, is the inter-governmental body established in implementation of the Convention on the Protection of the Black Sea Against Pollution (Bucharest Convention), its Protocols and the Strategic Action Plan (SAP) for the Environmental Protection and Rehabilitation of the Black Sea (1st SAP adopted in 1996; 2nd SAP adopted in 2009).
- 7.14 The **Joint Programming Initiative Healthy and Productive Seas and Oceans (JPI Oceans)** is an intergovernmental platform to increase the impact of national investments in marine and maritime research and innovation, focussing on long-term collaboration between EU Member States, Associated Countries and international partners. It addresses complex societal challenges that cannot be solved at national level. It adds value to national investments by aligning national priorities and implementing joint actions.
- 7.15 The **Joint Programming Initiative on Water challenges for a changing world (JPI Water)** deals with research in the field of water and hydrological sciences, with a focus on the pan-European and global environmental challenge of water availability in sufficient quantity and quality. It addresses complex societal challenges that cannot be solved at national level. It adds value to national investments by aligning national priorities and implementing joint actions.

Think Tank and Lobby Organisations

- 7.16 The **Organisation of the Black Sea Economic Cooperation (BSEC)** is a regional economic forum for cooperation in a wide range of areas for its 12 Member States: Albania, Armenia, Azerbaijan, Bulgaria, Georgia, Greece, Moldova, Romania, Russia, Serbia, Turkey and Ukraine. As a partner in the Black Sea CONNECT consortium, BSEC will provide substantial expertise and have a pivotal role as co-leader of dedicated task for joint transnational actions.
- 7.17 The **International Centre for Black Sea Studies (ICBSS)** is a think tank that has since fulfilled a dual function a) as an independent research and training institution focusing on the wider Black Sea region, and b) as a related body of the Organisation of the Black Sea Economic Cooperation (BSEC) serving as its acknowledged think-tank. The ICBSS will link Black Sea CONNECT to relevant policy-makers for enhanced sciency-policy.
- 7.18 The **Conference of Peripheral Maritime Regions (CPMR)** is a think tank and regional lobby. It has six Geographical Commissions: Atlantic Arc; Baltic Sea; North Sea; Intermediterranean; Balkan and Black Sea; and Islands. CPMR is a linked Black Sea CONNECT entity which provided an operational network for Transnational Access and input to Black Sea Blue Growth Initiative and SRIA.
- 7.19 The **European Marine Board (EMB)** is a European think tank in marine science policy, giving a platform to advance marine research and to bridge the gap between science and policy. It provides a strategic forum to develop marine research foresight, initiate state-of-the-art analyses and translate these into policy recommendations to European institutions and national governments.



7.20 **Via Pontica Foundation** is a Bulgarian think tank and regional lobby organization acting in the public interest, established to protect the Bulgarian nature – conservation of natural resources, changing the attitude towards the protected areas and awareness of the opportunities, benefits and responsibilities towards protection, conservation and restoration of Bulgarian biodiversity. Via Pontica Foundation is a member of Wetlands International and IFOAM.

UN bodies

Several United Nations (UN) bodies are involved in addressing various aspects of the Black Sea region:

- 7.21 The **United Nations Development Programme (UNDP)** works to promote sustainable development, poverty reduction, environmental conservation, and supports countries in their efforts to achieve the Sustainable Development Goals (SDGs). It collaborates with national governments, civil society organizations, and other stakeholders to implement projects related to governance, economic growth, energy efficiency, and environmental protection.
- 7.22 The **United Nations Environment Programme (UNEP)** plays a crucial role in addressing environmental challenges. It supports initiatives for the protection of the (marine) ecosystems, (marine) biodiversity, and sustainable management of natural resources. The UNEP aims to develop policies and strategies for environmental conservation and restoration.
- 7.23 The **Mediterranean Action Plan of the United Nations Environment Programme (UNEP/MAP)** is a regional cooperation platform established in 1975 as the first regional action plan under the UNEP Regional Seas Programme
- 7.24 The **United Nations Economic Commission for Europe (UNECE)** provides a platform for regional cooperation and economic integration. It facilitates dialogue and cooperation on various issues, including trade, transport, energy, environment, and sustainable development. The UNECE supports countries in implementing international standards and best practices to promote economic growth and regional integration.
- 7.25 The **General Fisheries Commission for the Mediterranean (GFCM)** is a regional fisheries management organization of FAO. Its main objective is to ensure the conservation and the sustainable use of living marine resources and the sustainable development of aquaculture in the Mediterranean and Black Sea. GFCM is a linked Black Sea CONNECT project/initiative, with its existing projects and results used for development of fisheries management.
- 7.26 The **United Nations Educational, Scientific and Cultural Organization (UNESCO)** is involved in preserving the cultural and natural heritage, including the Black Sea region. It works with countries to protect and promote cultural diversity, heritage sites, and intangible cultural heritage. Additionally, UNESCO supports initiatives related to education, science, and communication to foster social development and knowledge sharing in the region.
- 7.27 The **International Maritime Organization (IMO)** is responsible for addressing maritime safety, security, and environmental protection, including in the Black Sea



region. It works with countries to develop and implement international regulations and standards for shipping and maritime activities. The IMO promotes cooperation to ensure safe and sustainable maritime transportation and mitigate the environmental impacts of shipping.

- 7.28 The **United Nations Industrial Development Organization (UNIDO)** supports industrial development and economic diversification. It provides technical assistance and capacity-building programs to enhance the competitiveness of industries, promote sustainable industrial practices, and foster entrepreneurship. UNIDO's initiatives contribute to job creation, economic growth, and regional integration.
- 7.29 The **United Nations Convention on the Law of the Sea (UNCLOS)** also called the Law of the Sea Convention or the Law of the Sea Treaty, is an international agreement that establishes a legal framework for all marine and maritime activities. Although not a specific UN body, UNCLOS provides a basis for the regulation of maritime activities, including issues such as maritime boundaries, environmental protection, and resource management.

It is important to note that while these UN bodies are involved in the Black Sea region, the extent and nature of their engagement may vary depending on specific initiatives, partnerships, and regional priorities.

Stakeholders' Role for Black Sea CONNECT CSA

Stakeholders' identification and connecting with the CSA was ongoing process throughout the Black Sea CONNECT. The stakeholders listed here were invited to various project meetings such as [Black Sea Innovation Workshop](#), [Marine Litter Action Forum](#), [trainings for the Black Sea Young Ambassadors](#), [Research and Innovation Day in the Black Sea](#), [Bucharest Consultation with Linked Projects and Initiatives on the Black Sea SRIA Implementation Plan](#), [Launch of the SRIA Implementation Plan](#). In addition, most of them are working in close collaboration with members of the Black Sea CONNECT consortium to identify the needs and required actions that could support the update and proper implementation of the SRIA. These actors are also kept informed of the CSA achievements throughout the Black Sea CONNECT newsletters and invitation to events/questionnaires.

The CSA members also actively took part in the relevant process of other projects (to name a few: BRIDGE-BS, DOORS, SBEP, BlueMissionMed, ARSINOE, Common Maritime Agenda Implementation, BSAM and many more regional and international projects etc.) to ensure synergies and the uptake of the Black Sea SRIA and its Implementation Plan. Additionally, some actors mentioned here are invited to involve in the Operational Network of Funders for the implementation of the SRIA (CPMR, BSEC, BSC) who played a key role in preparation of the Implementation Plan and further its uptake at the policy level. (More information on how is provided under D2.5)

Based on these interactions, many of these actors are engaged and included in the Black Sea SRIA (EUROFLEETS, EMSO ERIC, SeaDataNet, EURO-ARGO, EMODNET, EMSEA, JPI Oceans, DEKOSIM, DANUBUIS, CMEMS, etc.) as key initiatives/organizations to contribute to the uptake of SRIA IP.



Beyond the CSA, these stakeholders will be integrated into the website alongside the final IP to allow as a go-to platform for those who are interested in the Black Sea SRIA and its Implementation Plan, funding agencies, etc.



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Annex

List of organisations, initiatives, projects, research infrastructures

Black Sea CONNECT (CSA) Consortium						
Entity		Category	Country	Status	Website	Mode of Engagement
METU	Middle East Technical University	Institution	Turkey	Partner	http://ims.metu.edu.tr	WP 1,2,3,4 ¹
BSEC	Organisation of the Black Sea Economic Cooperation	Inter-governmental body	Turkey	Partner	www.bsec-organization.org	WP 3,4
GeoEcoMar	National Institute for Marine Geology and Geocology	Institution	Romania	Partner	www.geoecomar.ro	WP 2,3, 4
INCDM	National Institute for Marine R&D	Institution	Romania	Partner	www.rmri.ro	WP 2,3,
IO-BAS	Institute of Oceanology, Bulgarian Academy of Sciences	Institution	Bulgaria	Partner	www.io-bas.bg	WP 2,3,4
TUBITAK	Scientific and Technological Research Council of Turkey	National funding agency	Turkey	Partner	https://www.tubitak.gov.tr	WP 2, 3
Ifremer & PMM-TVT	French Research Institute for Exploitation of the Sea –	Institution	France	Partner Third party (linked to Ifremer)	https://www.ifremer.fr www.polemermediterranee.com	WP 3

¹ Black Sea CONNECT CSA Workpackages (WPs): WP1 Management and Coordination; WP2 SRIA Development and Implementation Plan; WP3 Synergistic Activities towards SRIA Implementation; WP4 Visibility and Dissemination.



The activities of the Black Sea CONNECT Coordination and Support Action are funded by the European Union's Horizon 2020 Research and Innovation Programme under grant agreement No 860055.

	Pôle Mer Méditerranée – Toulon Var Technologies	Innovation and business cluster				
hereon	Helmholtz-Zentrum hereon GmbH	Institution	Germany	Partner	https://www.hereon.de/index.php/en	WP 3
UkrSCES	Ukrainian Scientific Centre of Ecology of the Sea	Institution	Ukraine	Partner	http://www.sea.gov.ua/?lang=en	WP 2,3
UPSC	“Ion Creangă” State Pedagogical University of Chişinău	Institution	Moldova	Partner	https://upsc.md/en/main-page/	WP 2,3
TSU	Tbilisi State University	Institution	Georgia	Partner	https://www.tsu.ge/en	WP 2,3,4
BSUN	Black Sea Universities Network	International ad-hoc organisation	Romania	Partner	https://bsun.org	WP 4

Black Sea Commissions and Initiatives					
<i>Entity</i>		<i>Category</i>	<i>Coordinating Country</i>	<i>Status</i>	<i>Website</i>
BSC	Commission on the Protection of the Black Sea Against Pollution (Black Sea Commission)	Inter-governmental organisation	Turkey	The Commission on the Protection of the Black Sea Against Pollution (the Black Sea Commission or BSC) via its Permanent Secretariat in Istanbul, is the inter-governmental body established in implementation of the Convention on the Protection of the Black Sea Against Pollution (Bucharest Convention), its Protocols and the Strategic Action Plan (SAP) for the Environmental Protection and Rehabilitation of the Black Sea (1 st SAP adopted in 1996; 2 nd SAP adopted in 2009).	http://www.blacksea-commission.org
BSEC	Organisation of the Black Sea Economic Cooperation	Regional organisation	Greece	BSEC was established in 1992 and is a representative regional organization promoting economic cooperation in the wider Black Sea area. It has a Permanent International Secretariat (BSEC PERMIS) in Istanbul, Turkey. BSEC serves as a trusted vehicle for cooperation in a wide range of areas (environmental protection,	http://www.bsec-organization.org



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				agriculture, culture, tourism, science and technology, education, energy, SMEs, emergency assistance, transport and etc.) for its 12 Member States (Albania, Armenia, Azerbaijan, Bulgaria, Georgia, Greece, Moldova, Romania, Russia, Serbia, Turkey and Ukraine) and beyond. It has 4 other autonomous entities (the Parliamentary Assembly of BSEC (PABSEC), the Black Sea Trade and Development Bank (BSTDB), the International Centre for Black Sea Studies (ICBSS) and the BSEC Business Council), which greatly contribute to the promotion and implementation of the Organization's objectives.	
ICBSS	International Centre for Black Sea Studies	Think Tank (non-profit)	Greece	The International Centre for Black Sea Studies (ICBSS) is located in Athens, Greece and was founded in 1998. It has since fulfilled a dual function: a) as an independent research and training institution focusing on the wider Black Sea region, and b) as a related body of the Organisation of the Black Sea Economic Cooperation (BSEC) serving as its acknowledged think-tank. It aims to enhance knowledge, empower people and enable synergies in the wider Black Sea region both within and beyond its boundaries.	https://icbss.org/
Black Sea Synergy		Regional organisation	Romania	Officially launched on February 14, 2008, in Kiev. It represents an institutionalised forum for EU cooperation encouraging cooperation between the EU and the countries surrounding the Black Sea and for tackling common problems while encouraging political and economic reform. The main objective of the Black Sea Synergy is to strengthen cooperation in the area, with EU's involvement in a constructive agenda of dialogue and cooperation with the region. It provides guidelines for pragmatic cooperation projects between countries in the region and the EU, in the areas of democracy, human rights, good governance, border management, frozen conflicts, energy, transport, environment, maritime policy, fisheries, trade, migration, development, education, research and development.	https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52007DC0160&from=EN
Black Sea NGO Forum		Network	Romania	The Black Sea NGO Forum was launched in 2008 by the Romanian NGDO Platform – FOND. The Forum has been organized with the support of the Romanian Ministry of Foreign Affairs and the European Commission, in the framework of	https://blackseango.org/



			<p>the Black Sea Synergy. The Forum aims at increasing the level of dialogue and cooperation among NGOs in the wider Black Sea Region, strengthening the NGOs capacity to influence regional and national policies and to increase the number and quality of regional partnerships and projects.</p> <p>The Romanian NGDO Platform – FOND is a platform of 34 Romanian NGOs actively involved in programs and projects related to international development cooperation.</p> <p>FOND aims to contribute to the strengthening of the Romanian NGOs' capacity to act in the field of international development cooperation and humanitarian aid, in order to achieve the following goals: promote the involvement of Romanian NGOs in the national and European international development cooperation policies; support the Romanian NGOs towards an effective contribution to the support of developing countries; increase Romanian citizens' awareness on the principles of international solidarity and development cooperation, as tools for fighting against poverty, promoting freedom and human rights and providing aid for humanitarian crisis victims all over the world.</p> <p>The Romanian NGDO Platform (FOND) is an active member of the European NGO Confederation for Relief and Development – CONCORD and founding member of the Forus International (the former International Forum of National NGO Platforms – IPF).</p> <p>Since 2013, FOND represents the focal point for the Black Sea region in the international coalition CSOs Partnership for Development Effectiveness – CPDE.</p>	
CMA	Common Maritime Agenda for the Black Sea	Sea basin initiative	CMA supports regional cooperation towards a more sustainable Blue Economy related to oceans, seas, and coasts and interlinked sectors.	https://black-sea-maritime-agenda.ec.europa.eu/
BSAM	Black Sea Assistance Mechanism	Executive management team dedicated to CMA implementation process	BSAM assists stakeholders at regional and national level to implement events, develop projects, provides guidance on funding opportunities on Blue Economy. They facilitate National Hubs (NH) which are key elements of the Black Sea Assistance Mechanism and are established in each participating country. The Black Sea Assistance Mechanism is supported by the European Maritime, Fisheries and Aquaculture Fund (EMFAF). It is implemented by	https://black-sea-maritime-agenda.ec.europa.eu/about/bsam



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				the European Climate Infrastructure and Environment Executive Agency (CINEA) and the Directorate-General for Maritime Affairs and Fisheries (DG MARE) of the European Commission.	
BSNN	Black Sea NGO Network	Network	Bulgaria	BSNN was established in 1998 as a regional association of NGOs from all Black Sea countries with more than 60 members as of today. Its mission is to contribute to the protection and rehabilitation of the Black Sea, including the Azov Sea, and to the sustainable development of the Black Sea countries through increased participation of NGOs, governments, businesses and other institutions, as well as the general public.	http://www.bsnn.org/
MARSPLAN-BS	Cross-Border Maritime Spatial Plan for the Black-Sea – Romania and Bulgaria	EU Maritime and Fisheries Fund project	Romania	MARSPLAN-BS aims to support the coherent, cross-sectoral Maritime Spatial Planning (MSP) in Bulgaria and Romania under the framework of MSP Directive 2014/89/EU and to establish a long-lasting mechanism for the Black Sea Basin cross-border cooperation on MSP. It helps capacity building and supporting Competent Authorities in Bulgaria and Romania for MSP implementation, as well as developing of national marine spatial plans on the bases of results of the first MARSPLAN-BS Project (2015-2018).	www.marsplan.ro
MARSPLAN-BS II	Cross-Border Maritime Spatial Plan for the Black-Sea – Romania and Bulgaria	EU Maritime and Fisheries Fund project	Bulgaria	The MARSPLAN-BS II Project aimed at supporting the coherent, cross-sectoral MSP in Bulgaria and Romania under the framework of MSP Directive 2014/89/EU and establishing a long-lasting mechanism for the Black Sea Basin cross-border cooperation on MSP (2019-2021).	http://www.ccms.bg/en/our-projects/marsplan-bs-ii
ODINBLACK SEA	Ocean Data and Information Network for the Black Sea (ODINBLACKSEA)	UNESCO IOC	Ukraine	ODINBLACKSEA was established as a Pilot Project, by IODE Committee of IOC. It has been proposed by the riparian countries to: (i) provide assistance in the development, operation and strengthening of NODCs; (ii) provide training and education in marine data and information management; (iii) enhance national and regional awareness for Marine Data and Information Management; (iv) assist in the development and maintenance of national and regional marine data, metadata and information databases; (v) assist in the development and dissemination of marine data and information products and services; (vi) undertake its activities in close collaboration and networking with other relevant organizations, programmes and projects operating in the	http://odinblacksea.iode.org/



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				Black Sea region; and (vii) applying modern technologies for data collecting, processing, storing and disseminating.	
BS-TOURISM NET	Black Sea Tourism Net	Inter-governmental organisation	Bulgaria	The overall objective of the Black Sea Tourism Net is to establish and operate a cooperative and self-supporting BS Network for sustainable tourism comprising data and information providers, policy and decision-makers and tourism industry.	www.blacksea-tourism.net

River Basin Commissions					
<i>Entity</i>		<i>Category</i>	<i>Coordinating Country</i>	<i>Status</i>	<i>Website</i>
ICPDR	International Commission for Protection of the Danube Region	Transnational body	Austria	ICPDR works to ensure the sustainable and equitable use of waters in the Danube River Basin. The work of the ICPDR is based on the Danube River Protection Convention (DRPC), the major legal instrument for cooperation and transboundary water management in the Danube River Basin. The ICPDR is formally comprised by the Delegations of all Contracting Parties to the Danube River Protection Convention, but has also established a framework for other organisations to join.	www.icpdr.org
Dniester Commission	Commission on Sustainable Use and Protection of the Dniester River Basin (Dniester Commission)	Inter-governmental organisation	Moldova and Ukraine	The Dniester Commission is a body for intergovernmental cooperation between the Republic of Moldova and Ukraine in the area of protection, sustainable use and development of the Dniester River Basin. Its main objective is to implement measures aimed at achieving the rational and environmentally sound use and protection of water and other natural resources and ecosystems of the Dniester River Basin in the interests of the population and sustainable development of the states.	https://dniester-commission.com/en/



Other Relevant Commissions and Initiatives				
Entity	Category	Coordinating Country	Status	Website
All-Atlantic Ocean Research Alliance	Research Alliance	Portugal	The All-Atlantic Ocean Research Alliance is the result of science diplomacy efforts involving countries from both sides of the Atlantic Ocean which aims at enhancing marine research and innovation cooperation along and across the Atlantic Ocean, from the Arctic to Antarctica. It aims to advance the shared vision of an Atlantic Ocean that is healthy, resilient, clean, safe, transparent, predictable, productive, understood and treasured so as to promote the well-being, prosperity and security of present and future generations. It has 3 main initiatives: AORA-CSA, AANhHOR-CSA and the All-Atlantic Ocean Research Projects (such as Blue-Action, Blue Cloud, ATLAS, AtlantOS, ASTRAL, AtlantECO, SO-CHIC, Mission Atlantic).	https://allatlanticocean.org/whoweare
Atlantic Maritime Strategy	Sea basin initiative	EC	The Atlantic Maritime Strategy identifies challenges and opportunities in the region and takes stock of existing initiatives that can support growth and job creation. The strategy is implemented through the <i>Atlantic Action Plan</i> , which was developed in 2013. The revised <i>Atlantic Action Plan 2.0</i> was communicated by the European Commission on 23 July 2020. Its main objective is to unlock the potential of blue economy in the Atlantic area while preserving marine ecosystems and contributing to climate change adaptation and mitigation. The EC Atlantic Assistance Mechanism provides a series of services aimed at keeping stakeholders informed of the latest news on the action plan and new funding opportunities generated under the scope of the maritime strategy. It also encourages stakeholder's participation through the organization of specialized events, mapping of funded projects that contribute to the strategy and its action plan (datahub), as well as promote development of new projects and ideas.	https://atlantic-maritime-strategy.ec.europa.eu/en/atlantic-strategy-glance/atlantic-strategy



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BEERi	Board of European Environmental Research Infrastructures	Advisory Panel	Finland	BEERi is an advisory panel consisting of directors or coordinators of the environmental Research Infrastructures giving direct guidance to the ENVRIplus project management and giving strategic view to the project progress, acting as internal advisory board representing the needs of environmental Research Infrastructures.	www.envriplus.eu/beer-i
CIESM	Mediterranean Science Commission	EU MARCOM programme	Monaco	CIESM was created early in the last century to promote international research in the Mediterranean Sea and the Black Sea and acts as a focus for the exchange of ideas, the communication of scientific information and the development of scientific standards across the Basin. It promotes communication and active cooperation among marine scientists of various disciplines and from diverse horizons engaged in research on the Mediterranean and the Black Seas. CIESM organises research workshops and syntheses up-to-date scientific knowledge in the form of workshop Monographs, biodiversity Atlases, or high-resolution digital maps of the sea bottom.	www.ciesm.org
Climate Partnerships 2030		Public-private partnerships	Denmark	Building on the Danish tradition for public-private partnerships and recognising the private sector as a central actor, the Danish government has formed 14 climate partnerships. Each representing the different sectors in the Danish economy. The 14 partnerships had been tasked with presenting a proposal on how their individual sector could contribute to CO2e reductions in a just way, supporting Danish competitiveness, exports, jobs, welfare and prosperity. This resulted in more than 400 recommendations. While the public sector provides the ambitious long-term goals and stable framework conditions, the private sector supplies the innovation, solutions and investments needed to achieve the visions.	https://climatepartnerships2030.com/
CMEMS	Copernicus Marine Environment Monitoring Service	EU programme		The Copernicus Marine Service is the marine component of the Copernicus Programme of the EU. It provides free, regular and systematic authoritative information on the state of the Blue (physical), White (sea ice) and Green (biogeochemical) ocean, on a global and regional scale. It is funded by the EC and is implemented by Mercator Ocean International. It is designed to serve EU policies and International legal Commitments related to	https://marine.copernicus.eu/



				Ocean Governance, to cater for the needs of society at large for global ocean knowledge and to boost the Blue Economy across all maritime sectors by providing free-of-charge state-of-the-art ocean data and information.	
CPMR	Conference of Peripheral Maritime Regions	Network		CPMR focuses mainly on social, economic and territorial cohesion, maritime policies and blue growth, and accessibility. European governance, energy and climate change, neighbourhood and development also represent important areas of activity for the association. CPMR's internal structure contains six Geographical Commissions (the Atlantic Arc, the Baltic Sea, the North Sea, the Intermediterranean, the Balkan and Black Sea and the Islands). Each Geographical Commission has its own organisational structure, so that it can promote its specific identity and cooperate on subjects of common interest, while contributing to the cohesion and unity of the Conference.	https://cpmr.org/
D4Science		Data Infrastructure service		D4Science is an organisation which hosts ca. 180 Virtual Research Environments (VREs) to serve the biological, ecological, environmental, social mining, culture heritage, and statistical communities world-wide.	https://www.d4science.org/
EEA	European Environment Agency	EU Agency		The European Environment Agency provides sound, independent information on the environment for those involved in developing, adopting, implementing and evaluating environmental policy, and also the general public.	https://www.eea.europa.eu/ https://www.eea.europa.eu/themes/water
EMODnet	European Marine Observation and Data Network	EU European Maritime and Fisheries Fund project	Belgium	The European Marine Observation and Data Network (EMODnet) is a network of organisations supported by the EU's integrated maritime policy. These organisations work together to observe the sea, process the data according to international standards and make that information freely available as interoperable data layers and data products. This "collect once and use many times" philosophy benefits all marine data users, including policy makers, scientists, private industry and the public. It has been estimated that such an integrated marine data policy will save at least one billion Euros per year, as well as opening up new opportunities for innovation and growth.	www.emodnet.eu



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EMSEA	European Marine Science Educators Association	Network of marine science educators	Belgium	EMSEA is a network of marine science educators acting as one voice across Europe and beyond. EMSEA supports its members by sharing good practice and training opportunities through annual international conferences. Working on grant funded projects, it ensures its members can benefit from this work. EMSEA organises events within regional groups and provides ways for the network to connect through digital platforms.	https://www.emsea.eu/
EuroMarine	European Marine Research Network	Network of European marine organisations and research institutes	France	EuroMarine is a member-based, interdisciplinary, collaborative network of European marine organisations and research institutes. It was established in 2014 as a merger of three former European Networks of Excellence: EUR-OCEANS, Marine Genomics Europe and MarBEF. The EuroMarine Consortium is comprised of European academic or research organisations that are active in marine sciences. It was launched on 1 June 2014, when sixty-six organisations signed the EuroMarine consortium agreement. Since 2015, new member organisations can join by signing a Consortium Accession Document. Full Members contribute to the budget and have voting rights. Organisations outside Europe can join as Invited Members.	https://euromarinenetwork.eu/
EuroOcean	European Centre for information on Marine Science and Technology	Independent, non-profit, scientific organization	Portugal	EuroOcean is founded in 2002, by the Portuguese Foundation for Science and Technology (FCT) and the French National Institute for Ocean Science (Ifremer). It supports European Ocean Science and Technology advances, by fostering information exchange, interaction, and innovation among its members, the ocean community, and society. EuroOcean provides comprehensive databases of information on topics related to marine science and technology in Europe (priority to Marine Knowledge Management, Marine Research Infrastructures, and Ocean Public Outreach and Awareness activities).	www.eurocean.org
EuroGOOS	European Global Ocean Observing System	UNESCO IOC body	Belgium	EuroGOOS is an international non-profit organization committed to European-scale operational oceanography within the context of the Global Ocean Observing System of the Intergovernmental Oceanographic Commission of UNESCO (IOC GOOS).	http://eurogoos.eu/
EU MSP	EU Maritime Spatial Planning	Sea basin initiative		Supports regional cooperation for the European stakeholders (project holders, institutions, public and private entities, general audience)	https://maritime-spatial-planning.ec.europa.eu/



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EU AAM	EU Aquaculture Assistance Mechanism	Sea basin initiative		The EU Aquaculture Assistance Mechanism is a service to share relevant knowledge, opportunities and experiences on EU Aquaculture. AAM aims to support the Member States, the aquaculture industry, and other relevant stakeholders, in the implementation of the 2021-2030 Strategic Guidelines for a more sustainable and competitive EU aquaculture, through the provision of logistic, administrative, and technical assistance, as well as a one-stop-shop for knowledge and practices about sustainable aquaculture in the EU. The Assistance Mechanism is part of a Service Contract funded under the call for tenders CINEA/EMFAF/2021/3.4.12 and CINEA/EMFAF/2021/3.4.13 . The Service Contract is jointly managed by DG MARE and the European Climate, Infrastructure and Environment Executive Agency (CINEA).	https://aquaculture.ec.europa.eu/
Future Ocean Network		Organizationally, the Future Ocean Network is part of the priority research area Kiel Marine Science (KMS) at the Kiel University.	Germany	The Future Ocean Network is an association of Kiel researchers who, as successors to the "Future Ocean" Cluster of Excellence, are jointly implementing research projects that contribute to the sustainable use of ocean resources on an interdisciplinary and cross-institutional basis. The Kiel research agenda aims to link science even more closely with society, with aspects in the context of the ocean-human relations and the sustainable development of the ocean and coastal zones, with the aim to further sharpen integrative marine research beyond the boundaries of disciplines and institutes.	www.futureocean.org
GEOSS	Global Earth Observation System of Systems	International	Co-chairs: European Commission, U.S.A., South Africa, China	GEOSS facilitates the sharing of environmental data and information collected from the large array of observing systems contributed by countries and organizations within GEO. GEOSS ensures that these data are accessible, of identified quality and provenance, and interoperable to support the development of tools and the delivery of information services. The GEOSS Platform proactively links together existing and planned observing systems around the world and support the need for the development of new systems where gaps currently exist. It will promote common technical standards so that data from the thousands of different instruments can be combined into coherent data sets.	https://earthobservations.org/geoss.php



GFCM	General Fisheries Commission for the Mediterranean	FAO		The General Fisheries Commission for the Mediterranean (GFCM) is a regional fisheries management organization of FAO. Its main objective is to ensure the conservation and the sustainable use of living marine resources and the sustainable development of aquaculture in the Mediterranean and Black Sea.	https://www.fao.org/gfcm/en/
GOOS	Global Ocean Observing System	Intergovernmental Oceanographic Commission (IOC)	GOOS Steering Committee: lead - Germany, co-chair - Canada	GOOS leads the ocean observing community and aims to create the partnerships needed to grow an integrated, responsive and sustained observing system.	https://www.goosocan.org/
HELCOM	The Baltic Marine Environment Protection Commission	Intergovernmental organisation	Finland	HELCOM is an intergovernmental organisation and a regional sea convention in the Baltic Sea area. A regional platform for environmental policy making, HELCOM was established in 1974 to protect the marine environment of the Baltic Sea from all sources of pollution.	https://helcom.fi/
ICPR	International Commission for the Protection of the Rhine	Intergovernmental body	Germany	Nine states and regions in the Rhine watershed from GER, FR, LUX, NL, CH) and the EC- DG-ENV closely co-operate in order to harmonize the many interests of use and protection in the Rhine area. Focal points of work are sustainable development of the Rhine, its alluvial areas and the good state of all waters in the watershed.	www.iksr.org
JPI Climate	Joint Programming Initiative on Connecting Climate Knowledge for Europe	Intergovernmental body		The Joint Programming Initiative "Connecting Climate Knowledge for Europe" (JPI Climate) is a pan-European intergovernmental initiative gathering European countries to jointly coordinate climate research and fund new transnational research initiatives that provide useful climate knowledge and services for post-COP21 Climate Action.	http://www.jpi-climate.eu/home
JPI Oceans	Joint Programming Initiative Healthy and Productive Seas and Oceans	Intergovernmental body	Belgium	JPI Oceans is an intergovernmental platform that strives to increase the impact of national investments in marine and maritime research and innovation. The main objective is to increase the value of relevant national and EU R&D and infrastructure investments through a combined effort of jointly planning, implementing and evaluating national research programmes.	https://www.jpi-oceans.eu/



JPI Water	Joint Programming Initiative on Water challenges for a changing world	Inter-governmental body	France	The JPI Water deals with research in the field of water and hydrological sciences. The availability of water in sufficient quantities and adequate quality is indeed a public issue of high priority and addresses a pan-European and global environmental challenge.	www.waterjpi.eu
Maritime Forum		EC forum	EC	The Maritime Forum aims to improve communication amongst EU maritime policy stakeholders. It allows parties interested in the EU maritime policy to communicate on a common platform.	https://maritime-forum.ec.europa.eu/
MCSD / MSSD	Mediterranean Commission on Sustainable Development / Mediterranean Strategy for Sustainable Development	International	UNEP (UNEP/MAP)	The Mediterranean Strategy for Sustainable Development (MSSD) 2016-2025 has been created by UNEP/MAP and provides an integrative policy framework for all stakeholders, including MAP partners, to translate the 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs) at the regional, sub-regional, national and local levels in the Mediterranean region. The MSSD was adopted by all Mediterranean countries at the 19th Meeting of the Contracting Parties to the Barcelona Convention (COP 19) (Athens, Greece, 9-12 February 2016) (Decision IG.22/2).	web.unep.org/unesmap/meeting-body/mediterranean-commission-sustainable-development-mcsd
OTC	ICOS Ocean Thematic Centre	Research centre	ICOS	OTC coordinates 22 ocean stations in seven countries, monitoring carbon uptake and fluxes in the North Atlantic and the Nordic, Baltic and Mediterranean Seas. The measurement methods include sampling from research vessels, moorings, buoys and commercial vessels, so called Ships of Opportunity (SOOP). They all have been equipped with state-of-the-art carbonate system sensors.	https://www.icos-cp.eu/observations/ocean/otc
SUBMARINER	SUBMARINER Network for Blue Growth EEIG	Network	Germany	The SUBMARINER Network promotes innovative approaches to the sustainable use of marine resources and offers a cooperation platform to related actors and initiatives in the Baltic Sea Region.	www.submariner-network.eu
SBEP	Sustainable Blue Economy' Partnership	Horizon Europe co-funded partnership	Italy and Norway	SBEP was launched in late 2022, aiming to combine and align pan-European, regional and national investments and the identified socio-political priorities for marine and maritime research and innovation. The activities of the Sustainable Blue Economy Partnership build on a Strategic Research and Innovation Agenda (SRIA). The SBEP SRIA contains 39 R&I objectives agreed and validated by MS/AC and the European Commission for the future development of the European blue economy. The R&I objectives	https://bluepartnership.eu/



				of the SRIA are organized in 4 pillars and seven crosscutting enablers. Within each thematic pillar there are three to four R&I clusters, and within each cluster there are three to four R&I objectives. The SBEP SRIA also builds on the agendas of the sea-basins initiatives.	
UNEP/MAP	Mediterranean Action Plan of the United Nations Environment Programme	International	UNEP (UNEP/MAP)	The Mediterranean Action Plan of the United Nations Environment Programme (UNEP/MAP) is a regional cooperation platform established in 1975 as the first regional action plan under the UNEP Regional Seas Programme.	https://www.unep.org/unepmap/
WestMED	WestMED Blue Economy Initiative	Sea-basin initiative		The WestMED initiative is aiming to increase maritime safety and security, promote sustainable blue growth and jobs, and preserve ecosystems and biodiversity. Although the initiative focuses on the western Mediterranean region and the 10 countries that constitute the 5+5 Dialogue (France, Italy, Portugal, Spain, Malta and five Southern partner countries – Algeria, Libya, Mauritania, Morocco and Tunisia), its scope of action and potential benefits extends beyond this sub-basin. Therefore, depending on the needs to be addressed and on the willingness to cooperate, actions may involve partners in the whole Mediterranean while remaining open to others.	https://westmed-initiative.ec.europa.eu/

Relevant Linked Projects						
Project		Financing	Coordinating Country	Start date – End date	Short description objectives/aims/results	Website
4SEAS	Synergies Between Science and Society for a Shared Approach to European Seas	EU Horizon 2020 project, FP7-SIS	Italy	2008-2010	Europe is bordered by four different seas that have been shaping and influencing European cultural, social and economic heritage since ancient times. The Baltic Sea, Black Sea, North Sea and Mediterranean Sea - in addition to the Atlantic Ocean - have been a doorway to knowledge and life for millennia. As science and culture have operated in a bi-directional way over these bodies of water, the 4Seas project	https://cordis.europa.eu/project/id/217766



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					aimed to unveiling all the opportunities that seas offer to mankind and to the threats that mankind poses to the seas.	
ACTIONPLANBS	T for the Black Sea region	EU Horizon 2020 project, FP6-INCO	Greece	2005-2006	The EU-funded project 'T for the Black Sea region' (Actionplanbs) prepared a science and technology strategy for countries around the Black Sea. The plan was designed to be implemented by ministries in BSEC countries that are related to research and technology.	https://cordis.europa.eu/project/id/517615/it
ARSINOE	Climate Resilient-Regions Through Systemic Solutions and Innovations	H2020-LC-GD-2020-2	Greece	2021-2025	The aim of the EU-funded ARSINOE project is to leverage innovation for climate adaptation across a series of key systems – from biodiversity to flooding and sea level rise and from droughts and water scarcity to heatwaves and deforestation. ARSINOE will build an ecosystem for solutions to climate change adaptation. It will develop a methodological framework for combining the systems innovation approach with the Climate Innovation Window, a reference portal, to create a new three-tier approach that will be showcased in nine widely varied demonstrators, as a proof of concept. The project's overall aim is to show the way towards a green, digital, inclusive, resilient and sustainable future.	https://arsinoe-project.eu/
ANEMONE	Assessing the vulnerability of the Black Sea marine ecosystem to human pressures	Co-financed by the European Union through the European Neighbourhood Instrument and by the participating countries: Romania, Bulgaria, Ukraine, Turkey	Romania	2018-2021	The project aimed to deliver, through collaborative efforts among partners, a common strategy related to the Joint Monitoring of the Black Sea, using the most adequate common agreed assessment criteria and indicators, in order to assess the status of the Black Sea, as a basis for further actions. ANEMONE built upon the monitoring related provisions of the Black Sea Commission, taking into account existing regional (BSIMAP) and national monitoring programs, the best practices of other Regional Sea Conventions, and last, but not least, Marine Strategy Framework Directive (MSFD) principles, aiming to contribute further to harmonization of methodologies and filling of knowledge gaps identified in the region.	http://anemoneproject.eu/



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AQUA EXCEL	AQUAculture infrastructures for EXCELlence in European fish research towards 2020	H2020-EU.1.4.1.2., H2020-EU.1.4.	France	2015-2020	AQUAEXCEL2020 aimed to integrate top class European aquaculture research facilities of very diverse nature, covering all relevant scientific fields for research and innovation in aquaculture, from genetics to technology through pathology, physiology and nutrition. It put in place a user-friendly one-stop access to high-quality services and resources from 39 installations covering both established and new aquaculture species, all types of experimental systems as well as sequencing facilities. It benefited from the support of the ESFRI infrastructures EMBRC (Marine Biology) and ELIXIR (Life Sciences data).	https://www.aquaexcel2020.eu/
ASCABOS	A supporting programme for capacity building in the Black Sea region towards operational status of oceanographic services	EU Horizon 2020 project, FP6-SUSTDEV	Bulgaria	2005-2008	ASCABOS was designed to strengthen the communication system ensuring flexible and operative infrastructure for data and information exchange between partners and end users. It increased public awareness, stimulated and motivated the utilization of operational oceanographic information in management and decision-making practices. It initiated an educational and training programme designed for young scientists and wide spectrum of end users. Considerable work has been performed on compiling meta-databases on the Black Sea environmental data, information and research within previous international initiatives and projects. Finally, ASCABOS combined experiences and instruments in order to develop a Black Sea information system, containing all available metadata, validated and efficiently updated through the Internet.	https://cordis.europa.eu/project/id/518063
BeECO	Joint actions for environmental protection in Black Sea Basin	Co-financed by the European Union through the European Neighbourhood Instrument and by the participating	Romania	2020-2022	The BeECO main idea was that common education, awareness and river clean-up campaigns to reduce river and marine litter are extremely beneficial for environmental protection in the Black Sea. Four NGOs unite their efforts in implementing number of activities, focused to boosting the development of environmental protection in the Black Sea countries. The BeECO project explores the opportunities for development cross border activities in the project countries and beyond by providing a vast platform for experience and knowledge sharing between NGOs, local and regional	https://keep.eu/projects/24608/Joint-actions-for-environme-EN/



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		countries: Romania, Armenia, Georgia, Republic of Moldova			authorities, public authorities, higher education and research, education /training centre and school for jointly promotion of good environmental management practices. The project will jointly promote public awareness and education regarding river and marine litter problems and share good environmental practices for biodiversity and environmental protection in Black Sea Basin. Finally, the project aims to create a BeECO IT app to align the project results.	
BioLearn	Eco-Conscious Minds to Stop Pollution in the Valuable Wetlands of Black Sea Basin	Co-financed by the European Union through the European Neighbourhood Instrument and by the participating countries: Turkey, Ukraine, Georgia, Bulgaria, Greece	Turkey	2020-2022	BioLearn will try to establish sustainable links and improvement of cooperation between regional and subnational partners with the aim to have coordinated actions for environmental protection, increase local awareness and reduce pollution in important wetlands of Black Sea Basin. The project aims in particular to exchanging of knowledge and experience and capacity building activities between project partners and interested institutions; investing on activities related to the establishment of a Network from “Stop Litter” and “Save Nature” activity centers working under the common environmental - educational approach and methodology; realising public awareness activities and educational programs for local target groups and clean-up activities for decreasing the local pollution in the targeted areas. BioLearn integrates the main valuable wetlands and biospheres of the BSB as Danube Biosphere Reserve, Black Sea Biosphere Reserve in UKR, Pomorie Wetland Complex-BG, the Delta of Merich/ Evros River with its both Greek and Turkish sides and Wetlands of Central Kolkheti and protected area in Tbilisi/Georgia.	http://bio-learn.org/
BLACK SEA HORIZON	Enhanced bi-regional STI cooperation between the EU and the Black Sea Region	19 partners in the region, including partners from Azerbaijan, Bulgaria, Georgia, Moldova,	Austria	2015-2018	The groundbreaking BLACK SEA HORIZON project has connected funding agencies, academic institutes and scientists in the Black Sea region and identified shared research priorities. Since the project was launched, there has been an increase of at least 10 % in the number of project proposals that include partners from non-EU Black Sea countries. A Horizon 2020 Summer School successfully trained 25 young researchers from non-EU Black Sea	https://blacksea-horizon.eu/



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		Romania, Russia, Turkey and Ukraine.			countries, preparing them to participate in future EU-funded research projects.	
BlueBRIDGE	Building Research environments fostering Innovation, Decision making, Governance and Education to support Blue Growth	H2020-EU.1.4.1.3.	Italy	2015-2018	BlueBRIDGE - supported capacity building in interdisciplinary research communities actively involved in increasing scientific knowledge about resource overexploitation, degraded environment and ecosystem. The aim was to provide a more solid ground for informed advice to competent authorities and to enlarge the spectrum of growth opportunities as addressed by the Blue Growth Societal Challenge. The project has developed innovative services, (Virtual Research Environments - VREs), in: a) the Ecosystem approach to Fisheries - services for stock assessment and for the generation of unique identifiers for global stocks; b) Aquaculture - services supporting the analysis of socio-economic performance in aquaculture; c) Maritime Spatial Planning - spatial planning services to identify aquaculture and fisheries infrastructures from satellite imagery and tools to visualize, analyze and report on a range of ecologically important seafloor features within marine protected areas and d) Education - tools to set up and deliver training courses in a cost-effective way.	www.bluebridge-vres.eu
BRIDGE-BS	Advancing Black Sea Research and Innovation to Co-Develop Blue Growth with Resilient Ecosystems	EU H2020	Turkey	2021-2025	Vulnerable and unique, the Black Sea's ecosystem services are under threat from multi-stressors such as pollution and overfishing because of climate and anthropogenic pressures. The overarching aim of the EU-funded BRIDGE-BS project is assessing the current state of the Black Sea ecosystems, their services, and resilience to the multi-stressors, and creating the necessary means to manage these ecosystems sustainably. For that, it will use an interdisciplinary approach based on three nodes: service dynamics, blue growth incubators, and empowered citizens. The project will use pilot study sites at the regional level, with findings contributing to work packages addressing the four pillars of the Black Sea	https://cordis.europa.eu/project/id/101000240 http://bridgeblacksea.org/



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					SRIA. This way, BRIDGE-BS strives to achieve a healthy, resilient and productive Black Sea by 2030.	
B-SEENOVA	Enhancement of Black Sea Innovation Capacity	EU Horizon 2020 project	Turkey	2020-2021	The Black Sea Enterprise Europe Network (EEN) delivered services that support innovation and growth of small and medium-sized enterprises (SMEs) in the Black Sea area in Turkey. The EU-funded B-SEENOVA project aimed at helping SMEs improve their innovation management capacity in the Middle and East Black Sea regions providing services for enhancing innovation management capacity (EIMC).	https://cordis.europa.eu/project/id/879429
BS-ERA.Net	ERA-NET project for Networking on Science and Technology in the Black Sea Region	EU Horizon 2020 project, FP7-INCO	Romania	2009-2012	BS-ERA.NET project has provided a framework to network and mutually open national and regional research, leading to concrete cooperation in the frame of a Black Sea Research Programme (BSRP), conducting to the development and implementation of joint programmes and activities in the region.	http://bs-era.uefiscdi.ro/
BS-SCENE	Black Sea Scientific Network	EU Horizon 2020 project, FP7-INFRASTRUCTURES	Netherlands	2005-2008	The Black Sea SCENE project aimed to establish a Black Sea Scientific Network of leading environmental and socio-economic research institutes, universities and NGOs from the countries around the Black Sea and to develop a virtual data and information infrastructure that will be populated and maintained by these organisations to improve the identification, access, exchange, quality indication and use of their data and information about the Black Sea.	www.blackseascene.net
BSB ECO MONITORING	Joint Monitoring for Environmental Protection in BSB countries	Co-financed by the European Union through the European Neighbourhood Instrument and by the	Bulgaria	2020-2022	The project aims at solving common problems of nature parks and protected areas in the Black Sea Basin (BSB) (Nature Park Strandja, Bulgaria; the Danube Delta Biosphere Reserve, Romania; Dilijan National Park, Armenia and part of protected areas in Georgia). The overall project objective is to contribute to increasing the level of availability of cross-border compatible environmental monitoring data and information in nature parks and protected areas in BSB. The major project outcome will be the creation of an intelligent	https://bsbecomonitoring.net/



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		participating countries: Bulgaria, Romania, Armenia, Georgia			platform for the collection, processing and analysis of environmental data via Web-based cloud service for automatic data collection from wireless sensor networks and Web-based cloud service for video content.	
BS Tourism Net	Black Sea Tourism Net	Co-financed by the European Union through the European Neighbourhood Instrument and by the participating countries: Republic of Moldova, Romania, Ukraine	Bulgaria	2013-2015	The aim of the network was to establish and operate a cooperative and self-supporting Black Sea Network for sustainable tourism comprising data and information providers, policy and decision makers and tourism industry in Bulgaria, Romania, Ukraine, Moldova and Georgia.	http://blacksea-cbc.net/wp-content/uploads/2017/11/2017_annual-brochure.pdf
CLEAN BLACK SEA	Clean Black Sea Working Group	EU Horizon 2020 project, FP6-INCO	Bulgaria	2004-2005	The aim of this SSA project was to organise future European and regional research activities under an EC-FP6 financed project, for the elaboration and implementation of a new strategy about i) mitigation of the Black Sea negative impacts and ii) sustainable environmental management of the Black Sea region.	https://cordis.europa.eu/project/id/3510
CLEANSEA A	Towards a Clean, Litter-Free European Marine Environment through Scientific Evidence,	EU Horizon 2020 project, FP7-ENVIRONMENT	Netherlands	2013-2015	CLEANSEA (Towards a clean, litter-free European marine environment through scientific evidence, innovative tools and good governance) project addressed the issues of marine litter giving input to the Marine Strategy Framework Directive (MSFD). A novel microplastic sampler was designed and tested by sampling marine litter on the seabed and used these samples as input for plastic fragmentation and hydrodynamic modelling studies. Another focus of the	https://cordis.europa.eu/project/id/308370



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	Innovative Tools and Good Governance				CLEANSEA project was to inform marine legislation and policies aimed at reducing waste.	
CLIMSEAS	Climate Change and Inland Seas: Phenomena, Feedback and Uncertainties. The Physical Science Basis	EU Horizon 2020 project, FP7-PEOPLE	Spain	2010-2014	CLIMSEAS project has identified important feedback processes controlling the physical state of inland seas, focusing on the Aral, Black and Caspian Seas, and ongoing trends in atmospheric forcing on a regional scale. The project established the link between current climate variability and climate change records over the last 150 years from bottom sediments from the inland seas. This enabled scientists to obtain a wider view of the relationship between climate and inland seas.	https://www2.udg.edu/ca/tabid/14577/
CoCoNET	Towards COast-to-COast NETworks of marine protected areas (from the shore to the high and deep sea), coupled with sea-based wind energy potential	EU Horizon 2020 project, FP7-KBBE	Italy	2012-2016	COCONET had two main themes: 1 - identify prospective networks of existing or potential MPAs in the Mediterranean and the Black Seas, shifting from a local perspective (centred on single MPAs) to the regional level (network of MPAs) and finally the basin scale (network of networks) and 2 - explore where Offshore Wind Farms OWF might be established, producing an enriched wind atlas both for the Mediterranean and the Black Seas. OWF locations will avoid too sensitive habitats but the possibility to act as stepping-stones through MPAs, without interfering much with human activities, was evaluated. Socioeconomic studies employing ecosystem services valuation methods to develop sustainable approaches for both MPA and OWF development were carried out, to complement the ecological and technological parts of the project, and to provide guidelines to design, manage and monitor networks of MPAs and OWF. Two pilot projects (one in the Mediterranean Sea and one in the Black Sea) tested in the field the assumptions of theoretical approaches, based on previous knowledge.	https://www.msp-platform.eu/projects/towards-coast-coast-networks-marine-protected-areas-shore-high-and-deep-sea-coupled
CREAM	Coordinating research in support to	EU Horizon 2020 project, FP7-KBBE	Spain	2011-2014	The aim of CREAM was to identify gaps in order to implement the ecosystem approach to fisheries (EAF) in the Mediterranean and Black Sea countries. The project	https://www.msp-platform.eu/projects/coordinating-research-



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	application of EAF (Ecosystem Approach to Fisheries) and management advice in the Mediterranean and Black Seas				successfully established an effective collaboration network among the key players in fisheries research and management within the two regions concerned. Main actors in fisheries assessment and management in the Mediterranean and Black Seas examined how best to improve the coordination of the fisheries research of European and International Cooperation Partner Countries (ICPCs). CREAM evaluated the capacity to address EAF issues in the Mediterranean and Black Seas. In general, the highest scores were recorded for knowledge related to fishing fleet structure/behaviour as well as on fish species/habitats, while the lowest scores were attributed to knowledge of modelling, and socioeconomic and management issues. The CREAM project successfully established organisational procedures for the creation of a permanent network of fisheries scientists and management bodies. This strengthened the scientific basis of EAF application in Mediterranean and Black Sea fisheries. By integrating non-EU countries, it ensured that the foundation of an EAF for the two regions also reaches third countries.	support-application-ecosystem-approach-fisheries-and-management
CRoCuS	Cleaner Rivers - Cleaner Seas	Co-financed by the European Union through the European Neighbourhood Instrument and by the participating countries: Bulgaria, Republic of Moldova, Ukraine, Romania	Bulgaria	2020-2022	CRoCuS project aims to produce innovative tools for rapid assessment of river litter and waste recycling potential, promote sustainable waste management practices, share good practices and mistakes and spread the word across the borders for reduction of bio-degradable waste and plastics recycling and minimization. A wide awareness raise campaign, capacity building of local actors and mobilization of communities on river litter reduction and prevention will be conducted. The project will provide a trash alert mobile application, teacher trainings and experience sharing workshops, demonstration activities on how to produce compost and mulch, clean-up activities on the rivers Prut, Dniepr and Tundja; ways of reducing/recycling of plastics; implementation of demonstration facilities on sustainable waste management in 7 communities located on the banks of	https://www.earthforever.org/en/p22.html



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					Prut, Dniepr and Tundzha rivers; development of training packs and promotional/educational materials.	
CSA Oceans 2	Coordination action in support of the implementation of the Joint Programming Initiative on 'Healthy and Productive Seas and Oceans'	H2020-EU.3.2.	Belgium	2016-2019	CSA Oceans 2 was a 36-month project with the general aim to facilitate and support the implementation of the Strategic Research and Innovation Agenda (SRIA) of JPI Oceans. CSA Oceans 2 built further on the outcomes of the FP7 CSA Oceans project.	
DACIAT	Improving the existing competences and developing new ones in the aquaculture and fish products trade sector	Co-financed by the European Union through the European Neighbourhood Instrument and by the participating countries: Romania, Greece, Turkey, Ukraine	Romania	2018-2021	DACIAT aims to improve existing competences in the field of aquaculture and aquaculture-related fields in the Black Sea Basin. It builds on a consolidated experience of exchange by moving towards concrete transfer of good practices in 4 Black Sea regions aiming to improve their competences, especially in what concerns support for aquaculture enterprises, in particular SMEs. The project's overall objective is to improve actual capacities in the field of aquaculture by increased cross-border cooperation in the Black Sea Region and, specifically, to upgrade the innovation capacity of existing enterprises activating in the field of aquaculture. This project aims to create added-value for aquaculture enterprises, in particular for SMEs, by creating customized support services and improving the existing ones.	http://daciato.ro/
DALIA	Danube Region Water Lighthouse Action	Horizon Europe	Hungary	2023-2026	DALIA project is working to support local communities through the creation of sustainable employment opportunities and by enhancing the river's cultural importance. The project is unique in that it brings together trusted experts from eight Danube countries with a shared goal of implementing	https://cordis.europa.eu/project/id/101094070



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					harmonised actions from source to sea. The project will provide an integrated tool for better decision-making and improved restoration of fresh and transitional water ecosystems in the Danube River Basin. DALIA will contribute to the EU Water Framework Directive. It will also collaborate with a wider network of ecosystems and related EU Missions and projects.	
DANCERS	DANube macroregion: Capacity building and Excellence in River Systems (basin, delta and sea)	EU Horizon 2020 project, FP7-ENVIRONMENT	Romania	2013-2015	DANCERS brought together scientists, the business community and decision-makers across the Danube/Black Sea area. This helped to increase understanding of the links between the achievements, deliverables and results of the work performed. The project's main outcome was a toolbox of instruments that could be used to develop a strategic research and innovation agenda. It will also be used to create a detailed plan of the distribution of research infrastructures required across the Danube/Black Sea area. In addition, an integrated research educational programme (EDU) was developed for all scholars, from infant to postgraduate, which also provided a developmental platform for researchers. Within the EDU there is a dedicated section for training the local and business communities, which is vital for improving the transfer of knowledge from project consortium to end users.	http://www.dancers-fp7.eu/
DANUBE4all	Restoration of the Danube River Basin Waters for Ecosystems and People from Mountains to Coast	Horizon Europe	Austria	2023-2027	Despite ambitious EU policy to turn things around, fresh and transitional water ecosystem restoration remains limited. The EU-funded DANUBE4all project will develop a comprehensive restoration action plan for the Danube River basin lighthouse. The project will engage stakeholders, integrating citizens' interests to support the EU Mission 'Restore Our Ocean and Waters by 2030' in an unprecedented cocreation process. The action plan will rely on solid scientific knowledge and new findings to promote ecological status, biodiversity, and ecosystem connectivity improvement.	https://www.danube4allproject.eu/about



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DarkLife	The Black Sea Basin, a Cradle and Refuge of European Biodiversity	EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions	Spain	2020-2022	In recent years, human activity has rapidly accelerated biodiversity loss, including the vital goods and services ecosystems provide to sustain well-being as well as future economic and social development. Environmentalists rank the Black Sea basin among the world's top priority places for conservation. The EU-funded DarkLife project aims to improve existing knowledge on the origins and diversification of terrestrial invertebrates in this unique region. In tackling this goal, the project will combine integrative taxonomic research with high-throughput DNA sequencing techniques and state of the species distribution modelling tools, helping to reveal the factors and mechanisms that shaped the Black Sea basin's unique biodiversity and to predict its future viability under a global warming scenario.	https://cordis.europa.eu/project/id/895672
DEMOSS	Development of Marine oil spills/slicks satellite monitoring system elements targeting the Black/Caspian/Kara/Barents Seas	IC-INTAS	Norway	2007-2009	The Overall Goal of DEMOS was to develop and demonstrate components of a marine oil spill detection and prediction system based on satellite SAR and other space data in combination with models for oil slick/spill monitoring, prediction and assessment of their impact on the environment. The project was a continuation of work started by the project titled 'Marine oil spill control: SAR monitoring and model prediction' (OSCSAR) funded by ESA-IAF within the frame of 'GMES Networking with Russia and Ukraine in 2004'.	
DEVOTES	DEVELOPMENT OF innovative Tools for understanding marine biodiversity and assessing good	EU Horizon 2020 project, FP7-ENVIRONMENT	Spain	2012-2016	DEVOTES has developed the technology that allowed EU Member States, the European Commission, scientists and managers to assess the environmental status of the seas. NEAT - the Nested Environmental status Assessment Tool - includes the DEVOTool and uses 600 different indicators from biodiversity, presence of non-indigenous species, commercial fishing, food-webs, eutrophication, and sea-floor integrity, to different ecosystem components like bacteria, plankton, fish or seabirds to give a holistic assessment of the sea. 'DEVOTES also achieved a world-first in evaluating the	https://cordis.europa.eu/project/id/308392/results



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	Environmental Status				health of marine bacterial communities. For the first time ever the project has developed a bacterial index, based on metabarcoding, that can assess the ecological status of bacterial communities. NEAT, including the DEVOTool, was tested in 10 different locations across European seas from the Arctic to the Black Sea covering areas ranging from 1,500 km ² to more than 800,000 km ² .	
DOORS	Developing Optimal and Open Research Support for the Black Sea	EU H2020	Romania	2021-2025	The Black Sea is a unique sea basin, rich in biodiversity, geological and cultural heritage, which is subject to combined effects of natural and human-induced stressors. The Black Sea Strategic Research and Innovation Agenda (SRIA) coordinates stakeholders from academia, funding agencies, industry, policy and society to address the specific challenges of this marine basin and promote Blue Growth and economic prosperity in the region. The EU-funded DOORS project will implement the SRIA in close cooperation with stakeholders and other projects in the region. It will harmonise research, deliver the infrastructure required to understand the Black Sea ecosystems, develop a structure to support Blue Growth and the early development of start-ups, and provide evidence to shape policy in line with the Black Sea SRIA.	https://cordis.europa.eu/project/id/101000518 https://www.doorsblacksea.eu/
ECOFISH	Researches on the potential conversion of conventional fish farms into organic by establishing a model and good practice guide	H2020-EU.1.3.3.	Romania	2015-2019	ECOFISH project developed a model and guide to encourage and help conventional fish farms to switch to organic aquaculture. Sustainable aquaculture farms take specific measures to protect the environment, natural resources and landscape during production. ECOFISH used aquaponics to achieve a sustainable production system for both plants and fish. Aquaponics combines traditional aquaculture with hydroponics in a symbiotic environment (meaning that it is a production system in which waste from the livestock is used as nutrients for the plants). ECOFISH established, tested and provided good practice guidelines for such a model. Moreover, this production system provided improved waste management practices and also high-value, organic, pesticide and chemical-free food products. During the project, processing and marketing	http://ecofish-project.com/



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					activities were carried out to support the added value of the end products and raise awareness of the potential benefits of organic aquaculture.	
EcoDaLLi	ECOsysteM-based governance with DANube lighthouse Living Lab for sustainable Innovation processes	Horizon Europe	Germany	2023-2026	Delivering on the European Green Deal and the EU Mission 'Restore our Ocean and Waters by 2030' requires integrated solutions and clear targets. The EU-funded EcoDaLLi project aims to centralise the governance structures of the Danube basin and its Delta through innovative solutions for ecological restoration, protection and preservation. The project will support the creation of an innovation ecosystem and a digital portal linked to the Mission Implementation Platform, delivering innovative solutions and tools for ecosystem services. This will contribute to the Green Deal goal of decarbonisation for cleaner water, improved environment, and job creation in sensitive areas.	https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/how-to-participate/org-details/996409512/project/101093908/program/43108390/details
4BIZ	4biz – Boosting The Blue Economy In The Black Sea Region By Initiating A Business Collaboration Framework In The Field Of Fisheries And Aquaculture, Coastal And Maritime Tourism And Maritime Transport	EMFAF	Romania	2022-2024	The Aim Of The Project Is To Address Local Capacity Building Needs To Boost Innovation, Digitalisation And Investment In The Black Sea Blue Economy. The Main Sectors Would Be Fisheries And Aquaculture, Coastal And Maritime Tourism, As Well As Maritime Transport. The Collaboration Framework Will Bring Together Blue Economy Stakeholders In The Eu And Eligible Non-Eu Black Sea Countries.	https://4biz.bsun.org/?page_id=477



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ELME	European lifestyles and marine ecosystems	EU Horizon 2020 project, FP6-SUSTDEV	United Kingdom	2004-2007	ELME investigated the relationship between threatened marine ecosystems and the lifestyles of Europeans. It looked at pollution, eutrophication and fishing in the Atlantic Ocean, Baltic Sea, Mediterranean Sea and Black Sea, defining links between these ecosystems and the livelihoods of communities around them. The project identified the threats to marine ecosystems driven by economic needs and other underlying forces at play, an initiative which could help redefine policies in the sector. ELME ascertained the catastrophic decline in quality and biodiversity of the seas surrounding Europe, caused mainly by socioeconomic pressures. Species of sea life that were low on the food chain helped exacerbate the declining situation, wreaking havoc on marine systems and biodiversity. These changes were mainly associated with transport of goods and economic choices of surrounding nations or those active in a given region of the sea. They were also shaped by regulatory frameworks, pointing to a need for improvement in this area. ELME warned that failure to act is likely to cause irreparable damage, and its recommendations will hopefully spur communities and governments to react rapidly.	https://cordis.europa.eu/project/id/505576/reporting
EMBLAS II; EMBLAS PLUS; EU4EMBLAS	Environmental Monitoring in the Black Sea	UNDP/EU	Ukraine and Georgia		The overall objective of EMBLAS is to help improve protection of the Black Sea environment and will be pursued through further technical assistance, focused on establishing modern systems and facilities for environmental monitoring in Georgia and Ukraine, increase capacity building, assess the environmental status in line with EU MSFD/WFD and enhance public awareness on the Black Sea environmental issues. The key involved actors are the relevant national authorities, as well as research / scientific and educational institutions involved in the Black Sea monitoring.	https://emblasproject.org/
ERA.Net RUS plus	Further linking Russia to the ERA: Coordination	EU Horizon 2020 project, FP7-INCO	Germany	2013-2019	The major objective of the ERA.Net RUS Plus initiative, which ended in October 2019, was to deepen the transnational collaboration between EU MS/AC and Russia and to reduce the fragmentation of research programmes along national funding lines. This joint undertaking was meant to create	https://www.eranet-rus.eu/



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	of MS/ AC S&T programmes towards and with Russia				synergies and strengthen the cooperation among the consortium members.	
ESONET	European Seas Observatory NETwork	EU Horizon 2020 project, FP6-SUSTDEV	France	2007-2011	The aim of ESONET is to create an organisation capable of implementing, operating and maintaining a network of ocean observatories in deep waters around Europe from the Arctic Ocean to the Black Sea connected to shore with data and power links via fibre optic cables. The fundamental scientific objective is to make continuous real-time observations of environmental variables over decadal, annual, seasonal, diel and tidal time scales.	http://www.esonet-noe.org
EURO-ECOGEOCENTRE	European centre of excellence for environmental and geo-ecological studies on river - delta - sea systems in Europe. Case study: river Danube - its delta - Black Sea system	EU Horizon 2020 project, FP5-EESD	Romania	2003-2006	The objective of the project was the establishment of a European Centre of Excellence for environmental and geo-ecological studies regarding the river-sea systems and the related sedimentary environments- "EU-EcoGeoCentre", which was built on the existing structure of GeoEcoMar to facilitate (1)the continuous formation and training of young scientists for improving the scientific level of the Romanian R&D units, (2)the enhanced scientific co-operation of Romanian R&D units with West-European research units by networking and improving mobility facilities and (3)the enhanced long-term co-operative research and monitoring of the River Danube-its Delta-Black Sea system using jointly the local and international human and logistic resources. Geocomar facilities (research vessels, sc. equipment buildings in Constanta) will be used for the activity of the Euro-EcoGeoCenter.	https://cordis.europa.eu/project/id/EVK3-CT-2002-80006
EUROqCHARM	EUROpean quality Controlled Harmonization Assuring Reproducible Monitoring	H2020	Norway	2020-2023	EUROqCHARM aims at establishing harmonised methodologies for long-term solutions to reduce plastic pollution. Blueprints for standards, recommendations for policy and legislation and support for the establishment of acceptable reference levels and environmental targets will be given. This will include a roadmap for harmonised data collection and management, where policy analysis and	https://www.euroqcharm.eu/en



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	and assessment of plastic pollution				coherence will be integral parts. To maximise impact, EUROqCHARM will also establish and consolidate an operational network for plastic monitoring, stimulating Transnational Joint Actions built on existing and future European and international initiatives.	
Empower Us	Socio-economic Empowerment of coastal communities as users of the sea to ensure sustainable coastal development	Horizon Europe	Norway	2022-2025	Focused on building resilient coastal communities. To do this, it is creating a coastal transition lab to empower Danube-Black Sea communities as they make the transition towards sustainable coastal development.	https://empowerus-project.eu/
FORCOAST	Earth Observation Services for Fishery, Bivalves Mariculture and Oysterground Restoration along European Coasts	H2020-EU.2.1.6.1., H2020-EU.2.1.6.3.	Netherlands	2019-2022	Copernicus Earth Observation programme supports market development and offers valuable services in a wide range of sectors such as marine activities. The EU-funded FORCOAST project will develop, test and prove innovative downstream information services based on the Copernicus programme that will offer high resolution information in the sectors of wild fisheries, oyster grounds restoration and bivalve mariculture. The proposal integrates Copernicus Observation products with local patterns, diverse data sources and ICT through different stakeholders. FORCOAST will offer regular coastal data products based on a data processing design. This service aims to improve the planning and management of different marine activities. It will be tested in eight pilot sites in different European regional waters.	https://forcoast.eu
GETAS	Develop and promote the green tourism in the Danube sector of the	Co-financed by the European Union through the European	Republic of Moldova	2020-2022	The objectives of the project are related to development and promotion of the cross-border tourism at a qualitatively advanced level for achieving mutual socio-economic benefits by the local communities in the Black Sea Basin on the Danube sector Galati-Cahul-Reni. The project has an integrated approach addressing the tourism sector directly	https://keep.eu/project-ext/25077/Partnerség%20a%20klimatikus%20változások%20hatásának%20a%20csökkentésére%20a%20fejlesztést



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	Black Sea Basin (Cahul District, Republic of Moldova; Reni District, Ukraine; Galati County, Romania)	Neighbourhood Instrument and by the participating countries: Republic of Moldova, Romania, Ukraine		<p>through the first GA "Elaboration of programs and materials for the development of cross-border green tourism" and the policy-making sector through the second GA "Joint activities to strengthen the capacities of stakeholders". The project activities are focused on the development of a policy-making sector and the creation and consolidation of a cross-border touristic cluster between Cahul (Moldova), Reni (Ukraine) and Galati (Romania), which would stimulate the development of the cross-border tourism, including the green one, and would increase the quality of tourism services, increase the number of tourists in the region and consequently improve the quality of life of the communities from the regions. The goal of the first GA is to develop and implement the "soft" components, research activities and development of materials (touristic guide; study of the good neighborhood; touristic informative brochure; joint cross-border program for tourism development; 3 cross-border touristic routes). The 2nd GA aims to develop and implement the "hard" components, activities to strengthen capacities of stakeholders of the project (trainings, workshops, study visits, festivals, documentary film, launching and strengthen the touristic cross-border cluster for touristic service providers and public authorities). In this context, the project has a clear impact on boosting the development of cross-border tourism in the targeted regions, due to the involvement of the most influential actors in the mentioned regions (regional public authorities, economic agents, civil society, universities) which will help to establish an attractive business environment for tourism, cross-border policy improvements and the establishment of an effective dialogue platform between institutions and from person to person at cross-border level. The project will create optimal conditions to develop green tourism and launch of cross-border mechanisms (tourism cluster, cross-border tourism program, tools to promote touristic potential in regions, promotion of good practices in green tourism, dialogue platforms, etc.).</p>	%20illetöen%20/%20Partnerstvo%20pre%20znížovanie%20dopadov%20klimatickej%20zmeny%20na%20rozvoj%20Ocezhraničného%20regiónu%20Košice%20-%20Miškovec%20%28Miskolc/
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GreenBubbles	Green Bubbles RISE for sustainable diving	H2020-EU.1.3.3.	Italy	2015-2018	The central objective of GREEN BUBBLES is to maximise the benefits associated with diving while minimising its negative impacts, thus achieving the environmental, economic and social sustainability of the system. This will be done by: 1) Carefully assessing and modelling the system itself; 2) Developing innovative products based on the issues and needs highlighted by assessment and modelling; 3) Promoting the uptake of such products by the system designing tailored business models and marketing plans. Direct engagement with selected stakeholders (divers, professionals, diving operators, certification agencies - CAs, MPAs, NGOs) will ensure relevant feedback throughout the project's lifetime, as well as effective uptake of results at the end of the project.	http://www.greenbubbles.eu/?lang=en
HERIPRENEURSHIP	Establishing long-lasting partnerships to upgrade heritage-based offers and create new investment opportunities in tourism and the cultural and creative industries at UNESCO designated areas in the Black Sea Basin	Co-financed by the European Union through the European Neighbourhood Instrument and by the participating countries: Greece, Romania, Bulgaria, Republic of Moldova, Georgia, Turkey	Greece	2020-2022	HERIPRENEURSHIP establishes long lasting partnerships to upgrade heritage-based offers for new investment opportunities in tourism and the Cultural and Creative Industries (CCI) in the Black Sea Basin (BSB). It is challenging the traditional tourism generation by remodeling supply-demand at places with natural and cultural significance. The UNESCO EXPERIENTIAL HERITAGE CORRIDOR is a unique multimodal tourism product-service set with 60 selling points in the BSB that incorporates heritage education into the leisure time (COUNCIL OF EUROPE).	http://heripreneurship.eu/



HydroEcoNex	Creating a System of Innovative Transboundary Monitoring of the Transformations of the Black Sea River Ecosystems under the Impact of Hydropower Development and Climate Change	Co-financed by the European Union through the European Neighbourhood Instrument and by the participating countries: Republic of Moldova, Romania, Ukraine	Republic of Moldova	2018-2021	The HydroEcoNex project focused on the development of a system of monitoring the influence of hydropower engineering on the state of environment and ecosystem services delivered by Black Sea rivers, Dniester and Prut. The development of policy instruments and enhancement of human capacities for integrated water resource management in light of impacts caused by climate change, the dissemination of new knowledge and strengthening the transboundary cooperation in integrated monitoring of these impacts on river ecosystems are among important activities of the project.	http://hydroeconex.com/
HYPOX	In situ monitoring of oxygen depletion in hypoxic ecosystems of coastal and open seas, and land-locked water bodies	EU Horizon 2020 project, FP7-ENVIRONMENT	Germany	2009-2012	HYPOX aimed to better understand dynamics and drivers of oxygen depletion, and built a global observation system for continuous oxygen monitoring. HYPOX further included experimental and modeling studies on hypoxia drivers and consequences for ecosystems, to gain predictive and decision-making capabilities from the obtained monitoring data. All activities were embedded into the framework of the Global Earth Observation System of Systems (GEOSS).	https://24biz.biz/blog/hypox-hypoxic/
IASON	Invasive Alien Species Observatory and Network Development for the Assessment of Climate	Co-financed by the European Union through the European Neighbourhood Instrument	Romania	2020-2022	The overall objective of the project is to establish and perform joint monitoring actions on Invasive Alien Species (IAS) in Black Sea deltaic ecosystems of five countries (Georgia, Greece, Ukraine, Romania and Turkey) and assess their response under current and predicted climatic conditions. The project aims to gain baseline data on IAS in the project delta areas, establish of an Observatory through which ICT services will be provided on IAS monitoring and assessments	https://iasonbsb.eu



	Change Impacts in Black Sea Deltaic Protected Areas	and by the participating countries: Romania, Ukraine, Greece, Turkey, Georgia			and on networking with/and engaging citizens and cross-border collaboration and exchange of information from developing and implementing information and communication activities, at all levels of society (education, managers, policy makers, local community)	
IASON	Fostering sustainability and uptake of research results through Networking activities in Black Sea & Mediterranean areas	EU Horizon 2020 project, FP7-ENVIRONMNT	Greece	2013-2015	finally project focused on Earth observation (EO), by building on previous EO-related projects, with the aim to apply EO results to three major challenges: climate change, resource efficiency and raw materials management.	http://iason-fp7.eu/index.php/en/
IASON	International Action for Sustainability of the Mediterranean and Black Sea EnviroNmeNt	EU Horizon 2020 project, FP6-SUSTDEV	Greece	2005-2006	An EU Presidency the IASON Conference on Sustainable Development in the Mediterranean/Black Sea (May 2003), revealed major gaps in management structures, scientific strategies and identified a diversity of environmental issues to be resolved through priority-focused RTD cooperation. The project IASON outlines collaboration and clustering schemes involving environmental, economic and scientific organisations in Mediterranean, Black Sea and other EU nations, in order to create synergies in networking and exchanges at several levels, addressing for the first time the system of interconnected basins as one, based on the integration of, both horizontally and vertically, natural scientists and economists.	http://www.iasonnet.gr
KNOWSEAS	Knowledge-based Sustainable Management	EU Horizon 2020 project, FP7-	United Kingdom	2009-2013	The Knowseas project aimed to enhance the scientific basis of _ecosystem approach_ to sea policies, in Baltic, Black and Mediterranean seas and the Atlantic Ocean. The first step towards implementing an ecosystem approach is finding out	https://www.msp-platform.eu/projects/knowledge-based-sustainable-



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	for Europe's Seas	ENVIRONME NT			how people view their role in the marine environment. A survey was undertaken to this end, which has already been published as a policy brief. The project also examined the effects of extreme events on European seas, as well as ways to reduce eutrophication in the Baltic. It was found that changes in the oceans are often due to climate and water temperature shifts, which may well be beyond the control of marine policies. The effects of fishing, transport, energy for aquaculture, water quality and recreation on the seas was also among the objectives of the project. This information helps scientists balance the environmental costs of degradation with the economic benefits of the goods and services provided by these ecosystems. Finally, the project also identified potential conflicts and alliances between marine governance structures to smooth future policy implementation. In addition, it has developed a tool to allow stakeholders to communicate effectively with policymakers.	management-europes-seas
KEAC-BSR	Knowledge Exchange and Academic Cultures in the Humanities: Europe and the Black Sea Region, late 18th – 21st Centuries	Marie Skłodowska-Curie Actions	Austria	2017-2021	KEAC-BSR established a network consisting of 12 research institutions from 11 Black Sea Region countries and Austria. It includes representatives of all the core disciplines of the humanities emerging around 1900. Innovative aspects of the project consist of 1) drawing attention to an emerging region (BSR) consisting of countries previously considered as belonging to separate historical regions, 2) systematic investigation of knowledge and culture exchange within and beyond the region, 3) innovative theoretical framework, 4) inter/multidisciplinary methodology and 5) explicit gender perspectives.	https://blacksearegion.eu/
LAGOONS	Integrated water resources and coastal zone management	EU Horizon 2020 project, FP7-ENVIRONME NT	Portugal	2011-2014	The LAGOONS project developed scenarios of future trends and conditions in Europe's coastal lagoons. Four lagoons were selected as case studies, representing a wide and balanced geographical distribution and characteristics. They were the Vistula Lagoon in the Baltic Sea (Poland/Russia), Tylygulskiy Lagoon in the Black Sea (Ukraine), Ria de Aveiro	http://lagoons.web.ua.pt/ https://cordis.europa.eu/article/id/92656-coastal-lagoon-conservation



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	in European lagoons in the context of climate change				Lagoon in the Atlantic Ocean (Portugal) and Mar Menor in the Mediterranean Sea (Spain). Aspects such as climate, hydrology, water quality, water demand, land use, water and land-user conflicts, political structures, institutions and policies were all taken into consideration. The effect of human activities and climate change in the future on the lagoons' hydro-biogeochemistry processes was examined. Results from numerical modelling used to formulate quantitative and qualitative scenarios. The project provided a pan-European perspective and framework as well as overall strategy recommendations from the four case studies. It also set policy guidelines derived from the different analyses conducted by the project, and proposed management initiatives in the case study areas.	
LitOUTer	Raising Public Awareness and Reducing Marine Litter for Protection of the Black Sea Ecosystem	Co-financed by the European Union through the European Neighbourhood Instrument and by the participating countries: Turkey, Georgia, Romania, Bulgaria	Turkey	2020-2022	LitOUTer enhances awareness-based neighborhood cooperation, cross-border information exchange, use innovative awareness methods between six partners (NGOs, higher education and scientific research institutes) from four countries (Turkey, Romania Bulgaria, and Georgia). In the project, cultural differences will be considered and raising awareness strategies will be developed to country-specific. The main aim of the project is to reach correct target groups, who are the most powerful impact to reduce litter in the source. In the project, "bottom-up" approach will be accepted during the training and awareness activities. In this approach, housewives, students, fishermen, muhtars, NGOs, local authorities, and decision-makers will be the main target groups of the project. In addition to that, citizens, villagers, tourism and shipping agencies will be informed/ aware of litter impacts on the marine environment and human health by using various educational/training tools. Scientists, sectoral experts, subject related NGO will joint awareness, educational and training activities. There will be many activities envisaged in the project such as in-situ trainings, field studies, cruise, visual materials (litter movement model output), and other awareness materials for housewives,	https://litouterproject.eu/



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					students, children, local authorities, and decision-makers. Meetings, workshops, TV programmes, cartoons, toys, play cards etc. will help to show litter impacts on their marine environment and human health. Other output will be the litter movement model which will demonstrate litter movement from sources to the last decision in the sea. GIS/WEB based-hydrodynamic model is one of the best methods to identify and demonstrate litter distribution and accumulation for awareness of stakeholders. Other output will be two social surveys by using questionnaires to understand the level of public knowledge on social, ecological and harmful effects of the litters at initial and final stages. In the project, the scope of the project is to reach over 4000-4500 stakeholders directly and more than 1.000.000 beneficiaries in all partner countries indirectly.	
MARLENA	Marine and River Litter Elimination New Approach	Co-financed by the European Union through the European Neighbourhood Instrument and by the participating countries: Turkey, Bulgaria, Romania, Republic of Moldova, Ukraine	Turkey	2018-2021	MARLENA - Marine and River Litter Elimination New Approach is set towards union of the forces against pollution near the Black Sea, rivers, protected areas and nature reserves or in the vicinity of the Black Sea basin. All 5 target regions are in BSBasin and have rich biological diversity and tourism potential. Project aims at jointly raising public awareness and education regarding river and marine litter problems, the value of biodiversity and environmental protection for target audiences such as youth, tourists, business, local communities and authorities, educational organizations. Particular attention is paid to development of environmentally and responsible-citizenship and ecological behavior among youth. The project aims to strength community action and to involve local population in promotion and implementation of cross-border Black Sea Basin coastal and river clean-up campaigns and share good experiences in this field in reducing and eliminating pollution.	http://www.marlenablacksea.eu/
MARLISCO	MARine Litter in Europe Seas: Social Awareness	EU Horizon 2020 project, FP7-SIS	Italy	2012-2015	Marine litter (ML) is accumulating in European seas because of unsustainable consumption and production models, inadequate waste management and lack of public awareness. MARLISCO project was established to raise	https://www.marlisco.eu/



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	and CO-Responsibility				public awareness, facilitate dialogue and promote accountability amongst all stakeholders in order to encourage sustainable ML management in all European seas. Activities focused on the north-east Atlantic Ocean and the Baltic, Black and Mediterranean Seas. Researchers first produced a report on existing ML monitoring and evaluation approaches in the four marine regions. This helped to determine main concerns for upcoming research agendas and policies to lessen the impact of ML. Project partners then compiled 72 best practice scenarios based on procedures, issues and solutions aimed at reducing ML. These were narrowed down to 11 before being used to prepare a toolkit for decision-making authorities. The MARLISCO Marine Litter Database was an additional means of further disseminating project products and activities. The interactive database was created to collate all the litter data that partners captured during the project as a result of the clean-up activities initiated to raise awareness about the ML issue. The database includes an interactive map interface that enables users to pinpoint the clean-up locations. It also allows users to interrogate the data to access information regarding specific types of waste or specific locations. A guide was developed to offer dialogue and informal working collaborations amongst industry, end users, science and society in 12 European countries. The forum helped members to recognise and deal with obstacles that impede the implementation of good practice and to influence behavioural change.	
MARLITER	Improved online public access to environmental monitoring data and data tools for the Black Sea Basin	Co-financed by the European Union through the European Neighbourhood Instrument and by the	Bulgaria	2018-2021	The project enhances knowledge-based cross-border cooperation, information exchange, use of IT technologies and innovative capacity building between 5 partners (NGOs, higher education and scientific research institutes) from 5 programme countries. It aims to improve the availability and interoperability of online public access data and data tools for environmental monitoring and adaptive management policies, supporting innovative non-formal education and capacity building and joint measures on the reduction of	https://marliter.bsnn.org/



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	supporting cooperation in the reduction of marine litter	participating countries: Bulgaria, Romania, Greece, Ukraine, Georgia			marine litter across the region. Central output of the project is the tool with public online access and interactive components to provide information support, decision making support and innovative forms for non-formal education and training for all stakeholders. The tool, an interactive, web-based Internet portal will support geospatial data on Black Sea region including digital maps on marine environmental conditions, geophysical maps for the coastal areas, environmental and abiotic parameters for the broader region, maps of protected areas, current climate and projections of future climate. It will also support maps for marine litter movement patterns. Further outputs include study of data and information from partner countries to integrate in the ICT based tool and data products associated with it. It will provide input for the policy toolbox - information and decision support platform for marine litter with data on regional policy documents, stakeholders and good practices to be used by administrations, scientists, businesses, educational institutions and interest groups. Other components include citizen science with e-learning and training in beach monitoring for youth, students, NGOs, volunteers, teachers and local communities. Three more outputs link to the study and tool, emphasising capacity building: e-learning course for youth with focus on citizen science and beach litter monitoring; regional stakeholder training on use of the policy toolbox for high level stakeholders and decision makers; and guide on marine litter reduction to support regional policies and activities in the area.	
MICORE	Morphological Impacts and Coastal Risks induced by Extreme storm events	EU Horizon 2020 project, FP7-ENVIRONMNT	Italy	2008-2011	The MICORE Early warning system (EWS) aims to improve civil defense and coastal evacuation plans and could pave the way for an autonomous EWS to save countless lives and protect infrastructure worldwide. The MICORE partners identified nine coastal areas throughout Europe and collected data for more than a year on the impact of storms on the living and non-living features of the coastline.	http://www.micore.eu



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MONITOX	Black Sea Basin interdisciplinary cooperation network for sustainable joint monitoring of environmental toxicants migration, improved evaluation of ecological state and human health impact of harmful substances, and public exposure prevention	Co-financed by the European Union through the European Neighbourhood Instrument and by the participating countries: Romania, Republic of Moldova, Greece	Romania	2018-2021	Based on the case study data and a historical analysis of significant storm events, the scientists developed a generic model linking the extent of the physical impacts on coastlines with indicators of storms detectable offshore, such as increased waves, wind and currents. By combining the model with advanced weather forecasting tools, the scientists developed an EWS to translate the intensity of an upcoming storm into a series of Storm impact indicator (SII)s specific to each of the nine locations, such as the risk of flooding or dyke breaching. These were then interpreted into a risk status (high, medium or low) and practical recommendations to aid local decision-making, i.e., the level of evacuation needed.	https://www.monitox.ugal.ro/
MWM-GMR	Waste Free Rivers for a Clean Black Sea	Co-financed by the European Union through the European Neighbourhood Instrument and by the participating countries: Georgia, Republic of	Georgia	2018-2021	The project aimed at facilitating the enhancement of the quality of the environment and contributes to reducing river and marine litter in the Black Sea countries through the promotion of cross-boundary cooperation between Georgia, Moldova and Romania. The main area of project activities involves the river basins (Rioni River in Georgia and Prut River in Moldova), as the main Black Sea pollutants from the inland areas. In the basins of mentioned rivers, the project envisages adaptation and introduction of the best EU waste management practices. A municipal green waste composting will be implemented for the first time in Georgia, and the Composting Center will be constructed and established in Kutaisi; source separation of plastic waste will be introduced	https://wmp.ge/wmp2/



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		Moldova, Romania			in the city of Poti, which is located on the Black Sea coast and at the bank of the Rioni River; waste separation will be even further developed in Kutaisi City and sorted collection of 3 types of waste will be introduced there as well; municipal WEEE collection will be implemented in Ungheni City and district which will be one of the first practices in Moldova. Special emphasis will be placed on the hazardous waste collection. Within the project, significant attention will be paid to the awareness-raising activities. There will be implemented the educational programs on environmental protection, river and Black Sea pollution and modern approaches to waste management for various target groups.	
PEGASO	People for Ecosystem Based Governance in Assessing Sustainable Development of Ocean and Coast	EU Horizon 2020 project, FP7-ENVIRONM ENT	Spain	2010-2014	The main aim of the PEGASO project was to support the implementation of the ICZM Protocol in the Mediterranean and its contribution to the development of similar policies in the Black Sea. It has bridged science and decision-making process along a collaborative process of work. The project established an ICZM Governance platform, as a human network and a forum where people with deep interest in effectively implementing ICZM have shared knowledge and experience, and tested new assessment and management tools. It has also developed tools to better appraise conflicting issues, responding closely to different articles from the Protocol, focusing on the balance between urban developments versus natural capital maintenance. All the tools and methods are fully accessible at the PEGASO website and have served to produce indicators factsheets at different places, and an atlas for the Mediterranean and Black seas. Tools have also served to develop participative methods for supporting decision making, facilitating a common understanding of the coastal and marine processes, getting a common understanding of which issues are manageable (or not), and in which way they should be managed, how stakeholders have to collaborate and at which scale, including cross-boundary collaborations. To support PEGASO process, a Spatial Data Infrastructure (SDI),	http://pegasoproject.eu/



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					following the INSPIRE Directive, has been implemented to organize and standardize spatial data, that can be shared on an interactive visor, to make it available to the ICZM Governance Platform, and to disseminate all results of the project to the End-Users and interested parties.	
PERSEUS	Policy-oriented marine Environmental Research for the Southern European Seas	EU Horizon 2020 project, FP7-ENVIRONM ENT	Greece	2012-2015	<p>The key to solving environmental problems on southern European coasts lies with a research governance framework that engages scientists, policymakers and the public. The PERSEUS project developed such a scheme, which resulted in a shared understanding and science-based decisions in line with the MSFD. Specifically, the project advanced new tools to evaluate current environmental status, and upgraded and extended existing observational systems. An innovative, small research vessel that served as a scientific survey tool was also developed. A comprehensive inventory of ocean observing systems of southern European seas, the Mediterranean Sea and the Black Sea, with quantitative conclusions on observational gaps and needs, was completed. Activities also focused on tools for the evaluation of ecosystem properties across the southern European seas. In addition, modelling tools for the identification of tuna spawning areas and jellyfish dynamics were investigated. PERSEUS partners worked on the future implementation of adaptive policies and management schemes, in line with the MSFD. Research was conducted on the adaptive policy framework (APF), with its interacting components, an APF toolbox and the stakeholder platforms. The project organised a summer school and an extra training course for organisations of Black Sea Economic Cooperation (BSEC) countries as well as training visits. Project results will undoubtedly empower stakeholders to make more informed and more effective decisions. Results will also promote coherency in environmental status assessments under the MSFD and the regional sea conventions.</p>	http://www.perseus-net.eu



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PONTOS	Copernicus assisted environmental monitoring across the Black Sea Basin	Co-financed by the European Union through the European Neighbourhood Instrument and by the participating countries: Armenia, Greece, Georgia, Ukraine	Armenia	2020-2022	<p>PONTOS aims to enhance transboundary cooperation for large-scale, harmonized environmental monitoring across the countries of the Black Sea region and beyond. The vehicle towards this objective is the exploitation of numerous freely available and incrementally credible Copernicus data and services (e.g., Copernicus Land and Marine Environment Monitoring Services). Intelligent fusion of data and information lead to novel services and products for actors operating along the coastal zone, becoming, through PONTOS operational platform and mounted online services, freely available to and accessible by a multitude of local, national and regional stakeholders. Transboundary spaceborne derived primary (e.g., images) and secondary (e.g., maps) products are being coupled with existing data and knowledge of in situ conditions. Citizens' current and future well-being will be the focus. As such, marine and lake coastal and inland human activities will be mapped targeting industry, recreation, agriculture, aquaculture, and commerce in Armenia, Georgia, Ukraine, and pilot-wise in Greece. Their effluents towards the Black Sea or the lakes around it will be calculated, while at the same time spaceborne and in situ data will monitor fluctuations in marine features' values, such as surface water temperature, salinity, nutrients, potentially toxic elements, and algae presence. Local stakeholders and actors will be informed and equipped with the adequate interface to access the information and its regular updates. Co-development and co-creation actions will respect national and local needs, constraints and vision.</p>	https://pontos-eu.aua.am/
PRIDE	Drivers of Pontocaspian biodiversity Rise and Demise	H2020-EU.1.3.1.	Netherlands	2015-2019	<p>PRIDE was a H2020 training network for the Black Sea and Caspian Sea. The programme combined climate-, geo- and bio- sciences and was conducted by 15 Early-Stage Researchers. The Black and Caspian Seas and their biota are under threat. Known for their unusual salinity regimes and widespread occurrence of low-oxygen zones, these landlocked waters are seeing a huge share of Pontocaspian species disappear. Climate change, habitat destruction,</p>	https://pontocaspian.eu



					invasive species and pollution are largely responsible for this phenomenon.	
Protect-Streams-4-Sea	Protecting streams for a clean Black Sea by reducing sediment and litter pollution with joint innovative monitoring and control tools and nature-based practices	Co-financed by the European Union through the European Neighbourhood Instrument and by the participating countries: Greece, Romania, Armenia, Republic of Moldova, Turkey	Greece	2020-2022	The Protect-Streams-4-Sea project focuses on a joint environmental monitoring of nonpoint source pollutants and litter that ends up in the Black Sea. The aim of the project is to stop the nonpoint source pollutants and litter from reaching the streams and rivers and consequently not reaching the Black Sea. If successful, this can cost-effectively maintain a clean Black Sea that will benefit the welfare of the entire region. The project uses innovative methods (fingerprinting) to correlate landscape position with the pollutants in the stream water and bed, sampling along stream banks, soil surfaces and in-stream. In addition, traditional (erosion pins, runoff plots) and new innovative (remote sensing, indices and drones) methods will be used for the pollutant estimations. Hydrologic models will be applied to simulate the pollutants at the watershed scale. A Multi-Criteria Decision Analysis and a Decision Support System will be developed to find the “hot spots” of pollutants and/or litter, and recommend best management practices in each pilot area. Finally, it will develop and/or test innovative tools/machines: 4 litter traps (in Armenia, Greece, Moldova and Turkey) and 1 skimmer vessel (in Romania) in the pilot area water bodies to collect litter and other pollutants. With Universities, NGOs and public authorities partnering on this project the methods and tools developed will be science-based and practical.	http://websites3.teiemt.gr/p4sea/
RedMarLitter	Innovative techniques and methods for reducing the marine litter in the Black Sea coastal areas	Co-financed by the European Union through the European Neighbourhood Instrument	Bulgaria	2018-2021	The main objective of the project was to analyze the load of the Black Sea basin, in specific representative areas, with waste and tracking the main polluting flows and carrying out waste cleaning through the developed measures in a specific demonstration pilot site through innovative methods. It studied the current status of the Black Sea, including coastal areas, and the load capacity will be assessed. The available information on the accumulated quantity of waste was	https://map.redmarlitter.eu



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		and by the participating countries: Bulgaria, Romania, Georgia			collected and analyzed and data inserted in a common database. The project also identified main waste flows and potential waste concentration hot points and used model output, for prediction of their movements, and potential places of their highest concentration. The computer model-map helped to precisely locate the waste concentration points. Cross-border cleaning campaigns were organized. The aim was to include volunteers of different ages, including students, whom were encouraged to pay special attention to the problem of marine litter and the possibilities for solving it.	
RInES CONFERENCE	Research and Innovation in the service of Economy and Society EU Neighbourhood and the Black Sea region	EU Horizon 2020 project, FP7-INCO	Greece	2013-2014	Organization of a Conference, namely RInES, under the auspices of the Greek Presidency of the European Council. Its overall objective was to highlight the crucial INCO's role for the EU by reinforcing its collaboration with the European Neighbourhood and Black Sea region within the framework of the HORIZON2020.	https://cordis.europa.eu/project/id/630741
SaBS	Sailing across the Black Sea	Co-financed by the European Union through the European Neighbourhood Instrument and by the participating countries: Greece, Bulgaria, Georgia	Greece	2018-2021	The main objective of the project was based on the fact that the cooperation between bodies from three countries with similar social, economic, geographical characteristics (Greece, Bulgaria, Georgia) could address common factors that can create obstacles to tourism flows between ports in the Black Sea and North Aegean Sea. Some of the most important outcomes of the project are: The development of 6 new tourist routes aiming to create sailing trips (2 in each country), emphasizing in cultural heritage attractions; the establishment of new floating docks to host tourist boats that are not able to visit the north Aegean Sea due to severe lack of infrastructure; the deployment of a new eco-friendly tourist boat that is going to travel to the newly created tourist routes from Burgas port; the establishment of three separate but integrated into one network tourist offices (1 in each country); the elaboration of a complete guide-manual for boat owners	https://www.sabsproject.com/



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					that want to travel between black sea ports and north Aegean Ports; the establishment of movable info points to approach stakeholders and tourists; the establishment of an interactive database for the virtualization of the routes providing open access to the information; the implementation of a grand program of international and national events that are going to emphasize on ways to enhance tourism flows between participating countries.	
SafeShore	System for detection of Threat Agents in Maritime Border Environment	H2020-EU.3.7.	Belgium	2016-2018	Recently, there has been a dramatic rise in very-small-scale agents used in the maritime border domain. Small vessels used by human traffickers and drones used by terrorists or drugs traffickers are examples of these small-scale threat agents. This introduces new challenges to border control. SafeShore project has contributed a novel system for more efficient detection capabilities.	http://safeshore.eu/
SEA-SEARCH	Pan european network for oceanographic and marine data & information management	EU Horizon 2020 project, FP5-EESD	Netherlands	2002-2005	It was proposed to extend and to innovate the present European Network for Oceanographic Data and Information Management – (EURONODIM) of the 16 EU-member states ocean and marine data centers (at that time), as follows: a) Horizontally by adopting a pan-European dimension, including marine data centers of Eastern European countries around the Baltic Sea and Black Sea, as well as additional Mediterranean countries. b) Vertically by extending the Sea-Search services and products with among others Common Data Index metadata base for data sets held at partners and Trial with high-bandwidth communication between the partner sites.	https://cordis.europa.eu/project/id/EVR1-CT-2002-20009/fr
SeaDataCloud	SeaDataCloud - Further developing the pan-European infrastructure for marine and ocean	H2020-EU.1.4.1.2., H2020-EU.1.4.	France	2016-2021	SeaDataCloud's priority was to upgrade SeaDataNet's Common Data Index (CDI) service, alongside related tools and services. Technical testing of the newly developed components and integrated systems was first performed by the developers. These were followed by two project-training workshops with representatives from over 100 participating data centres. One of the drivers for the project was to accommodate the rapid increase in SeaDataNet's data. For example, within the CDI's European directories for European	https://www.seadatanet.org/



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	data management				marine organisations, the catalogue of marine and oceanographic in-situ data sets for physics, chemistry, biology, geology and bathymetry increased from 1.87 million to 2.62 million entries in the 4-year period of the project. Thanks to SeaDataCloud's efforts, the SeaDataNet CDI cloud environment is now operational, hosting all the CDI's public data.	
SeaDataNet	SeaDataNet - A Pan-European Infrastructure for Ocean and Marine Data Management	EU Horizon 2020 project, FP6-INFRASTRUCTURES	France	2006-2011	The objective is to network the existing professional data centres of 35 countries, active in data collection, and provide integrated databases of standardized quality on-line. The on-line access to in-situ and remote sensing data, meta-data and products will be provided through a unique portal interconnecting, in the first phase, 11 interoperable node platforms. The development and adoption of common communication standards and adapted technology will ensure the platforms interoperability. This activity will be developed to gradually connect all the other data centres to the interoperable system. The quality, compatibility and coherence of the data issuing from so many sources, will be ensured by adopting standardized methodologies for data checking, by dedicating part of the activities to training and preparation of synthesised regional and global statistical gridded products from the most comprehensive in-situ and remote sensing data sets made available by the participants.	https://cordis.europa.eu/project/id/26212
SEAS-ERA	Towards Integrated Marine Research Strategy and Programmes	EU Horizon 2020 project, FP7 ERA-NET	Spain	2010-2014	SEAS-ERA goal embraced marine and maritime research in its entirety, going beyond previous initiatives which only targeted a given area or basin, and thus created a stable and durable structure for empowering and strengthening marine research all across Europe. SEAS-ERA was a platform for developing a European integrated policy-oriented structure to promote knowledge and expertise in any sea related area. The overarching characteristic of SEAS-ERA was its ambition to embrace the whole spectrum of marine and maritime research, making it an open forum for knowledge sharing, an authentic arena where all sea related knowledge could mingle. EurOcean acted as a third party to FCT and provided	http://www.seas-era.eu/np4/homepage.html



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					its expertise in relation to communications and dissemination activities being responsible for maintaining the web portal, developing promotional materials and dissemination to targeted audiences.	
SESAME	Southern European Seas: Assessing and modelling ecosystem changes	EU Horizon 2020 project, FP6-SUSTDEV	Greece	2006-2011	The project assessed and predicted changes in the Mediterranean and Black Sea ecosystems as well as changes in the ability of these ecosystems to provide goods and services. The Mediterranean and Black Sea were approached as a coupled climatic/ecosystem entity, with links and feedbacks to the world ocean. The assessment of ecosystem changes was based on the identification of the major regime shifts in ecosystems that occurred during the last 50 years. Mathematical models, validated and upgraded using existing and new observations were used to predict ecosystem responses to changes in climate and anthropogenic forcing during the next five decades. The new data were gathered during multidisciplinary/ multi-ship oceanographic cruises in the Mediterranean and Black Sea and provided not only an overall picture of the Mediterranean and Black Sea but also essential data sets for model validation. SESAME studied the effects of the ecosystem variability on key goods and services with high societal importance like tourism, fisheries, ecosystem stability though conservation of biodiversity and mitigation of climate change through carbon sequestration in water and sediments. The innovative character of SESAME was reflected in the close merging of economic and natural sciences to study the changes in the western and eastern Mediterranean and the Black Sea within the period from 50 years in the past to 50 years in the future. SESAME created a valid platform for disseminating the research results to all levels of society. It stimulated and strengthened the international cooperation in the Mediterranean and Black Sea regions.	https://climate-adapt.eea.europa.eu/metadata/projects/southern-european-seas-assessing-and-modelling-ecosystem-changes



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SILC	Silk Road Local Culture	Co-financed by the European Union through the European Neighbourhood Instrument and by the participating countries: Greece, Armenia, Bulgaria, Georgia, Romania	Greece	2018-2021	Silk Road Local Culture project aimed to promote economic and social development throughout the Black Sea area and reinforce the tourism development and cooperation of tourism entrepreneurship related to the Silk Road heritage. The core axis around which the project's actions was deployed, is the creation of a Tourism Intelligence on the Silk Road cultural heritage located within the project study areas, and the evaluation of the potential of the Silk Road cultural footprint over the eligible Regions for tourism growth, interregional cooperation and cross-border partnerships. The project focused on identifying, documenting and mapping the cultural footprint of Silk Road and assessing its growth potential. It will create and establish a first-ever actual Silk Road Virtual Observatory to act as a modern and innovative tool for Western Silk Road tourism. In its entrepreneurial phase the project establishes a newly proposed cross-border network and created a Silk Road Entrepreneurship Label, the SILCONNECT Label, to be adopted by cross-border and along the Silk Road enterprises involved in the tourism and cultural sectors, to certify them as quality affiliates of the project.	http://www.culturaltourism.silkroad.net/
SIMSEA	Scenario simulations of the changing Black Sea ecosystem	H2020-EU.1.3.2.	Belgium	2015-2017	The main purpose of the project carried out by JRC was to implement an advanced ecosystem model for the complex Black Sea ecosystem based on the validated JRC hydrodynamic model to generate future scenario simulations considering different policy options and climate change scenarios. The data generated from these scenario simulations were thoroughly analysed using state of the art statistical methods like singular spectrum analysis and breakpoint detection methods. The results of this work were widely disseminated beyond the scientific community to various groups, public bodies and agencies that could use the knowledge produced.	https://cordis.europa.eu/project/id/660841
Spirit BSB online	Leave your Environment alist Spirit Online for the	Co-financed by the European Union	Romania	2020-2022	The project aims to increase awareness and knowledge of environmental issues of Black Sea Basin by promoting joint sensible actions, create a positive model and positive behaviors for young people and contribute to joint	https://www.spiritbsb.online/



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	Black Sea Basin	through the European Neighbourhood Instrument and by the participating countries: Romania, Turkey, Georgia			environmental protection. The project is built on four groups of activities: 1) information activities and search for updated data on the state of pollution of the Black Sea basin; 2) the current state of environmental education, where the project identifies and defines the educational model in schools and work on the development of innovative tools in the field of environmental education, having as main subject the protection of the Black Sea; 3) develop the integrated training program “Young Environmentalists” designed to take place on three levels: classical education, education through play, and environmental education; 4) The environmental campaign program to include a one-year online campaign. Each partner will be organized 4 environmental events to celebrate International Black Sea Day.	
SUNRISE	Sustainable Use of Natural Resources – Integrated Services Establishment	Co-financed by the European Union through the European Neighbourhood Instrument and by the participating countries: Romania, Republic of Moldova, Georgia, Bulgaria	Romania	2019-2021	The SUNRISE Project provides a series of activities, the realization of which will increase the business and entrepreneurial capacity of the tourism sector, increase their capabilities and provide new development alternatives. Four transnational forums (one in each participating countries) will be held presenting topical topics related to tourism and new opportunities for business and entrepreneurship for development in the context of local and transnational tourism will be discussed. In addition, four festivals will be held, with demonstrations of authentic local traditions, folklore, culture and crafts. The purpose of the festivals is to demonstrate the opportunities of large-scale cultural events to attract local visitors and tourists in the interests of local business and entrepreneurship. Each partner will develop 1 new integrated tourism product for its region (4 in total), consistent with the current demand for tourist services. A cross-border tourism product will also be developed to present the natural richness and cultural diversity of partner regions. The creation of new integrated tourism products and the increase of cultural events aim to promote the target regions of the Black Sea basin as an attractive tourist destination.	https://sunriseblacksea.eu/



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SUST-BLACK	Sustainable development at the Black Sea	H2020-EU.3.5.6., H2020-EU.3.5.4., H2020-EU.3.5.3., H2020-EU.3.5.1., H2020-EU.3.5.2.2.	Romania	2018-2019	Situating in the geographic area of the lower Danube region and the western Black Sea, Romania is a country of strategic importance. The EU-funded SUST-BLACK project supported the official launch of the Strategic Research and Innovation Agenda in the Black Sea region. This occurred within the framework of the Sustainable Development at the Black Sea Conference that took place under the auspices of the Romanian Presidency of the EU Council in 2019 and that ended with the Bucharest Declaration on the Black Sea Strategic Research and Innovation Agenda (SRIA). The conference brought together policymakers, academics, NGOs and professionals aiming to establish a sustainable and innovative society in the Black Sea region focusing on the smart connection between Europe and Asia.	https://www.sust-black.ro/
TIMMOD	Promoting Technology Innovation in Environmental Monitoring & Modelling for Assessment of Fish Stock and Non-Fish Resources	Co-financed by the European Union through the European Neighbourhood Instrument and by the participating countries: Bulgaria, Greece, Georgia, Republic of Moldova, Romania	Bulgaria	2020-2022	The overall project objective is to improve joint environmental monitoring and modelling, by facilitating Technology Innovation, to improve the availability and quality of data, the cooperation in sharing of data for water quality, biodiversity statistics, assessment of fish and non-fish living resources of the Black Sea. The project aims to be in line with the EU's Marine Strategy Framework Directive (MSFD), Data Collection Framework (DCF), Blue Growth Strategy, Black Sea Convention on Environmental Protection and other EU and regional policies and conventions. The project aims to: 1) achieve enhanced capacity of project partner organisations (and other stakeholders), to provide, use, and share, reliable and compatible environmental data for water quality parameters, fish and non-fish living resources; 2) achieve better cooperation, improved environmental data-sharing between Black Sea partners, by creation of a set of ICT shared tools and; 3) put on the agenda an Innovation Strategy, designed to bring together (national, regional, EU) regulations and permits, combined with new monitoring and information technology, expanded transparency, and innovative enforcement.	http://www.timmod.org/



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TREASURE	Joint Cultural Heritage – Source for Development of Entrepreneurship in the Black Sea Basin	Co-financed by the European Union through the European Neighbourhood Instrument and by the participating countries: Romania, Bulgaria, Turkey, Republic of Moldova	Romania	2018-2021	The overall objective refers to the joint promotion of business and entrepreneurship in the tourism and culture sectors in the partner regions of the Black Sea Basin. The cooperation of the communities from the Black Sea Basin involved in the project emerged from the common interest to solve common problems and to create favorable conditions for the sustainable development of an entrepreneurship in the culture and tourism sector. This project aims at developing specific activities (creation and equipping of infrastructure with specific equipment, research and museum exposition of the natural, cultural underwater and classic heritage), so that at the end of the project, the partners benefit from equipment and valuable facilities (e.g., diving equipment and traditional and digital display including rehabilitating a center building in Enez) promoted in a modern way (album and digital maps, festival, site and common event).	http://www.proiect-treasure.ro
UP-GRADE BS-SCENE	Up-Grade Black Sea Scientific Network	EU Horizon 2020 project, FP7-INFRASTRUCTURES	Netherlands	2009-2011	The Up-Grade of Black Sea SCENE aimed at: a) to extend the existing research infrastructure with 19 marine environmental institutes/organizations from the 6 Black Sea countries, b) to implement the results of the Joint Research Activities of the FP6 RI SeaDataNet project (common communication standards and adapted technologies to ensure the datacenters interoperability), c) to network the existing and new Black Sea datacenters, active in data collection, and provide integrated databases of standardized quality on-line, d) to realize and improve on-line access to in-situ and remote sensing data, meta-data and products and e) to adopt standardized methodologies for data quality checking to ensure the quality, compatibility and coherence of the data issuing from so many sources. The Up-Grade Black Sea SCENE project was undertaken by 51 partners of which 43 are located in the Black Sea countries.	http://www.scene.bsnn.org/
ZeroWaste BSB	Zero Waste Strategy: Methods and Implementation	Co-financed by the European Union	Turkey	2020-2022	The main objective of the project is to increase awareness on environmental challenges and good waste management practices related to river and marine litter within the Black Sea Basin (BSB) for ensuring improvement of the welfare of the	https://bsbzerowaste.eu/



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	on in Black Sea Basin	through the European Neighbourhood Instrument and by the participating countries: Turkey, Greece, Ukraine, Bulgaria			people in the Black Sea Basin regions. It will try to implement methods for zero waste practices. The project is based on the good cross-border partnership between regional, local authorities, NGO and research institute from four different countries in the BSB. The aim of the project is to increase awareness on environmental challenges and good waste management practices related to river and marine litter within the Black Sea Basin for ensuring improvement of the welfare of the people in the Black Sea Basin regions. Two partners will implement important and effective Zero Waste system investments in their countries: for Integration of Zero Waste system by innovative way in huge territory covering 39 villages in Kırklareli Region, Turkey, and investing in the necessary machine-equipment for double collection and ensuring clear public areas in Tsarevo, Bulgaria. Also, public awareness campaign and trainings for decreasing litter in the basin, aim to involve more than 18,000 people and youth living in rural areas of the basin and in its biggest cities as Thessaloniki, Greece and Odessa, Ukraine. Important cross-border clean-up campaigns will be also realized.	
ZEWSGES	Zero Waste Strategy for Good Environmental Status	Co-financed by the European Union through the European Neighbourhood Instrument and by the participating countries: Turkey, Bulgaria, Ukraine, Georgia	Turkey	2018-2021	The project's objectives aimed at contributing to overall reduction in macro litter number of visible (> 2.5 cm) litter items including plastic, fishing and sanitary litter items on coastlines. It also aimed to reduce the number of litter items /m2 on the sea bed including fishing related litter items in several locations (like Odessa-UKR; Bourgas-BG; Guria-GE and Tekirda-TK) via adequate collection, sorting, and environmentally sound disposal of litter from the sea bed and coasts/beaches, in these regions. It involved schools, NGOs and local media organisations to increase public awareness. Target groups of the action were 7-16 age group primary and secondary school students and their teachers, local fishermen and local communities. The project, with its results, aimed to enhance proper implementation of waste management legislation, reduction of marine litter on	http://www.zerowasteb.com/



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					beaches and seas, improvement of residents and tourists' waste related behavior, etc.	
	Assessment of the gas-bearing sediments in the north-western Black Sea	EU Horizon 2020 project, FP5-HUMAN POTENTIAL	Belgium	2002-2004	This study attempted to integrate existing and ongoing geophysical, geomorphological and sediment logical data in order to assess the main characteristics of the gas-charged sediments in the north-western Black Sea.	https://cordis.europa.eu/project/id/HPMF-CT-2002-01835

Other Relevant Projects						
Project		Financing	Coordinating Country	Start date – End date	Short description objectives/aims/results	Website
AANCHOR-CSA	All Atlantic Cooperation for Ocean Research and Innovation	EU Horizon 2020 project H2020-EU.3.2., H2020-EU.3.2.5.2., H2020-EU.3.2.5.1.	Portugal	2018-2022	Upscale research and innovation cooperation within the Atlantic basin, to better understand and sustainably manage the Atlantic Ocean as a whole, and to seed the basis for healthy future large-scale joint Atlantic marine activities. It will be done by: identifying concrete joint actions to support the implementation of the EU-Brazil-South Africa Belém Statemen; contributing to the implementation of the selected joint actions; defining long term measures for sustainability of the cooperation framework beyond the lifetime of the AANCHOR-CSA.	www.allatlanticocean.org https://cordis.europa.eu/project/id/818395
AtlantOS	Optimising and Enhancing the Integrated Atlantic Ocean	EU Horizon 2020 project H2020-EU.3.5.,	GEOMAR Helmholtz-Zentrum für Ozeanfor	2015-2019	AtlantOS overarching objective was to achieve a transition from a loosely-coordinated set of existing ocean observing activities to a sustainable, efficient, and fit-for-purpose Integrated Atlantic Ocean Observing System (IAOOS), by defining requirements and systems design, improving the readiness of observing networks and data systems, and engaging stakeholders around the Atlantic; and leaving a	https://atlantosh2020.eu/ https://cordis.europa.eu/project/id/633211



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	Observing Systems	H2020-EU.3.2.	schung Kiel (Germany)		legacy and strengthened contribution to the Global Ocean Observing System (GOOS) and the Global Earth Observation System of Systems (GEOSS).	
ATLAS	A Trans-Atlantic Assessment and deep-water ecosystem-based Spatial management plan for Europe	EU Horizon 2020 project H2020-EU.3.5., H2020-EU.3.2.	The University of Edinburgh (UK)	2016-2020	ATLAS creates a dynamic new partnership between multinational industries, SMEs, governments and academia to assess the Atlantic's deep-sea ecosystems and Marine Genetic Resources to create the integrated and adaptive planning products needed for sustainable Blue Growth. ATLAS will gather diverse new information on sensitive Atlantic ecosystems (incl. VMEs and EBSAs) to produce a step-change in our understanding of their connectivity, functioning and responses to future changes in human use and ocean climate.	http://www.eu-atlas.org/ https://cordis.europa.eu/project/id/678760
BANOS CSA	Towards the joint Baltic Sea and the North Sea research and innovation programme	EU Horizon 2020 project H2020-EU.3.2., H2020-EU.3.2.5.1.	Finland (BONUS European Economic Interest Grouping)	2018-2021	This is the dedicated implementing structure of BONUS, the joint Baltic Sea research and development programme (TFEU Art. 185 initiative).	www.banoscsa.org https://cordis.europa.eu/project/id/817574
Blue-Action	Arctic Impact on Weather and Climate	EU Horizon 2020 project H2020-EU.3.2.5., H2020-EU.3.5., H2020-EU.3.5.1.	Denmark	2016-2021	Blue-Action evaluates the impact of Arctic warming on the Northern Hemisphere and develops new techniques to improve forecast accuracy at sub-seasonal to decadal scales. Blue-Action specifically works to understand and simulate the linkages between the Arctic and the global climate system, and the Arctic's role in generating weather patterns associated with hazardous conditions and climatic extremes.	http://blue-action.eu/ https://cordis.europa.eu/project/id/727852
BBSEA	Blueing the Black Sea GEF Regional	World Bank	Permanent International		In support of the Common Maritime Agenda, the Blueing the Black Sea (BBSEA) Program supported by the World Bank and its partners would be aiming at catalyzing blue economy investments for the Black Sea. The initial step of building a	http://www.bsec-bsvkc.org/Forms/BlueingTheBlackSeaProject



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	project (P173890)		Secretariat of Black Sea Economic Cooperation (BSEC)		coherent BBSEA Program is focused on the Pillar 1 “Save the Sea” that is aiming at reducing pollution in the Black Sea. Two instruments are considered for the realization of these first step: (i) PROBLUE Regional Analytical Work, executed by the World Bank (US\$ 400,000) has been approved and will support national diagnostic on pollution and synthesize the results in a regional report and; (ii) the proposed GEF grant in an amount of US\$ 6.4 million, financed under the International Water window. Although the proposed Project would benefit all Black Sea countries through knowledge exchange and standards building, national level activity would take place only in the four GEF eligible countries (Georgia, Moldova, Turkey and Ukraine) in accordance with GEF policies in the current context of the Black Sea. The ambition of the Project would be, however, to progressively include all Black Sea countries through additional financing. The Program is an instrument to enhance synergies of the IBRD financed projects in Black Sea Countries, including amongst others the Integrated Regional and Local Development Project in Georgia (P169747), the Moldova Water Security and Sanitation Project (P173076), the Turkey Integrated Landscapes Management Project (P172562) and the Assessment for Climate Change Impact Opportunities, and Priorities for Ukraine (P171986) and the Blue Economy policy notes in Bulgaria (P167719) and in Russia (P171509).	
Black Sea React!	Black Sea React! – Pilot innovative solutions for fighting marine litter in the Black Sea	EU project	Secretariat of Black Sea Economic Cooperation (BSEC)	2021-2022	The Project activities piloted an innovative circular economy solution to marine (plastic) litter by involving local fishermen, a coastal municipality and a business association from the Black Sea region. In parallel, it developed a strong and positive narrative on marine litter prevention targeting specifically young people.	https://icbss.org/black-sea-react-pilot-innovative-solutions-for-fighting-marine-litter-in-the-black-sea-2/



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Blue-Cloud	Piloting innovative services for Marine Research & the Blue Economy	EU Horizon 2020 project H2020-EU.3.2., H2020-EU.3.2.5.1.	Italy	2019-2022	Marine research is playing a crucial role in wider efforts to preserve and support ocean sustainability. Innovative technology such as Blue Cloud offers us unique opportunities to understand, exploit and protect the ocean environment. The rise of the 'Blue Economy' concept needs to be accompanied by new technological applications for more effective marine research that will support efforts to minimise environmental risks and ecological catastrophes. The EU-funded Blue Cloud project proposes a practical approach to understand the potential that cloud-based open science offers to the research of the ocean. The project will develop a pilot cyber platform to collect and elaborate multidisciplinary data and provide analytical instruments as well as computing facilities.	https://www.blue-cloud.org/ https://cordis.europa.eu/project/id/862409
Blue-Cloud 2026	A federated European FAIR and Open Research Ecosystem for oceans, seas, coastal and inland waters	Horizon Europe	Italy	2023-2026	Blue-Cloud 2026 aims at a further evolution of the pilot Blue-Cloud project into a Federated European Ecosystem to deliver FAIR & Open data and analytical services, instrumental for deepening research of oceans, EU seas, coastal & inland waters. It develops a thematic marine extension to EOSC for open web-based science, serving the needs of the EU Blue Economy, Marine Environment and Marine Knowledge agendas. Blue-Cloud 2026 will evolve the core services, integrating more blue analytical services, configuring more Virtual Labs, improving services for uptake of new data sets from a multitude of data originators (such as SeaDataNet, EurOBIS, Euro-Argo, ELIXIR-ENA, SOCAT, EcoTaxa, and ICOS-Ocean), and major e-infrastructures, namely EUDAT, D4Science, and WEKEO (CMEMS DIAS) and for discovery and access to their structured data collections.	https://blue-cloud.org/blue-cloud-2026



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BlueBio	ERA-NET Cofund on Blue Bioeconomy - Unlocking the potential of aquatic bioresources	H2020-EU.3.2. H2020-EU.3.2.5.2.	Norway	2018-2024	The main objective of the BlueBio COFUND is to establish a coordinated R&D funding scheme that will strengthen Europe's position in the blue bioeconomy.	https://bluebioeconomy.eu/ https://cordis.europa.eu/project/id/817992
BlueMed	BlueMed Initiative	EU Horizon 2020 project H2020-EU.3.2.5., H2020-EU.3.2.	Italy	2016-2021	The BLUEMED Project is a Coordination and Support Action for the exploitation of the BLUEMED Research and Innovation Initiative for blue jobs and growth in the Mediterranean area, with particular reference to the implementation of the BLUEMED Strategic Research and Innovation Agenda (SRIA). The BLUEMED Initiative aims to advance a shared vision for a more healthy, productive, resilient, better known and valued Mediterranean Sea, promoting the citizens' social well-being and prosperity, now and for future generations, and boosting economic growth and jobs.	www.blueded-initiative.eu https://cordis.europa.eu/project/id/727453
BlueMissionMed	Lighthouse coordinating and supporting the innovation ecosystem for a Healthy, Pollution free Mediterranean Sea	Horizon Europe	Italy	2023-2025	In line with the European Green Deal, the EU Mission "Restore our Ocean and Waters by 2030" aims to eliminate pollution and make the blue economy (the economic activities that depend on the sea) carbon-neutral and circular. In this context, the EU-funded BlueMissionMed project will inspire, inform, assess, mobilise, connect and empower all the actors that can take a role in preventing and eliminating pollution in the Mediterranean Sea and waters. The project will build on, connect and structure existing initiatives and activities with the aim of designing and supporting a well-functioning basin scale innovation ecosystem as well as upscaling solutions in all forms (technological, social, business, governance). The aim is to ensure fast progress towards the achievement of the Mission objectives.	https://blumissionmed.eu/



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BONUS	The joint Baltic Sea Research and Development Programme	EU Framework project	Finland	2010-2020	The BONUS programme and its legacy has served as the basis in development of the framework for a joint Baltic and North Sea Research and Innovation Programme (BANOS) prepared in years 2018-2021. Until December 2026 some key BONUS information remains on this web page for ease of access, information and use.	www.bonusportal.org https://cordis.europa.eu/article/id/35240-bonus-research-opportunities-in-the-baltic
BSVKC	Black Sea Virtual Knowledge Centre	EU project EMFF-IBA-BS-2019	BSEC PERMIS	2020-2022	BSVKC aimed to provide a centralized platform for information on the Blue Economy in the Black Sea and to improve synergies between stakeholders and Blue Economy related projects in the region. The BSVKC provides means to disseminate information, ensure synergies and raise awareness about opportunities in the Blue Economy sector.	https://maritime-spatial-planning.ec.europa.eu/projects/black-sea-virtual-knowledge-centre
CERES	Climate Change and European Aquatic Resources	EU Horizon 2020 project H 2020-EU.3.2.	Germany	2016-2020	CERES investigated how climate change is affecting different European fish/shellfish species – and how Europe's fishermen and fish farmers can adapt in the future to climate change.	https://ceresproject.eu/ https://cordis.europa.eu/project/id/678193
EDITO-Model Lab	Undelying models for the European Digital Twin Ocean	Horizon Europe	France	2023-2025	EDITO-Model Lab is designing next-generation ocean models as part of the European Digital Twin Ocean initiative. The aim is to enable stakeholders to develop ocean management scenarios. The project will deliver a virtual ocean model lab (VOML) that will feature an interactive and codevelopment environment. The VOML will be based on modeling software, AI algorithms and special tools. The project will support the sustainable blue economy and explore 'what-if scenarios' to find solutions to natural and man-induced hazards.	https://cordis.europa.eu/project/id/101093293
EDITO-Infra	EU Public Infrastructure for the European Digital Twin Ocean	Horizon Europe	France	2022-2024	EDITO-Infra will build the EU Public Infrastructure backbone for the Digital Twin Ocean (DTO). It will upgrade, combine and integrate the key service components of the Copernicus Marine Service and the European Marine Observation and Data Network into a single digital framework. This will provide the foundation for the further development of Europe's DTO initiative and provide public access to the widest possible range of open ocean observation datasets.	https://cordis.europa.eu/project/id/101101473



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ERA-MarineBiot ech	Marine Biotechnology ERA-NET	FP7-ERANET-2013-RTD	Norway	2013-2017	Consortium of national funding bodies seeking complementarities between national activities to pool resources to undertake joint funding of transnational projects in the area of Marine Biotechnology.	https://www.marinebiotech.eu/marine-biotechnology-era-net
Eurofleets Plus	An alliance of European marine research infrastructure to meet the evolving needs of the research and industrial communities	EU Horizon 2020 project H2020-EU.1.4.1.2., H2020-EU.1.4.	Ireland	2019-2023	EUROFLEETS+ is ambitious, building on achievements in two preceding Eurofleets projects. It will integrate a larger number of research vessels and extend the research infrastructure by adding a range of advanced mobile marine equipment. The project is likely to create excitement and interest in marine research communities, in particular given the unprecedented access to European and global seas and oceans. Plans for open science will provide access to new data and information for scientists from different domains. The number of days of ship time has been increased relative to previous projects, and new user groups will be sought; from emerging early-stage researchers, to those from less equipped countries, to increased participation by women scientists. Advanced IT systems, a multi-functional website, and robust logistical management will provide seamless integration of services and easy access for user groups.	www.eurofleets.eu https://cordis.europa.eu/project/id/824077
ENVRI-FAIR	ENVIRONMENTAL Research Infrastructures building Fair services Accessible for society, Innovation and Research	EU Horizon 2020 project H2020-EU.1.4.1.1., H2020-EU.1.4.	Germany	2019-2023	European environmental research infrastructures are key providers of high-quality digital assets like research data and services. Understanding the Earth needs an interdisciplinary approach based on harmonised and easy-to-use data and services from the contributing environmental research infrastructures. The overarching goal of EU-funded ENVRI-FAIR is to advance the findability, accessibility, interoperability and reusability (FAIRness) of these digital assets and connect them to the emerging European Open Science Cloud. ENVRI-FAIR targets the development and implementation of a technical and policy framework to overcome discipline boundaries within the ENVRI community. Cross-discipline harmonisation and standardisation, together with the implementation of joint data management and access structures, will facilitate truly	https://envri.eu/home-envri-fair/ https://cordis.europa.eu/project/id/824068



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					interdisciplinary Earth system science that is fundamental to addressing today's environmental challenges.	
GoJelly	GoJelly - A gelatinous solution to plastic pollution	EU Horizon 2020 project H2020-EU.3.2.5., H2020-EU.3.2.	Denmark	2018-2021	Cooperation between the funding bodies has been initiated during the FP7 supported ERA-NET Preparatory Action in Marine Biotechnology.	https://gojelly.eu/
iSOL-MET	Innovative SOft SkillS to Maritime Education and Training	Erasmus+	Greece	2020-2023	The project focuses on the creation of a comprehensive <i>Maritime skills course program</i> for multidisciplinary and multicultural groups of students, using the case study methodology for cultivating the needed soft skills. In parallel, consortium will produce in the form of a <i>Handbook</i> the collection of all case studies identified and analyzed during project' life time, as well as <i>Guidelines</i> as a practical set of recommendations to course designers for developing, conducting and evaluating a course focusing on soft skills.	https://isolmet.aegean.gr/
MINE-EMI	Maritime Innovative Network of Education for Emerging Maritime Issues	Erasmus+	Turkey	2020-2023	Project focused on elaborating a Joint Master Program (JMPs) that facilitate developing skills and competences to raise awareness on emerging maritime issues in order to promote sustainable management of the maritime sector. It focuses on the Black Sea basin and involves representatives from the business sector and local administrations in order to fill the gap between the requirements in the maritime sector (management of marine areas, transport operations, logistics) and the current lacking of updated courses in that matter.	https://www.pirireis.edu.tr/what-is-mine-emi https://cpmr.org/maritime/mine-emi-a-new-partnership-for-the-promotion-of-sustainable-management-of-the-maritime-sector-in-the-black-sea-basin/23242/



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MarineBiot ech	CSA (Coordinating) in Marine Biotechnology	EU FP7 project	Norway	2011-2013	CSA-MarineBiotech aimed to stimulate the development of a strategy, so that marine bioresources can contribute to answering the Grand Challenges for Europe on the one hand and enhancement of the knowledge-based Bioeconomy on the other. This will be done by aligning research, development and innovation through the joint project calls within an ERA-NET (European Research Area Network) focused on marine biotechnology.	https://cordis.europa.eu/project/id/289311
MarTERA	Maritime and Marine Technologies for a New Era (MarTERA)	EU Horizon 2020 project H2020-EU.3.2.5., H2020-EU.3.2.	Germany	2016-2022	MarTERA is an ERA-NET Cofund scheme of the EC Horizon 2020. The overall goal of the the project is to strengthen the European Research Area (ERA) in maritime and marine technologies as well as Blue Growth.	www.martera.eu https://cordis.europa.eu/project/id/728053
MERCES	Marine Ecosystem Restoration in Changing European Seas	EU Horizon 2020 project H2020-EU.3.5., H2020-EU.3.5.2.	Italy	2016-2020	MERCES focused on the restoration of different degraded marine habitats, with the aim of: 1) assessing the potential of different technologies and approaches; 2) quantifying the returns in terms of ecosystems services and their socio-economic impacts and; 3) defining the legal-policy and governance frameworks needed to optimize the effectiveness of the different restoration approaches.	www.merces-project.eu https://cordis.europa.eu/project/id/689518
MICS	Developing metrics and instruments to evaluate citizen science impacts on the environment and society	EU Horizon 2020 project H2020-EU.5.c.	UK	2019-2022	MICS project will engage citizens in the development of new knowledge and innovations in the context of Nature-Based Solutions (NBS). Open, participatory practices provide enormous potential to facilitate engagement of local communities in NBS projects while also increasing capacity for standardised monitoring and scientific research to increase the evidence base for developing effective NBSs.	https://mics.tools/ https://cordis.europa.eu/project/id/824711
MONOCLE	Multiscale Observation	EU Horizon 2020 project	UK	2018-2022	Funded by EU H2020 MONOCLE aims to create sustainable in situ observation solutions for Earth Observation (EO) of	www.monocle-h2020.eu



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	Networks for Optical monitoring of Coastal waters, Lakes and Estuaries	H 2020-EU.3.5.5.			optical water quality in inland and transitional waters. It Develops essential research and technology to lower the cost of acquisition, maintenance, and regular deployment of in situ sensors. The MONOCLE sensor system will establish firm links between operational Earth Observation (EO) and essential environmental monitoring in inland and transitional water bodies.	
NEPTUNE	New Cross Sectoral Value Chains Creation across Europe Facilitated by Clusters for SMEs Innovation in Blue Growth	EU Horizon 2020 project H2020-EU.2.3.2.	France	2016-2018	NEPTUNE is an innovation action project supported by EC HORIZON 2020 programme. It implements a Blue Growth Accelerator supporting the development of new cross-sectoral and cross-border industrial value-chains mixing Water, Aerospace, ICT and Agriculture technologies.	www.neptune-project.eu https://cordis.europa.eu/project/id/691554
PIONEER	Plasma catalysis for CO2 recycling and green chemistry	Marie Skłodowska-Curie actions (MSCA)	France	2019-2022	Innovative Training Network (ITN) funded through the EU H2020 program aiming at educating a generation of experts in the multidisciplinary field of plasma/catalysis for CO ₂ conversion. 14 Early-Stage Researchers (ESRs) work together in a joint training and doctoral programme, within a consortium of 15 academic and 5 industrial partners, in 10 different countries, to conceive new systems of plasma/catalysis for an efficient conversion of CO ₂ molecule.	https://cordis.europa.eu/project/id/813393 https://www.co2pioneer.eu/
PREP4BLUE	Preparing the Research & Innovation Core for Mission Ocean, Seas & Waters	Horizon Europe	France	2022-2025	The project aims at setting the foundations for co-creating and co-implementing the research and innovation required to achieve Mission Restore our Ocean and Waters by 2030. PREP4BLUE overarching objective is to facilitate a successful first phase (2022-2025) of the Mission, by developing the co-creation and co-implementation R&I modalities required to achieve the Mission objectives and preparing the ground for inspiring and engaging citizens and stakeholders. The project is designed to deliver a series of tools, guidelines, methodologies and recommendations	https://prep4blue.eu/



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					tested through pilots, which will interlink, leverage and optimise activities among the projects funded under the Mission.	
Respon-SEA-ble	Sustainable oceans: our collective responsibility, our common interest. Building on real-life knowledge systems for developing interactive and mutual learning media	EU Horizon 2020 project H2020-EU.3.2.	France	2015-2019	One of the main objects of the ResponSEABLE project, is increasing the understanding and awareness of how European citizens affect and benefit from the ocean. To do this, the project decided to focus on some key ocean issues – the ResponSEABLE’s Key Stories: eutrophication and agriculture; ballast water and invasive alien species; sustainable fisheries & aquaculture; microplastics & cosmetics; coastal tourism; marine renewable energy.	www.responseable.eu
REST-COAST	Large scale RESToration of COASTal ecosystems through rivers to sea connectivity	H2020	Spain	2021-2026	The project aims at assessing ecosystem services from coastal marshes, seabed meadows and coastal dunes, to reduce erosion and flooding risks while enhancing biodiversity and blue carbon. It will develop large-scale river-coast connectivity and increase the nearshore accommodation space for the resilient delivery of coastal ecosystem services. The project will conduct nine pilots in the main EU regional seas (Baltic, Black, North, Atlantic and Mediterranean) with the aim of increasing the commitment of citizens, stakeholders and policymakers. Creating a healthy Danube-Black Sea region not only involves clean and free-flowing water, but also requires protecting coastal areas.	https://rest-coast.eu/
SeaChange	Sea Change view from the EU citizens	H2020-EU.3.2.	United Kingdom	2015-2018	The overarching goals of the Sea Change project are to bring about a fundamental “Sea Change” in the way European citizens view their relationship with the sea, by empowering them – as ‘Ocean Literate’ citizens - to take	https://cordis.europa.eu/project/id/652644



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					direct and sustainable action towards healthy seas and ocean, healthy communities and ultimately - a healthy planet.	
SeaChanges		Marie Skłodowska-Curie actions (MSCA)	United Kingdom	2019-2023	Innovative Training Network (ITN) funded through the EU H2020 program. SeaChanges provides state-of-the-art doctoral training to forge a new generation of interdisciplinary researchers able to operate at the interface of archaeology and marine biology. The seas are crucial to European economy, identity, and food security. Marine resource use has influenced European societies for millennia, and we in turn have impacted the seas. The need for long-term perspectives to inform marine management is becoming clear, but disciplinary silos hold back integration of archaeological data and approaches to this end. SeaChanges brings together experts from 7 leading institutions in archaeology, zoology, marine ecology and conservation biology, united by the recognition of this gap.	https://sites.google.com/york.ac.uk/seachanges
SOPHIE	Seas, Oceans and Public Health in Europe (SOPHIE): a Strategic Research Agenda for Europe and Beyond	H2020-EU.3.2.5.	United Kingdom	2017-2020	SOPHIE consortium brings together an international multidisciplinary European team of marine, health, social and economic science experts and practitioners to explore these relationships in the European context. SOPHIE aimed to: a) deliver a clear, evidence-informed Oceans and Human Health Strategic Research Agenda (SRA) within the European context, based on extensive involvement by diverse stakeholders; and b) ensure that the structures needed to develop and implement this SRA are in place and will exist as a legacy beyond the life of the project. These aims will be achieved by: (i) systematic synthesis of the current evidence base; (ii) developing and coordinating a European community of OHH stakeholders; (iii) identification of innovative solutions to sustainably reduce risks and promote benefits; (iv) scenario modelling and horizon scanning; (v) knowledge exchange through bespoke training and skills programmes; and (vi) a global OHH Conference to present SOPHIE's findings and enhance European leadership and global cooperation in OHH research	https://cordis.europa.eu/project/id/774567



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SUMMER	Sustainable Management of Mesopelagic Resources	EU Horizon 2020 project H2020-EU.3.2., H2020-EU.3.2.3.1.	Spain	2019-2024	SUMMER project aims to establish a protocol to accurately estimate mesopelagic fish biomass, quantify the ecosystem services provided by the mesopelagic community (food for aquaculture, for humans, for other wild fish, climate regulation and potential for bioactive compounds) and develop a decision support tool to quantitatively balance the trade-offs between the different services for any given exploitation scenario.	https://summerh2020.eu/ https://cordis.europa.eu/project/id/817806
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Stakeholders				
<i>Category (academia, industry, government, civil society, other)</i>	<i>Entity</i>		<i>Coordinating Country</i>	<i>Website</i>
Research Infrastructures	DANUBIUS-RI	International Centre for Advanced Studies on River-Sea Systems	Romania	www.danubius-ri.eu
	JERICO & JERICO NEXT	Joint European Research Infrastructure network for Coastal Observatory	France	www.jerico-ri.eu
European Research Infrastructure Consortium (ERIC)	EMBRC-ERIC	European Marine Biological Research Centre	France	www.embrc.eu
	EMSO ERIC	European Multidisciplinary Seafloor and water column Observatory	Italy	www.emso.eu
	Euro-Argo ERIC	European contribution to the ARGO programme	France	www.euro-argo.eu
	ICOS ERIC	Integrated Carbon Observation System	Finland	www.icos-ri.eu
	LifeWatch ERIC	e-Infrastructure for Biodiversity and Ecosystem Research	Spain	https://www.lifewatch.eu/



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Research Centres	DEKOSIM	Marine Ecosystems and Climate Research Centre	Turkey	https://ims.metu.edu.tr/ecosystem-and-climate-center
	EurOcean	European Centre for information on Marine Science and Technology	Portugal	https://eurocean.org/
Innovation and business cluster	PMM-TVT	Pôle Mer Méditerranée - Toulon Var Technologies	France	www.polemermediteranee.com , www.tvt.fr
	FUGRO		Netherlands	https://www.fugro.com/
	MCB	Marine Cluster Bulgaria	Bulgaria	https://www.marinecluster.com/en/
Inter-governmental body	BSC	Commission on the Protection of the Black Sea Against Pollution (Black Sea Commission)	Turkey	www.blacksea-commission.org
	JPI Oceans	Joint Programming Initiative Healthy and Productive Seas and Oceans	Belgium	www.jpi-oceans.eu
	JPI Water	Joint Programming Initiative on Water challenges for a changing world	France	http://www.waterjpi.eu/
Think Tank and Lobby Organisations	EMB	European Marine Board	Belgium	www.marineboard.eu
	Via Pontica	Via Pontica Foundation	Bulgaria	https://viapontica.org/en/
	BSEC	Organisation of the Black Sea Economic Cooperation	Greece	http://www.bsec-organization.org
	ICBSS	International Centre for Black Sea Studies	Greece	https://icbss.org/
	CPMR	Conference of Peripheral Maritime Regions	France and Belgium	https://cpmr.org/



UN bodies	UNDP	United Nations Development Programme		https://www.undp.org/
	UNEP	United Nations Environment Programme		https://www.unep.org/
	UNECE	United Nations Economic Commission for Europe		https://unece.org/
	GFCM	General Fisheries Commission of the Mediterranean	FAO	https://www.fao.org/gfcm/en/
	UNESCO	United Nations Educational, Scientific and Cultural Organization		https://www.unesco.org/en
	IMO	International Maritime Organization		https://www.imo.org/
	UNIDO	United Nations Industrial Development Organization		https://www.unido.org/
	UNCLOS	United Nations Convention on the Law of the Sea		https://www.imo.org/en/ourwork/legal/pages/unitednationsconventiononthelawofthesea.aspx



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