

#### **FAIRSEA (ID 10046951)**

# "Fisheries in the AdriatIc Region - a Shared Ecosystem Approach"

# D 3.4.1 – Report on participation to working groups

Work Package:	WP 3 – Mapping, benchmarking, sharing and enhancing EAF capabilities  Activity 3.4: Sharing the vision and knowledge beyond partnership
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# Deliverable 3.4.1 Report on participation to working groups

FAIRSEA - Fisheries in the Adriatic Region - a shared Ecosystem Approach

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#### Acronyms used

AB Advisory Board

**CFP** Common Fisheries Policy

**EAF** Ecosystem Approach to Fisheries

**EAFM** Ecosystem Approach to Fisheries Management

**EMFF** European Maritime and Fisheries Fund

**FAIRSEA** Fisheries in the Adrlatic Region – a Shared Ecosystem Approach

**FAO** Food and Agriculture Organization

**FARNET** Fisheries Area Network

**FLAG** Fisheries Local Action Group

ICES International Council for the Exploration of the Sea

**GFCM** General Fisheries Commission for the Mediterranean Sea

SAC Scientific Advisory Committee

SRC-AS Subregional Committee for Adriatic Sea

**WGSAM** Working Group on Multispecies Assessment Methods

WP Work packages



#### INTRODUCTION

The central focus of FAIRSEA is the fisheries sector that is an important economic activity in the Adriatic Sea, because of its strong role in regional economies for employment and for the many activities associated with fisheries. In the Adriatic and Ionian region there is a clear need for integrated management of fisheries, especially concerning innovative mechanisms for sustainable growth and protection of Adriatic ecosystem. Furthermore, there is a territorial "need to enhance the cooperation among scientific experts on marine renewable resources, representatives of producers and entities such as NGOs, national and local authorities that are involved in the management of fisheries in the basin. Overall there is a great need to introduce innovation in the field of fisheries management for a better use of evident potentials for blue growth in the area.

FAIRSEA tackles these challenges by developing an integrated platform for a quantitative ecosystem approach to fisheries (EAF) that goes across territorial boundaries and across several disciplines by integrating biological/ecological processes and fisheries bio-economic dynamics. To do so, the project moves beyond single species assessment to reduce environmental vulnerabilities and safeguard optimal exploitation thus it provides basis for promoting an efficient exploitation of fisheries resources. The 3 specific objectives of FAIRSEA are described in the following.

Regarding the Project specific objective 1, Enhance transboundary integrated competence in the field of ecosystem approach to fisheries, the scientific dissemination will allow enhancing the transnational competencies and skills in the field of EAF in all network's members, by crossing and pooling resources and complementary expertise, exchanging and integrating knowledge and sharing the results. The territorially integrated conceptualization of the EAF beyond existing differences and boundaries is going to be documented in the scientific work in order to strengthen and structure a network for future transnational plans useful in the framework of the Common Fisheries Policy (CFP). This will result in reinforcing cohesion and encourage identification and adoption of shared optimal strategies in the field of fisheries management.

Regarding the Project specific objective 2, **Implement a shared "state of the art" integrated platform for the region**, the scientific dissemination will allow to document the developments of the integrated platform, in the form of an operational spatially explicit platform that integrates the dynamics of water masses and primary production patterns, main components of the ecosystem in terms of target species and their food, main fisheries spatio-temporal dynamics, also accounting for socio-economic impacts. The scientific dissemination of the results obtained from the novel integration of existing information and numerical approaches applied in the



Adriatic basin (GSA17 and GSA18 and GSA19) will make scientific community aware of the achievements and facilitate transferring the results to actors higher in the management pyramid.

The scientific communication will be key in the project specific objective 3, Share benefits and challenges of ecosystem approach to facilitate the achievement of CFP objectives. In fact scientific arena represent a critical forum for having expert revision of the work done, for sharing the integrated conceptualization of the ecosystem approach to fisheries and the insights obtained from pilot applications. The objective is also to guarantee the best transferring at different levels and to different groups the potentialities and the difficulties of the approach in order to increase its further development in the region and outside the region toward a Mediterranean EAF.

#### FAIRSEA project aims

The FAIRSEA project aims at developing an highly data-driven and scientific-based approach for supporting EAF in the Adriatic and North-western Ionian Seas. The approach is based on the development of the Integrated Platform that is developed in WP4, also on the basis of a continuous participatory approach developed in WP5 (stakeholder meetings) and WP3 (technical meetings with policy makers). The developed tools are used in specific testing cases, i.e., analysis of scenarios of potential fisheries management actions (Activity 5.3. Scenarios of fisheries policy application in the Adriatic) and analysis of sub-regional (local) management actions (Activity 5.2. Pilot actions: identification of conflicts and possible solutions).

Capacity building events such as the Advanced schools on quantitative methods for EAF application (Activity 3.3.1. and 3.3.2) allow to increase the potential for having high-skilled human resources in the fisheries sector to strengthen development patterns in the area, support "brain circulation" amongst research institutes/academies and companies as a condition for developing cooperation in the field of blue technologies and fisheries management. International stakeholder meetings (such as those conducted in Activity 5.1.1, 5.1.2 and 5.1.3) favour capitalising on previous technical results and developments, and allow to set an innovative mechanism that results in a participated, integrated, shared and quantitative ecosystem approach to fisheries that connects and enhances territorial skills and capabilities.

However, it is also necessary an intermediate level of interaction that allows technical discussions among bodies participating in any phase and at different levels during the fisheries policy development. Thus other than actions for capacity building and fostering participatory approaches, FAIRSEA promoted the sharing of results beyond partnership.



#### Role of Technical and Scientific Dissemination

The scientific and technical dissemination is considered a key element to contribute to the three project specific objectives of FAIRSEA.

The FAIRSEA approach results in an operational decision support integrated tool useful for developing harmonised recommendations from technical and scientific experts, but also accounting policymakers and stakeholders considerations. A continuous step by step sharing of scientific results and tools was thus necessary to guarantee efficient and efficacy of the approach, and in particular to result useful for policy makers in developing new policies and laws.

FAIRSEA is based on solid scientific shared evidence that comes from a range of marine disciplines integrated across boundaries, that however are benefited from a scientific and technical confrontation. The integration of transnational data and ecological processes through the integrated platform (IP) result in the development of common standards and best practices for the region, possibly exported in other areas of the Mediterranean Sea. But this requires acceptance at all levels, that starts from an involvement, a large sharing of vision and knowledge.

The Scientific and technical Dissemination of the ecosystem approach adopted in FAIRSEA, of the supporting tools developed and the analyses carried out was considered a key activity that has the following objectives of:

- i) **increasing the strength and reliability of results** by revising the ideas and concepts through discussion events;
- ii) favouring dissemination of results to colleagues working on the same EAF objective;
- iii) facilitating comprehension, trust and possible adoption of supporting tools for management in the future;
- iv) documenting the steps and work done for ensuring repeatability, reproducibility and transferability;
- v) furthermore the scientific dissemination is considered an approach for increasing durability of actions and results done during FAIRSEA.

#### Sharing the vision and knowledge beyond partnership

To assure durability, to promote acceptance and especially to guarantee transferability of the approach, a special set of actions were taken to share the vision and knowledge beyond the partnership. The FAIRSEA project through its development was favouring dissemination of its vision and results in institutional, scientific, technical, policy makers international forums beyond the partnership. International in the conceptualization, application and analysis as a way to crosscontaminate across disciplines, across boundaries and across technical, institutional and



stakeholder levels to foster innovation. For these reasons the FAIRSEA PPs contributed in preparing and delivering presentations and documents for:

- participation to working groups
- provide policy brief to EUSAIR key implementers

This deliverable is fully dedicated to report the efforts done by FAIRSEA partnership to contribute and participate to working groups.



#### Participation to working groups

The original aim of this activity aims at contributing to existing working groups or establishes new ones in important international arenas and forums for the trans-national fisheries management. Working groups of STECF, ICES, FAO-GFCM and its regional project AdriaMed were planned in the Programme area during the project.

The main target regarded the events in the FAO-GFCM framework, that are considered essential for strengthening the regional framework for sustainable fisheries management in the Adriatic. A second target for participatory groups were those in the framework of STECF and/or ICES with the objective to set the basis for addressing future ecosystem analyses and for establishing a permanent working group similar to ICES Working Group on Multispecies Assessment Methods.

However, the COVID-19 pandemic strongly compromised all interactive, aggregation activities in Europe and worldwide. This especially affected the activity during the course of year 2020, after the emergency restrictions in Italy, Croatia and Europe. Clearly online activities were reprogrammed with delays and impacts on this activity.

#### Strategy and planning of participation to WGs

FAIRSEA activities regard the development of the integrated platform which has as a core element a food web ecosystem model. The integrated platform elements are under development, yet the approach, the aims and the methods are going to be useful for the management of fisheries in the programme area, but would also be beneficial to other areas.

Instead of developing a FAIRSEA working group it was considered more strategic to get involved in existing ones that act:

- a) with the same geographical, concerning the fisheries sector, involved in the policy recommendation framework: FAO Adriamed, FAO GFCM Subregional Committee for Adriatic Sea (SRC-AS)
- b) with the same geographical scope and similar sector but with different actors: **DORY project**; **ARIEL project**.
- with large geographical scope, concerning the fisheries sector: FARNET network of FLAGS;
- d) with another geographical scope but same sector of application: ICES -WGSAM;



#### ARIEL project mid term conference (11 June 2019)

#### Context

ARIEL project is and ADRION project jointly promoted and developed by 9 scientific and institutional partners of 4 Countries (Italy, Croatia, Greece and Montenegro) and focuses on small-scale fishery and aquaculture which are two key drivers for blue and sustainable growth of Adriatic and Ionian communities. Despite their relevance, those sector faces the same challenges of maritime spatial planning, environmental and socio-economic sustainability, better conditions for innovation uptake and for scientific knowledge dissemination, more effective cooperation between entrepreneurs, academia and policy makers. In this context, ARIEL transnational approach will catalyze joint efforts to tackle this complex ecological, economic and societal challenge supporting the development of a transnational "critical mass" and the provision of common skills, tools and methods accompanying small-scale fishery and aquaculture innovation process and networking in the Adriatic and Ionian Sea basin.

ARIEL overall objective is, in fact, to promote technological and non-technological solutions for innovation up take of small-scale fishery and aquaculture in Adriatic-Ionian basin, acting as knowledge network and performing a set of transferable activities to better understand threats and solutions for a more successful and sustainable management of policies and practices.

ARIEL partners will then develop a Joint Research Agenda for small-scale fishery and aquaculture and a Chart of Innovation Services, a strategic and multidisciplinary action plan defining common priorities and research lines, areas of improvement, knowledge based solutions and actions to successfully address the major challenges linked to innovation and sustainability of fisheries and aquaculture for the coming years in the Adriatic and Ionian Sea region.

Ariel Mid term Confrence was organized in Split, on 11th June 2019.

#### Participation and results

The partnership agreed that ARIEL and FAIRSEA shared some common objectives and that the interaction would be beneficial for both projects. For FAIRSEA the advantage is to show the approach to a partnership including countries such as Albania, Montenegro and Greece which were not in FAIRSEA partnership.

The presentation" FAIRSEA Fisheries in the Adriatic Region - a Shared Ecosystem Approach" was given by the project coordinator.







Photos from the ARIL mid term conference on 11 June 2019



#### ICES-WGSAM meeting (Rome, 14-18 October 2019)

#### Context

**The WGSAM** is the forum where similar approaches are going to be applied in other parts of the world.

The ICES-WGSAM is the "Working Group on Multispecies Assessment Methods" of the ICES (International Council for the Exploration of the Sea). WGSAM is a working group presenting results, developments and analysis of multispecies approaches internationally applied for the fisheries management. It is an open group where scientists convene discussing topics described in long term TORs (available here: http://www.ices.dk/community/Documents/Science%20EG%20ToRs/HAPISG/2019/WGSAM%2 OMA%20ToRs%202018.pdf):

- a) Review further progress and deliver key updates on multispecies modelling and ecosystem data analysis contributing to modeling throughout the ICES region
- b) Update of key-runs (standardized model runs updated with recent data) of multispecies and ecosystem models for different ICES regions
- c) Establish and apply methods to assess the skill of multispecies models intended for operational advice
- Evaluate methods for generating advice by comparing and/or combining multiple models
- e) Management Strategy Evaluation (MSE) methods and applications for mutispecies and ecosystem advice, including evaluating management procedures and estimating biological reference points

The ICES-WGSAM discussion has a great scientific importance for the FAIRSEA approach which is intended to use multispecies approaches to develop the integrated platform (WP4) for fisheries management. Having insights from these applications would facilitate and contribute to the most efficient application of methods in the Programme Area. Informing the ICES WGSAM on FAIRSEA approach will also represent an important moment not only for scientific exchange and debate but also for disseminating the FAIRSEA activities.

#### Participation and results

LP-OGS participated with a contribution to TORs number d) of the WGSAM with the following presentation:

"Preliminary analysis of fisheries management targets in Adriatic Sea from multispecies modelling approaches"



#### Authors: Panzeri D., Libralato S. et al.

The meeting was held at the University Botanical Garden, Largo Cristina di Svezia, 23 A - 24, 00165 Roma; the meeting had an independent agenda covering the TORs above in 4 days.

The participation outside the CBC programme area was requested by the Project Coordinator (ANNEX 1) and approved by JS through an e-mail sent by PO Petra Laus on 7 October 2019 16:01. (ANNEX 2).

The presentation was given by D. Panzeri (LP-OGS) and included a) the general structure and objectives of FAIRSEA and b) some preliminary evaluation of single and multispecies targets for fisheries management using a draft food web model to be used in FAIRSEA WP4 (act. 4.6). The presentation will be given by D. Panzeri which is working at OGS and contributing to FAIRSEA. Presentation at WGSAM, ANNEX 3.

The results of the meeting are synthesized in a dedicated WGSAM report:

ICES. 2019. Working Group on Multispecies Assessment Methods (WGSAM). ICES Scientific Reports. 1:91. 320 pp. <a href="http://doi.org/10.17895/ices.pub.5758">http://doi.org/10.17895/ices.pub.5758</a>

(downloadable here:

https://www.ices.dk/sites/pub/Publication%20Reports/Expert%20Group%20Report/HAPISG/2 019/Working%20Group%20on%20Multispecies%20Assessment%20Methods%20(WGSAM).pdf)



#### Conference of DORY project (Venice, 19 September 2019)

#### Context

The Project the DORY (Italy Croatia Interreg project) is a project on the similar aspects of FAIRSEA. DORY intends to promote the adoption of common management models for supporting sustainable fisheries and development of alternative spatial management measures. The pilot activities will test the innovative solutions for reducing the negative aquaculture ecological impact of the economic activities and to, on the other hand, enhance the biodiversity of fish habitats.

Interaction with DORY project was seen to contribute to:

- i) understanding the state of the art of the decision support tools and regulations for sustainable management of fisheries in the Adriatic Sea, crucial to FAIRSEA planned activities;
- ii) help strengthening relationships and supports by partners of different projects and allows for increasing the cooperation with other international activities and working groups;
- iii) enable enhancing cooperation between the two projects that started since the initial contribution of DORY to the First Stakeholder meeting of FAIRSEA (Venice, February 2019).

#### Participation and results

The DORY conference on "Future scenarios for the sustainability of Adriatic fisheries and aquaculture" was programmed for 19/09/2019 and 20/09/2019 in Venice.

The participation was requested by the Project Coordinator (ANNEX 4) and approved by JS through an e-mail sent by PO Petra Laus on 19 september 2019 10:24. (ANNEX 5).



## FARNET - Transnational seminar for MEDITERRANEAN & BLACK SEA FLAGS (25-27 November 2020)

#### Context

FARNET (Fisheries Area Network) is commissioned by the European Commission DG MARE to animate and support the Fisheries Local Action Groups (FLAGs) network, which implement the Community-Led-Local-Development as a part of the EMFF.

"Following the seminar for Baltic and inland FLAGs, the second of the three FARNET seminars targeting FLAGs from a specific geographical area will be organised for coastal FLAGs from the Mediterranean and Black Sea. This geographic focus will allow FLAGs to exchange with their counterparts from areas facing similar contexts and challenges and jointly explore solutions. Certain issues are particularly common around the Mediterranean and Black Sea, including challenges to the long-term sustainability of small-scale fisheries in the face of pollution, the decline of certain fish species, and competition for space and resources from other economic sectors, including tourism. At a time when FLAGs will be starting to think about their future strategies, this seminar will offer an opportunity to exchange around these common issues and generate ideas to best tackle some of the challenges faced by Mediterranean and Black Sea fishing communities. Time will be dedicated, in particular, to discussion around how to ensure local projects are effective at responding to these challenges, including where FLAG cooperation can strengthen that response."

The FARNET support Unit was organizing a seminar for local multi-sector partnerships from fisheries areas (FLAGs) around the Mediterranean and Black Sea, which was set to happen from the Wednesday 25th to the Friday 27th of November in Croatia but then was given online. The seminar was attended by more than 100 representatives of local groups working with fisheries communities from all EU MS around the Mediterranean and Black Sea (Spain, France, Italy, Slovenia, Croatia, Greece, Cyprus, Bulgaria, Romania).

During the seminar was set an Exhibition of Mediterranean & Black Sea initiatives, for the inspiration of the Med and Black Sea FLAGs. The seminar outputs will be used to develop a guide for FLAGs on "Quality local projects".





The preliminary agenda of the FARNET event on 25-27 November 2020.

#### Participation and results

The event was considered a quite unique and important forum for networking, presenting the activities done and expose some of project results. The partnership agreed on using especially disseminating tools and to broadly present the project.

A presentation entitled:

#### FAIRSEA, Sustainable management of the Adriatic Sea fisheries

Was given by the FAIRSEA coordinator. The presentation (ANNEX 6) synthesized the project strategy and the tolls developed.

The presentation was included in the AGENDA of the event (Annex 7) and was given to a forum of approximately 120 people (ANNEX 8). Discussions and feedbacks were especially concerning the gaming approach and tools used for communicating FAIRSEA to different target groups.



Notably the event was participated by representatives of EU DGMARE, FAO GFCM, IUCN, MEDPAN, MAVA and many FLAGS of the Mediterranean Sea.

#### FAO-Adriamed working group Demersal (18 December 2020)

#### Context

FAO-AdriaMed Project (Scientific Cooperation to Support Responsible Fisheries in the Adriatic Sea) is an FAO Regional Project and it is funded by the Italian Ministry of Agriculture, Food and Forestry Policies and Tourism (MiPAAFT), since 2007 by the European Commission and from january 2016 by the Croatian Ministry of Agriculture and from February 2018 by the Ministry of Agriculture Food and Forestry of Slovenia. The Project aims in promoting scientific cooperation among the Adriatic countries (Republics of Albania, Croatia, Italy, Montenegro and Slovenia), in line with the Code of Conduct for Responsible Fisheries (UN-FAO). The Project has been operative since September 1999. The Project aims to promote scientific cooperation among the Adriatic nations. Its goal is to improve the management of fishing activities in conformity with the Code of Conduct for Responsible Fisheries (FAO 1995). AdriaMed aims to contribute decisively to enlarging the scope of information on the Adriatic Sea, related to shared fishery resources, knowledge that is often fragmented and localised to different territories. As biological resources are not limited to geopolitical boundaries, scientific knowledge of resources within a single nation is not adequate for the responsible management of those resources.

Some of the main objectives of the Project Adriamed are:

- -to develop a common cognitive basis to support international processes aimed at fishery management;
- to reinforce the scientific coordination among the different institutions interested in fishing activity;
- to establish a permanent network among the main institutions present in the Adriatic that are involved in fishery management activities.

#### Participation and results

The FAIRSEA partners agreed on SC meeting that the FAO Adriamed is a crucial forum for presenting its developments, for allowing that such approach is used and effective in the area. Furthermore, given that FAO-Adriamed is involving all countries in the Adriatic region, this was



another way of interaction with Slovenia, Albania, Montenegro experts that could not be involved in the project.



#### A presentation entitled:

Developing spatial distribution models for demersal species by the integration of trawl surveys data and relevant ocean variables

Authors: Panzeri D., Bitetto I., Carlucci R., Cipriano G.,, Cossarini G., D'Andrea L., Masnadi F., Querin S., Reale M., Russo T., Scarcella G., Spedicato M.T., Teruzzi A., Vrgoč N., Zupa W., Libralato S.

Was presented by Panzeri [LP-OGS] on behalf of the FAIRSEA partners: LP-OGS, PP05-COISPA, PP03-CNR, PP06-CONISMA, PP01-IOF, LP-OGS with the contribution of Univ. Tor Vergata

The presentation (ANNEX 9) contains main insights from activities of WP4, I.e., the integration of information from modules HYDRO, BGC, BSTAT and EFFORT of the WP4 for the best representation of spatial distribution of demersal species.



## GFCM - Subregional Committee for the Adriatic Sea (SRC-AS), 20–23 April 2021

#### Context

The General Fisheries Commission for the Mediterranean (GFCM) is the Regional fisheries Management Organization (RFMO) in charge of producing binding recommendations regarding fisheries and aquaculture in the Mediterranean Sea. The GFCM Scientific Advisory Committee on Fisheries (SAC) is the scientific organism that provide advice through recently defined SubRegional Committees, one of which is completely devoted to the Adriatic: the Subregional Committee for the Adriatic Sea (SRC-AS).

The fifth meeting of the Subregional Committee for the Adriatic Sea (SRC-AS) of the GFCM of the Food and Agriculture Organization of the United Nations was held online on 20-23 April 2021. The aims of the meeting were to: i) compile relevant information on the status of Adriatic Sea fisheries and provide advice to the GFCM Scientific Advisory Committee on Fisheries (SAC), including on urgent actions towards sustainability and, following the requests made by the Commission, in particular in relation to small pelagic and demersal fisheries in the subregion; ii) identify priority topics for the subregion, including in relation to data collection, provision of advice and implementation of management measures; and iii) prepare a draft work plan to address priority issues for the consideration of the SAC. The SRC-AS formulated draft advice on issues related to fisheries in the subregion, including a summary of the status of the stocks, the assessment and management of small pelagic and demersal resources in the subregion as well as the fisheries restricted area in the Jabuka/Pomo Pit. It further provided insights into the identification of conservation priority areas hosting essential fish habitats and/or vulnerable marine ecosystems, the implementation of a data call to feed the GFCM Database on Sensitive Benthic Habitats and Species, and the implementation of a vulnerability assessment of Mediterranean fisheries to climate change in the Adriatic Sea subregion.

The FAIRSEA partners agreed that participation to the meeting is central because it represents an occasion for presenting vision and results of FAIRSEA to all institutional actors involved in the fisheries policies and decision for the Adriatic.

#### Participation and results

The partnership participated to the event with three presentations:



1) Preference Modelling to support participative processes toward the sustainable management of the fishery in Adriatic sea: the experience of the FAIRSEAproject. (ANNEX 10)

Authors: G. Lembo, I. Bitetto, R. Caggiano, A. Caccin, U. Meconi, D. Mioković, F. Perretta, M. Piron, M.T. Spedicato, S. Libralato

Partners contribution: PP05-COISPA, PP11-MEDAC, PP04-ASSAM, PP02-MPS, LP-OGS with the contribution of external partner Alberto Caccin

Main insights from activities of WP5 related to Stakeholder International meetings, used to analyse results of the tools developed in WP4 and provide insights on Pilot actions of WP5.

 Integration of trawl surveys data, relevant ocean variables and effort for accurate estimation of spatial distribution of demersal species in Adriatic-Ionian region (ANNEX 11)

Authors: Panzeri D., Bitetto I., Carlucci R., Cipriano G.,, Cossarini G., D'Andrea L., Masnadi F., Querin S., Reale M., Russo T., Scarcella G., Spedicato M.T., Teruzzi A., Vrgoč N., Zupa W., Libralato S.

Partners contribution: LP-OGS, PP05-COISPA, PP03-CNR, PP06-CONISMA, PP01-IOF, LP-OGS with the contribution of Univ. Tor Vergata

Main insights from activities of WP4, I.e., the integration of information from modules HYDRO, BGC, BSTAT and EFFORT of the WP4 for the best representation of spatial distribution of demersal species.

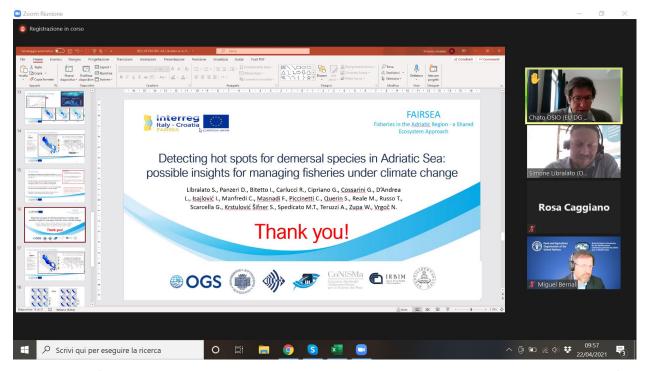
3) Detecting hot spots for demersal species in Adriatic Sea: possible insights for managing fisheries under climate change (ANNEX 12)

Authors: Libralato S., Panzeri D., Bitetto I., Carlucci R., Cipriano G., Cossarini G., D'Andrea L., Isajlović I., Manfredi C., Masnadi F., Piccinetti C., Querin S., Reale M., Russo T., Scarcella G., Krstulović Šifner S., Spedicato M.T., Teruzzi A., Zupa W., Vrgoč N.

Partners contribution: LP-OGS, PP05-COISPA, PP03-CNR, PP06-CONISMA, PP10-UNIST, PP01-IOF, LP-OGS with the contribution of Univ. Tor Vergata



The work result from the deepening of analysis on species distribution models and to the definition of the best areas (hot spots) of aggregation for several demersal species, with the aim of providing insights on the best areas for future spatial management.



Screenshot of the presentation given by FAIRSEA Coordinator to the GFCM - Subregional Committee for the Adriatic Sea (SRC-AS), 20–23 April 2021.

The SRC-AS welcomed these important scientific contributions noting their relevance as a basis for the future management of Adriatic demersal resources and expressing its interest in future more consolidated results on both i) Norway lobster hotspots and the need to be particularly careful in managing poorly connected areas; and ii) demersal resources in general and the effect of climate change scenarios on the distribution of the main priority commercial species.

Annotated agenda of the event and the full report of the Fifth meeting of the Subregional Committee for the Adriatic Sea (SRC-AS) of the Scientific Advisory Committee on Fisheries (SAC), given online on 20–23 April 2021 are included as ANNEX 13 and ANNEX 14 respectively.



#### **ANNEXES**

**ANNEX 1:** Letter of the LP to the JS for requesting Participation to ICES WGSAM meeting in Rome on 14-18 October as part of activities foreseen in the Interreg Italy-Croatia project FAIRSEA "Fisheries in the Adriatic Region a Shared Ecosystem Approach".

ANNEX 2: Email of approval by the JS

**ANNEX 3:** Presentation entitled "Preliminary analysis of fisheries management targets in Adriatic Sea from multispecies modelling approaches" By Panzeri et al.

**ANNEX 4:** Letter of the LP to the JS for requesting Participation to the DORY conference. FAIRSEA: participation to DORY event in Venice 19/09/2019

ANNEX 5: Email of approval by the JS to participate to the event of DORY project

**ANNEX 6:** The presentation "FAIRSEA, Sustainable management of the Adriatic Sea fisheries " given to FARNET event.

**ANNEX 7:** agenda of the FARNET event: "Effective local projects for a sustainable Mediterranean and Black Sea - Transnational seminar for MEDITERRANEAN & BLACK SEA FLAGS"

**ANNEX 8:** List of participants to the FARNET event: "Effective local projects for a sustainable Mediterranean and Black Sea - Transnational seminar for MEDITERRANEAN & BLACK SEA FLAGS"

**ANNEX 9:** Presentation "Developing spatial distribution models for demersal species by the integration of trawl surveys data and relevant ocean variables" by D. Panzeri presented at FAO-Adriamed WG Demersal.

**ANNEX 10:** Presentation "Preference Modelling to support participative processes toward the sustainable management of the fishery in Adriatic sea: the experience of the FAIRSEAproject ". By Lembo et al. given at GFCM-SRC-AS



**ANNEX 11:** Presentation "Integration of trawl surveys data, relevant ocean variables and effort for accurate estimation of spatial distribution of demersal species in Adriatic-Ionian region "BY Panzeri et al., given at GFCM-SRC-AS

**ANNEX 12:** Presentation "Detecting hot spots for demersal species in Adriatic Sea: possible insights for managing fisheries under climate change" BY S. Libralato given at GFCM-SRC-AS

**ANNEX 13:** Annotated agenda of the Fifth meeting of the Subregional Committee for the Adriatic Sea (SRC-AS)

**ANNEX 14:** REPORT of the Fifth meeting of the Subregional Committee for the Adriatic Sea (SRC-AS) of the Scientific Advisory Committee on Fisheries (SAC), given online on 20–23 April 2021