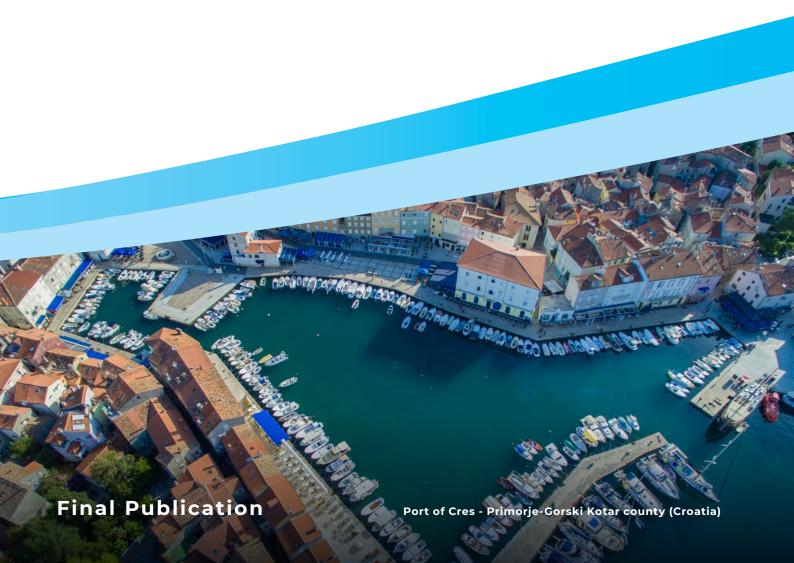


FRAMESPORT

Framework initiative fostering the sustainable development of Adriatic small ports





Project duration

Start 01/01/2020

End 30/06/2023

Budget

6.068.007,96[€] | ERDF contribution

7.138.832,90€ Total budget



Preface

Pierpaolo Campostrini

Managing Director CORILA

This final publication has the aim of briefly presenting FRAMESPORT, from the premises to the challenges of the more critical issues, to the results achieved. This is done through the detailed, albeit concise, narration of the three technical work packages that represented the core of the project.

Worldwide, ports are facing significant challenges in terms of infrastructure renovation, production capacity, finances, regulation compliance, safety and security, environmental sustainability, digitalization, and (somewhere) lack of community support. Importantly, these global challenges do not concern only large ports, but also small touristic ports. In addition, they are affected by the global trend of mass tourism, which is putting new kind of pressures on coastal cities, asking for new strategies, at local and regional scale, able to generate new perspectives for resident people and companies.

Focusing on the Mediterranean area and in particular on the Adriatic Sea, small tourist ports suffer of a strong seasonality and of a not geographically homogeneous level of the offer, compared to the demand (somewhere surplus occur), and their further development is limited by the lack of standardized and competitive services, capable of attracting an increasingly demanding and sophisticated users.

The FRAMESPORT project ("FRAMEwork initiative fostering the sustainable development of Adriatic Small PORTs"), started from these premises with the objective of developing a strategy capable of boosting

competitiveness of small ports, both Italian and Croatian, providing a set of guidelines and instruments pushing for new business models, measures, and actions to recover their overall efficiency and attractiveness.

FRAMESPORT was launched in the same period when the COVID-19 pandemic appeared. This, inevitably, led to some delays in the implementation of the numerous activities foreseen, but did not prevent their success.

In almost three and a half years of the project, the 15 project partners plus 12 associates have developed 25 pilot actions that have generated about twenty tools, classified into three main macro-areas (sustainable growth, business development and system management), and enclosed in a dedicated toolbox whose peculiarity is to ensure the replicability and transferability of the actions in other territories and contexts. These actions and operational tools represent the concrete proof of the success of the project in terms of real impact on the territory in which they were implemented.

All the results achieved by FRAMESPORT have been possible thanks to an important cross-border cooperation, the INTERREG IT-HR program, that invested over 7 million euro in this project.

We have collected the knowledge, developed innovative ICT tools, and defined good practices aimed at a sustainable development of the Adriatic small ports; now it's time for a real transition.

Port of Rovinj Istria County (Croatia)





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Project partners The project involved and territorial coverage 16 Rep. dike – vente RIM STATETTO MORA. DOWN TO I REDAKTOR KTHOP primorsko primorska **Partners Associated** partners ARAP ≿_{asset} o cmcc The project was coordinated by CORILA "Consortium for coordination of research activities concerning the Venice lagoon system" and involved 15 project partners plus 12 associates from Italy and Croatia, guaranteeing a complete geographical coverage along the two opposite coasts of the Adriatic.



FRAMESPORT

Project Objectives

FRAMESPORT (FRAMEwork initiative fostering the sustainable development of Adriatic Small PORTs) was designed with the main goal of supporting a homogeneous improvement of Adriatic small ports sustainability, competitiveness, and attractiveness to make them drivers of socio-economic development of the coastal and inner areas.

FRAMESPORT involved the main interested Public Administrations and relevant stakeholders of the nautical sector to pursue the following activities:

01.

The definition of a comprehensive long-term strategy addressed to both Administrations and market operators in the nautical sector.

02.

The development of an ICT platform as a virtual space, available for users and stakeholders, collecting and systematizing key data on Adriatic small ports and innovative IT tools and proposals for Adriatic small ports development and management.

03.

The implementation of innovative and concrete pilot initiatives.



WORK PACKAGE 3

Framework strategy for the development of small ports

The strategy developed in the framework of FRAMESPORT builds upon the evidence and outcomes resulting from the numerous project activities with the aim of providing a coherent and harmonized approach to address the challenges that Adriatic small ports currently face.

The FRAMESPORT strategy intends to foster the development and resilience of small ports and marinas of the Adriatic Sea to climate and socio-economic changes, enhancing their role as drivers for the ecological transition, as well as promoters of a more sustainable and integrated tourism. Indeed, ports are strategic nodes of access from the sea to the mainland, capable of connecting inner and coastal areas through an intensification of the green mobility and of the tourist flows to lower the impact on the territory, in line with a longer boating season.

The strategy objectives, identified thanks to a careful analysis of relevant European and national directives concerning tourism and sustainability, and taking into consideration the local needs and priorities, aim therefore to support touristic ports towards a transition, making them more:

CONNECTED, with the territory through an intensification of the green mobility, valorising the local knowledge and traditions, also through training.

GREEN AND SUSTAINABLE, making the best use of resources, enhancing the efficiency through the use of renewable energy and new technologies and supporting virtuous behaviours.

SAFE, preventing and limiting accidents for vessels, users, and the environment through the development of innovative risk prevention and management systems.

COMPETITIVE AND ATTRACTIVE, thus able to respond to the demand of the tourism sector and to attract new types of users.



Capitalizing the results of the FRAMESPORT pilots initiatives, the inputs received from local and regional stakeholders, as well as the results emerged from the analysis of demand and supply based on data on small ports' infrastructures and services collected during the project lifetime, we were able to identify **8 areas of intervention** on which the strategy is focused:

01.

Governance and planning (land/sea), to overcome the current lack of a shared and strategic vision.

02.

Tourism, to drive a diversification of the touristic routes and better connect the coast to the inland territory.

03.

Maritime culture, to understand how this sector will evolve in the future also in relation to external factors (society, governance, climate change ...).

04.

Landscape and heritage protection, in relation to the challenges connected to climate change.

05.

Green transition, to renovate the small ports' infrastructures and services in a sustainable perspective.

06.

Climate change and risk management, by introducing innovative and smart monitoring systems to deal with risk prevention and mitigation within and outside the ports.

07.

Coast and waters, including the management of water, ecosystems, and all the physical assets of the coasts, to ensure high quality standards and a proper connection with river routes and land.

08.

Maritime transport, through the offer of sustainable and shared mobility services.



The identified areas of intervention have been declined into a list of more pragmatic indications, resulting in more than 30 strategic "actions" responding to different scales of intervention, from national to local one. These actions range from the definition of national and regional measures and institutional tables to suggestions in terms of promotion of activities, support to infrastructure renovation and ideas for public-private partnership. They focus on the maritime sectors, with reference to the themes of energy transition, sustainable and diversified touristic offer, smart mobility, digitalization, circular economy for a landsea integration that enables small ports to respond to multiple environmental, social, cultural, and economic challenges.

The actions are linked to the three macrotopics identified by the FRAMESPORT toolbox developed under the Work Package 5, which are sustainable growth, business development and system management.

An example of strategic action, transversal to the three macro-topics, is the diversification of touristic flow on different activities (e.g., Fishing Tourism, Rural Route) to improve economies, connect territories and reduce human impacts.

The FRAMESPORT Strategy has the ambition to be used by decision makers, at Regional/County and national level, who can benefit from an overview of the main needs of small ports and possible steps to be done to achieve a sustainable development in conjunction with the territory, of which ports are integral part.

The strategy is also designed for port authorities and small ports' managers who can find a list of opportunities for innovation and diversification of their offer, supporting their decisions based on the lessons learnt coming from the implementation of the project activities.

For sure, the deployment of the strategy requires significant financial effort and investments which cannot be faced by small port managements only. An appropriate financing plan at Regional/County level with an action perspective of 10-15 years, as well as national financing support, in particular for cultural purposes and environmental protection, should be guaranteed, and further EU funds could be accessed to allow for the operative implementation of the key elements identified by the FRAMESPORT strategy.

The strategy is intended to be implemented over a short and medium period and reviewed to overcome the changing conditions and ensure a long-lasting effect. Considering the objectives set by the EU Green Deal, the first key deadline for priority actions that can be set is 2030.



Infographic of touristic offer diversification





WORK PACKAGE 4

Baia Marina di Vallugola Marche (Italy)

Conveying knowledge of macro-themes into actions

Work Package 4 was coordinated by the Croatian Ministry of the Sea, Transport and Infrastructure that successfully guided the partnership in facing the relevant activities foreseen, including the collection of detailed data on small ports' services and infrastructures, the identification of best practices and an extensive stakeholder consultation, with the aim of framing a comprehensive understanding of the small port phenomenon at the Programme area level.

Within WP4, a methodology for analysing the "state of the art" related to small ports of the Adriatic coasts was developed, ensuring a systematic approach for data collection and reporting. This allowed the creation of a standardized set of information on Adriatic small ports, that were detailed in the regional reports and then summarized in the joint report, showing the findings on the current situation.

Importantly, national, regional, and local stakeholders, including public authorities and private entities, were engaged in constructive open dialogues to collect the diverse perspectives, needs, and expertise of those directly involved in small ports' management and development, providing valuable inputs for the definition of the FRAMESPORT strategy.





Map showing the ports (n= 598) for which data relating to facilities and services have been collected within the framework of the FRAMESPORT project.

Over 50 meetings were organized during the project lifetime, engaging more than 200 high-level industry- relevant stakeholders. This extensive consultation phase enabled the identification of key themes, priority actions, and key performance indicators that guided the overall strategy of the project and allowed for a **deeper understanding of the challenges, priorities, and aspirations** related to small port development in different geographical areas. Furthermore, by bringing together actors from various sectors and backgrounds, it created the conditions for the creation of a **stakeholder platform**,

which aimed to foster the collaboration and inclusivity among them, as well as the networking, knowledge and best practices sharing and highlighting each expertise.

The interactions and exchange of ideas generated during these meetings supported the building of relationships and partnerships that, we wish, may further advance the sustainable development of Adriatic small ports in the long term.



WORK PACKAGE 5

Innovative tools and services boosting strategic development of small ports

WP5 represents the practical implementation phase of the FRAMESPORT project, under which partners have carried out 25 pilot actions to test and validate practical solutions in the context of their territories. All these actions aim to drive sustainable growth in the small ports of the Adriatic region. All the activities performed in WP5 are strongly related to the other technical work packages. Data collection and the analysis of the current situation and best practices set the basis for the planning and the implementation of the pilot actions that actively involved various stakeholders, including local authorities and educational institutions. Moreover, key messages and priority actions to be taken coming from the experiences gathered from the Pilot Actions implementation and the tools generated from them, have fed the final strategy of the project.

The pilot actions were carried out using a common methodology and focused on five main themes, identified to address the key challenges faced by Adriatic small ports and their surrounding territories. These themes include:

- ICT application and service development (ICT),
- The planning and management of the territory (P&M),
- Environment and energy (E&E),
- Business aspects for the innovation and development of enterprises (BIZ),
- Training and knowledge aspects linked to the local territory (T&K)

Port of Trani Puglia (Italy)





Macro-themes



Environment and energy aspects (E&E)



ICT applications and services development (ICT)



Spatial planning and management (P&M)



Training and knowledge aspects (T&K)



Business-oriented aspects (BIZ)

Pilot actions











Sub-topics for ICT & service development

P P P

Promotion of ports' resources and territory



Harbour and navigation safety













Management of port operations and services





Monitoring of seaside and landside port areas



The FRAMESPORT Portal provides valuable structured information and innovative tools for nautical tourists, port managers and investors, acting as a virtual space where to exchange ideas, share best practices and concrete proposals to improve ports' services and infrastructures.

The portal for small ports and stakeholders of the Adriatic basin is available at framesport.eu

The FRAMESPORT portal

The final goal of the pilot initiatives was to develop a TOOLBOX consisting of 21 complementary tools coming from the 25 pilot actions. Indeed, some tools merge the results of two or more pilot actions contributing to the same need or aspect. The final outcome is a navigable document consisting of guidelines, applications and successful case studies that can support the sustainable development of small ports throughout the entire Adriatic area.

The tools are categorized based on their use during different planning phases (preliminary, strategic planning, and operational design phases) and aligned with three priority axes: sustainable growth, business development, and system management, which together form the core of the FRAMESPORT Strategy.

Sustainable growth

The SUSTAINABLE GROWTH focuses on reducing the environmental impact of the ports, developing territorial strategies, and fostering awareness among the younger generation about port activities and cultural identity. Port authorities and regional and local administrations can refer to the pilot actions included in this macro topic to implement solutions towards a sustainable improvement of the small ports and their territory.

Business development

The BUSINESS DEVELOPMENT focuses on increasing the attractiveness of ports and their surrounding areas, with particular reference to tourism. Tools and guidelines included in this macro theme are provided to port authorities and public administration to strengthen their services and enhance the range of opportunities for the port users.

System management

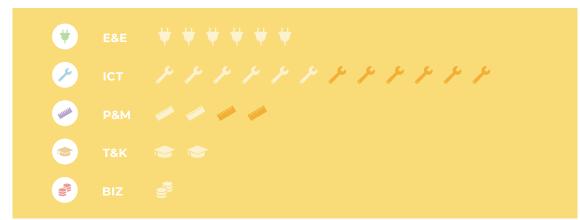
The SYSTEM MANAGEMENT centres around improving the overall level of efficiency of small ports management through planning instruments, in particular Masterplan, and IT system.

The toolbox ensures that the results achieved, and the approach followed during the implementation of the pilot actions can be replicated and transferred to other contexts, both within the territorial framework of the FRAMESPORT Project and beyond. It thus guarantees and favours the replication, scalability, and transferability of these experiences and promotes the use of the applications developed.

The toolbox and all the elements contained in it are available on the FRAMESPORT portal.



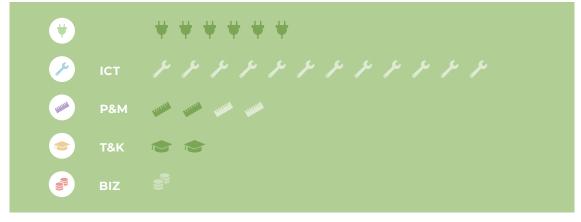
SYSTEM MANAGEMENT



SUSINESS DEVELOPMENT



SUSTAINABLE



FRAMESPORT Pilot Actions clustered according to the three macro-topics of the toolbox









WORK PACKAGE 2

Communication and dissemination activities

During the whole duration of the project, FRAMESPORT could count on thorough and continuous dissemination activities carried out by the Leader of communication and by each single partner. Dissemination of the results reached and of the main project achievements to both specialized and general public was guaranteed through the release of 13 press releases that were shared by each partner to their media lists. Periodic newsletters were sent to subscribers and monthly communications were published on the project official social media channels and partners' social channels to keep interested stakeholders updated with the project advancement and news. Brochures, roll-ups, and promotional materials were also produced and printed by the partners during the project lifetime

to disseminate the project's key topics.

Significant effort was made on organizing events to disseminate and discuss the project's objectives, progress and results. The Project Partners organised more than 20 local-targeted events and participated to 17 cross-fertilization events. These events ensured over 2.100 people reached among general public, over 70 among local, regional and national authorities, over 165 enterprises, over 28 transport operators and 25 among education, research organization and universities.

We can also count on the publication of **three peer reviewed scientific papers**, a result of great value for the project itself and for the dissemination of the results to the scientific community.



















Conclusions

Small ports are gateways from the sea to the hinterland, capable of offering to the user a vast range of experiences, if well served and connected with the surrounding areas. Having this in mind, investing in ports by increasing the volume of traffic (passengers/ freight), reducing congestion, improving accessibility, mitigating environmental impacts, using alternative energy, encouraging the ecosystem approach to the management and territorial planning of resources, represents a key element to relaunch the economy of the whole territory, both coastal and inland.

To create this strategic recipe, FRAMESPORT performed an analysis of the "state of the art" of the nautical sector in the Adriatic area, collecting and systematizing the geospatial data of the small touristic ports at the sea and the services they offer, involving from the very beginning the main actors in the Italian and Croatian nautical sector to identify the main issues and priorities to be faced, internalizing their suggestions and opinions and combining them with the main European directives in terms of sustainability and economic development.

The collaboration, dialogue and network established with the stakeholders are undoubtedly added values of this cross-border cooperation project. Indeed, FRAMESPORT has succeeded in bringing people together, making the two countries able to discuss and face common issues, leading to shared and common solutions. To foster the creation and improvement of a consistent and wide network of small ports, businesses and institutions between Italy and Croatia, it has been developed an innovative portal "framesport.eu", that is one of the results we are most proud of. The platform can be somehow considered a multiple tool for small ports and stakeholders of the Adriatic area. It contains data, information and tools for networking and promotion, knowledge and capacity building and collaborative data management. And it is exactly on the FRAMESPORT portal that we bet to avoid that the knowledge, network, and richness in terms of data and information developed in the project lifetime are not lost, but rather continue to grow and spread to generate a virtuous driving force for the relaunch of small ports of the Adriatic. Conditio sine qua non for the portal to continue to be useful and attractive for users and stakeholders is that data and information contained therein are kept updated. To achieve this goal, the support of stakeholders is needed and for this reason we asked them to sign a letter of commitment for supporting the web portal of Adriatic Small Ports. This is another very important result that FRAMESPORT was able to achieve.

Three years ago, we started this adventure being aware that it was challenging. Now, at the conclusion of the project, we can say that, thanks to the commitment and dedication of all the partners, we were able to return to the community the resources we have received on loan in terms of innovative ICT tools, good practices aimed at a sustainable development, slow-impact mobility and new certification protocols proposal, such as the Ecolabel, defined to mark the small port as excellent from a sustainability perspective. The challenge now is spread the lessons learnt and maximize their effects to make tourist ports more connected, sustainable, technological, safe, and therefore more competitive in terms of offer.

Arsenale di Venezia (Italy)





COORDINATON

CORILA - Consortium for coordination of research activities concerning the Venice lagoon system

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Visit the project website to learn more about FRAMESPORT:

programming14-20.italy-croatia.eu/web/framesport

Discover FRAMESPORT Portal at:

www.framesport.eu

Project Partners



































Our network

The project partners



Pierpaolo Campostrini

Managing Director - CORILA

WEB SITE



CORILA had the honour to coordinate FRAMESPORT, guiding the partners in the successful implementation of the numerous activities envisaged by the project. Together with its associated bodies, University IUAV of Venice and University of Padova, CORILA was responsible in particular for the development of the portal framesport.eu and of the final strategy to make the Adriatic small ports more attractive, connected, safe and sustainable.







Anna Maria Cisint Mayor - Municipality of Monfalcone **WEB SITE**



Municipality of Monfalcone

The FRAMESPORT project has played a key role in the development of the nautical sector of small ports and sailing centres of the Monfalcone territory. The actions that have been developed, and that will be continued in the future, have been dedicated to the development of two very important sectors: training in the ancient traditions of the sea professions and the development of new technologies, and the creation of a digital tool for the tourist promotion of the area aimed at sailors and nautical centres.

Francesco Paolo Nanni Costa







ITL - Institute for transport and logistics foundation

As WP5 Leader, ITL developed a common methodology for the Pilot Actions implemented by the partnership. ITL also defined and developed the FRAMESPORT Toolbox that is available in the FRAMESPORT Portal. At the local level, ITL successfully executed three pilot actions at the Rimini Canal Port. These actions focused on proposing a project for the port's renewal, monitoring the port area, and promoting port activities.





Giuseppe Garofalo Project Manager - ASSET **WEB SITE**



ASSET - Regional strategic agency for the eco-sustainable development of the territory

The main focus of the Regional Agency ASSET was to improve the connectinity among the Apulian small ports. ASSET developed a webApp sharing free services such as touristic information and contacts of the ports of Vieste, Trani and Otranto, covering the entire coastal area of Apulia Region. In parallel, ASSET worked on a awareness campaign to promote a conscious use of plastic and distributing plastic-free kits.





Andrea Santori

President SVEM - Sviluppo Europa Marche *WEB SITE*



SVEM - Sviluppo Europa Marche

In the ports of Vallugola/Gabicce and Numana, SVEM tested new forms of soft mobility (e.g. e-buses and e-bikes). An in-depth study was also carried out in the 9 small ports of the Marche region to update and further analyse the existing knowledge, to examine their needs in terms of growth and sustainability and to define guidelines for developing tourist ports as part of the regional tourism policy.

Romeo Ciammaichella

Project Manager - ARAP ABRUZZO **WEB SITE**



ARAP - Regional Agency for Productive Activities

ARAP promoted the constitution of an Innovation LAB, which represents a physical place and an intersection of subjects, activities and objectives that constitute an "hub" of economic, social and cultural innovation, to promote the development of small ports along the Adriatic coasts. The Lab engaged different stakeholders to stimulate measures and actions aimed at recovering small port efficiency and attractiveness. It was articulated in 4 sessions about energy efficiency and pollution reduction; valorisation of "port space"; ICT solutions; training paths.



IES Assessment as Supplement Filment

Giovanna Sciulla

Representative for territorial cooperation programmes - AAST





AAST - Autonomous agency for hospitality and tourism of Termoli

AAST was responsible of creating and developing a free multilingual platform, the FramesPort app (available on iOS and Android). This app has the main aim to support marinas to easily manage their berths, moorings and bookings, while yachtsmen can book the best moorings according to their needs and find out all the information to enjoy the touristic attractions around the port.





Doriano LabinjanDirector - Umag - Novigrad Port Authority WEB SITE



Umag - Novigrad Port Authority

LUUN implemented a port management system that enables monitoring of vessels and efficient management of services. The system speeds up the mooring and disembarking procedure, enables port and mooring monitoring via video surveillance and ultrasonic sensors and enables billing for the service. An electrically powered vessel is now used for fast and environmentally friendly personnel transport.

Ljudevit Krpan

Head of the Administrative Department for Regional Development, Infrastructure and Project Management - Primorje-Gorski Kotar County, **WEB SITE**



Primorje-Gorski Kotar County

PGKC's pilot action enhanced the monitoring and management system of the Port of Rab, which became the first smart port in Croatia. The integration of surveillance cameras and Bluetooth devices with software systems provides accurate and real-time data, enabling better visibility, security, and efficiency in port operations, serving as a model for replicability in other county ports.



Branka Batur

Assistant of the director - County Port Authority of Zadar **WEB SITE**



County Port Authority of Zadar

The CPA Zadar benefited from its participation in the FRAMESPORT project as it was able to gain experience and knowledge useful for developing a Master Plan for future planning and strategic management of small ports in Zadar, providing also some inputs for the final strategy of the project.





Paško Dželalija

General manager - Sibenik Port Authority

WEB SITE



Sibenik Port Authority

The main objective of Port of Šibenik authority was to develop an innovative IT tool to predict the possible geographical spread of pollution at sea. In case of an accident, the installed buoys with pollutant sensors will enable Port of Šibenik Authority to predict the geographical spread of pollution and respond properly, therefore helping in reducing the pollution in the entire Adriatic basin. LUSI also acquired high resolution drones to detect and prevent potential pollution in the whole port area. LUSI also successfully composed a study for alternative moorings of ro-ro ships with help of external experts.

Tanja Poletan Jugović

Professor - University of Rijeka, Faculty of Maritime Studies Rijeka

WEB SITE



PFRI: University of Rijeka, Faculty of Maritime Studies Rijeka

Faculty of Maritime Studies contributed to the FRAMESPORT project by: analysing the Italian and Croatian port terminology, criteria and definition of the term "small ports", reviewing scientific journals, studies and statistics to identify the current status of small ports, corresponding with Port Authorities, analysing surveys of marinas, disseminating project results and publishing one scientific peer reviewd paper based on the project research.



Dražen ŽgaljićDirector - Logoteam LTD
WEB SITE



Logoteam LTD

As WP2 Leader, Logoteam Ltd. coordinated the communication work package and successfully completed the pilot study on upgrading small ports. We explored possibilities for enhancing infrastructures, super-structures, user services, and port management organization, thus providing valuable insights for the whole partnership and contributing to the project's durability.





Gianandrea Mannarini Senior Scientist - CMCC

WEB SITE



Euro-Mediterranean Center On Climate Change Foundation

CMCC developed hyper-resolution (30m) ocean models, providing seamless circulation and wave modelling from the open sea to small harbours of the Apulia areas facing the Adriatic. Furthermore, CMCC developed an operational platform for optimal routing of sailboats in the Adriatic sea considering both the freshest ECMWF wind and Copernicus sea current forecasts. Overall, 21 small harbours and 3 sailboats were considered.

Ante Stipić
Director - Seny Port Authority
WEB SITE



Senj Port Authority

Port Authority of Senj successfully elaborated a Master Plan for the development of a county-level port system in Lika-Senj County, thus, contributing to the strategic governance of small ports in a joint way between Italy and Croatia.



Jana Borić

Head of Legislation Service within the Maritime Affairs Directorate - Ministry of the Sea, Transport and Infrastructure, Directorate for Maritime Affairs

WEB SITE

Ministry of the Sea, Transport and Infrastructure, Directorate for Maritime Affairs

As WP4 Leader, the MMPI contributed to the project advancement as a whole. The MMPI ensured that the work done represented the connection between the more practical approach of pilot actions adopted in the WP5 and the core strategic approach requested by the WP3. The MMPI also ensured that the efficient dialogue required between the partners and their stakeholders were met.