

Pillar 1: BLUE GROWTH

Main topics according to EUSAIR Action Plan:



BLUE TECHNOLOGIES



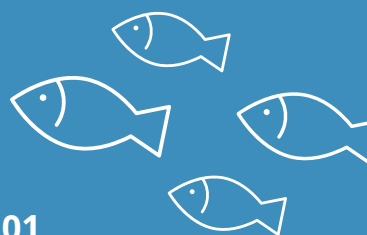
FISHERIES AND AQUACULTURE



MARITIME AND MARINE GOVERNANCE AND SERVICES

EUSAIR Flagships 2021 - 2027

Fostering quadruple helix ties in the fields of marine technologies and blue bio-technologies for advancing innovation, business development and business adaptation in blue bio-economy



01

- FishTourAIR - Fishing tourism and ichtyotourism diversification activities in the Adriatic-Ionian Region

- ▲ BLUECULTURE - Development of Macro-regional Cluster on BlueCulture Technologies and creation of International Competence Center

- Collaboration between Pillar 1 & 4

Promoting sustainability, diversification and competitiveness in the fisheries and aquaculture sectors through education, research & development, administrative, technological and marketing actions, including the promotion of initiatives on marketing standards and healthy nutritional habits



02

- AimFrisht - Evaluating freshness and authenticity with real-time non-destructive methods to increase the value added of Adriatic-Ionian macroregion produced fish

- EURYNOME - The Effects of anthropogenic pressures and climate change in the nutritional and commercial value of two small pelagic fish species of importance to ADRION region fisheries: Biodiversity and energy flow from the Ecosystem to the final product

- ▲ WAI-TP: WATERBORNE - Adriatic-Ionian Technology Platform

- Collaboration between Pillar 1 & 2
(Transport subgroup)

Bolstering capacity building and efficient coordination of planning and local development activities for improving marine and maritime governance and blue growth services



03

- SeaSusPack - Sustainable packaging of fish and seafood based on marine bioresources

- AMOS - Developing a cost-effective observatory system, tailored to the needs of Aquacultures with remote access, real-time data and forecast capabilities

- ▲ CROSS-PILLAR Integrated Coastal Zone Management (ICZM) & Maritime Spatial Planning (MSP) - Using high quality research to strengthen dialogues and institutional capacities for effective implementation of MSP/ICZM in support of inclusive and sustainable growth in the AIR
- Collaboration between Pillar 1 & 3

01-03 EUSAIR flagships

There are 4 strategic formats for implementation of EUSAIR flagships:

- **EUSAIR strategic projects**

Defined set of tasks which must be completed in order to arrive at a particular goal or outcome foreseen in the Flagship.

- ▲ **EUSAIR cross-pillar strategic projects**

These are strategic projects aimed at implementation of Flagships in the topics of different Pillars.

- **EUSAIR master plans**

A master plan is a dynamic long-term planning document that provides a conceptual layout to guide future growth and development in the field.

- × **EUSAIR actions**

A list of tasks that need to be completed before a strategic project is being developed.

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EUSAIR Flagships and strategic projects supporting them:

Fostering quadruple helix ties in the fields of marine technologies and blue bio-technologies for advancing innovation, business development and business adaptation in blue bio-economy

• **FishTourAIR - Fishing tourism and ichthyo tourism diversification activities in the Adriatic-Ionian Region**

The FishTourAIR project aims to evaluate the fishing tourism and ichthyo tourism diversification activities in the Adriatic-Ionian (A-I) Region, which includes both marine and freshwater areas. This will involve examining various issues in the EUSAIR Countries, such as infrastructure at national, regional, and local levels, seasonal patterns, legal status, safety regulations for fishing vessels carrying passengers, types of vessels and registration systems, licensing rules and procedures, expanding the scope of fisheries-related tourism in the A-I macroregion, training and certification requirements, and establishing support units similar to Fisheries Areas Network (FARNET) for Fisheries Local Action Groups (FLAGs).

01

Expected results of the project include:

- Establish a list of required infrastructure.
- Address seasonality by proposing year-round activities.
- Recommend harmonization or creation of legislation, including for brackish and freshwater bodies.
- Study passenger safety on fishing vessels and funding options.
- Foster partnerships with the fishing tourism sector, particularly in marine protected areas (MPAs) and Natura 2000 sites.
- Develop custom training courses for fishermen, their families, and locals.
- Promote women's roles in the fishing tourism sector.
- Establish an A-I fishing tourism network similar to FARNET.
- Investigate socio-economic and environmental impacts of fisheries-related tourism.
- Enhance funding access through a business plan draft.



Interested in the project? The project was developed by experts in cooperation with Thematic Steering Group of Pillar 1. It can be used for further development by relevant partnerships. For additional information please contact the EUSAIR Facility Point Project Partner from Greece supporting Pillar 1.

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EUSAIR Flagships and strategic projects supporting them:

Promoting sustainability, diversification and competitiveness in the fisheries and aquaculture sectors through education, research & development, administrative, technological and marketing actions, including the promotion of initiatives on marketing standards and healthy nutritional habits

- **AIM-FRISH - Evaluating freshness and authenticity with real-time non-destructive methods to increase the value added of Adriatic-Ionian macroregion produced fish**

The AIM-FRISH project aims to evaluate fish freshness and predict shelf life of various species using sensory, chemical, natural, and microbiological methods, with portable devices. This will help estimate time since catch/harvest swiftly and accurately. We'll also verify authenticity and origin to combat fraud and enhance traceability. The project focuses on both high-priced and high-volume species. Freshness assessment will use techniques like organoleptic evaluation, ATP levels, biogenic amines, TVB-N, VOCs, texture, color, pH, NIR, and microbiological analyses.

02

Expected results of the project include:

- Develop fast techniques for freshness determination of important Adriatic-Ionian macroregion (AIM) commercial species.
- Calibrate portable devices for freshness assessment and non-destructive quality and authenticity evaluation.
- Develop a quality control and authentication protocol for AIM seafood products.
- Label fishery products for increased safety and reduced fraud risk.
- Enhance AIM fresh fish producing enterprises' competitiveness.
- Apply real-time non-destructive freshness determination in the supply chain.
- Maximize the added value of fresh AIM fish through quality labels.
- Develop traceability solutions and electronic data transmission.



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Promoting sustainability, diversification and competitiveness in the fisheries and aquaculture sectors through education, research & development, administrative, technological and marketing actions, including the promotion of initiatives on marketing standards and healthy nutritional habits

- **EURYNOME - The Effects of anthropogenic pressures and climate change in the nutritional and commercial value of two small pelagic fish species of importance to ADRION region fisheries: Biodiversity and energy flow from the Ecosystem to the final product**

This study aims to explore how climate change affects the diet and nutritional value of two important Mediterranean fish species - the sardine and the European anchovy. These fish, primarily consuming phytoplankton and zooplankton, are key sources of energy and fatty acids like EPA and DHA for higher trophic levels, including humans. Climate change's potential impacts on marine ecosystems might alter the quantity and quality of this energy flow. By examining how climatic conditions and geographical areas influence the fish's diet and subsequent nutritional properties, the study aims to predict climate change's effects on these species' fisheries and the overall energy flow in the marine environment.

02

Expected results of the project include:

- Enhance the value of sardine and anchovy fisheries by highlighting their nutritional qualities and potential regional/climate-related characteristics, in cooperation with fisheries associations, fishmongers, and regional authorities.
- Supply the processing industry with useful data on regional/seasonal qualities of raw material for optimal use in different processing methods.
- Support sustainable exploitation of regional stocks by identifying fishing periods where the fish offer the greatest nutritional value and/or conditions for producing high-quality processed products.
- Enhance understanding of planktonic biodiversity in the ADRION region and identify potential climate change risks, through comprehensive environmental sampling and advanced taxonomy/genomic/biochemical technologies.



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EUSAIR Flagships and strategic projects supporting them:

Bolstering capacity building and efficient coordination of planning and local development activities for improving marine and maritime governance and blue growth services

- **SeaSusPack - Sustainable packaging of fish and seafood based on marine bioresources**

The main aim is to optimize new value-chains for fish and seafood destined for the EU market, enhancing product handling and transportation for better quality and reduced post-harvest losses. We aim to develop novel, efficient packaging solutions to enhance product quality, extend shelf life, and decrease waste.

03



Expected results of the project include:

This project addresses significant fish and seafood waste due to spoilage during storage and transport. Key outcomes include:

- Innovative, safe fish and seafood product prototypes with high sensory appeal.
- Extended shelf life to reduce energy usage, food waste, and associated costs.
- Building a multidisciplinary team to drive innovation in the fish and seafood supply chain.
- Contributions to the European Bioeconomy strategy's goals, including food security, sustainable resource management, and job creation.

The project boosts competitiveness for SMEs and larger enterprises by offering innovative, sustainable solutions.

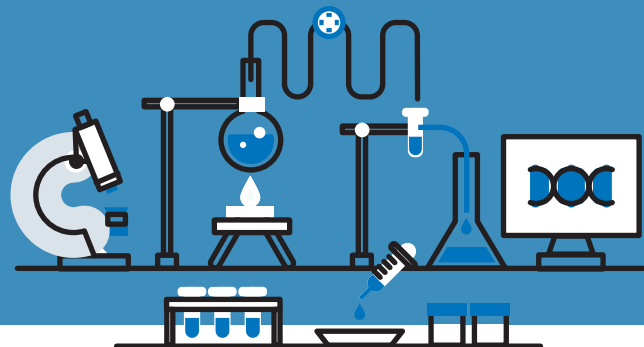
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EUSAIR Flagships and strategic projects supporting them:

Bolstering capacity building and efficient coordination of planning and local development activities for improving marine and maritime governance and blue growth services

- **AMOS - Developing a cost - effective observatory system, tailored to the needs of Aquacultures with remote access, real-time data and forecast capabilities**

The AMOS project plans to develop innovative, cost-effective marine monitoring technology for the aquaculture industry. Its objectives include analyzing current systems, defining the functions and requirements of new systems, designing a common system architecture to reduce costs, conducting lab and field tests, and finally, implementing it in coastal and aquaculture areas.



03

Expected results of the project include:

- Facilitates the continuous monitoring of the marine environment in areas of high interest in the coastal zone by transmitting data from the marine observatory sensors at regular intervals.
- Contributes to technologically innovative solutions and methods for the development of new applications.
- Improves the quality of drawing conclusions by retrieving large amounts of data in real time.
- Proposes a new, sustainable and innovative business model that ensures cost effect and significant savings in the management of marine observatories while combining research with the modern availability of Internet and telecommunications services and mobile devices.
- Ensures the management production plan of aquacultures and connect it with environmental real-time data.

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