

# Design of the FRAMESPORT ICT platform development and implementation guidelines

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## Table of Contents

<b>1. Introduction.....</b>	<b>4</b>
<b>2. Objective .....</b>	<b>5</b>
<b>3. Methodology.....</b>	<b>8</b>
<b>4. Results.....</b>	<b>9</b>
FRAMESPORT platform overall features.....	9
FRAMESPORT Platform Implementation Guidelines .....	11
<b>5. Conclusion .....</b>	<b>26</b>
<b>Annex A - SWOT analysis to decide the network leader.....</b>	<b>27</b>

## 1. Introduction

The FRAMESPORT project has the aim of creating a coordinated initiative to support the sustainable development of the small ports of the Adriatic basin in a strategic perspective. Therefore, the objective is to turn small ports into a proactive driver of the socio-economic development of this coastal area. This strategic goal requires a multifaced and interdisciplinary approach, including both the adoption of concrete pilot projects as well as identification of priority themes to be promoted within the overall strategy. These actions are going to be performed adopting a bottom-up approach, involving local and national stakeholders since the beginning of the project. Also, the various project partners have been selected to guarantee a wide territorial cover. Their aim is to address the planning and management topics, the business models implementation, the enhancement of training and competence, as well as the development of Information and Communication Technologies (ICT) tools and services. In addition, they are going to develop an ICT platform that collects and systematizes the key data on small ports in order to use this information to drive sustainable development. The portal is going to work as a bridge between the two sides of the Adriatic basin, the Italian and Croatian one. In this way, it is possible to create a more consistent and united network of small ports, businesses, and institutions, and align their sustainable performance, infrastructure, and policies in order to favour their development and growth.

The Work Package (WP) 3 represents the core technical activity of the FRAMESPORT project. In fact, it has the aim to create the aforementioned ICT platform, or portal, and define a common strategic approach to support the adoption of better practices to boost sustainable development. The WP3 is therefore accompanying the whole evolution of FRAMESPORT project, being the backbone of the platform collecting information on small ports infrastructures and on their potentialities. These information are also going to be valuable to outline the action plan to promote sustainable development in the area.

The WP3 is also an umbrella activity that allows to launch the WP4 and WP5 activities. In particular, the WP4 has the objective of defining the general picture of the small port phenomenon. Thus, it is going to deliver a wide set of data fundamental to populate the database of the FRAMESPORT platform and identifying the best practices and initiatives that are characterising small ports. These activities also have the aim of discuss and define the priority themes and, consequently, the actions to be promoted at an upper level. Therefore, it is going to contribute to the definition of the FRAMESPORT strategy for sustainable development. In regard to WP5, this is the practical side of the project. Pilot projects are going to be performed to test technical solutions and experimental initiatives to identify new or alternative paths to solve current challenges as well as to move small

ports towards a sustainable development. The pilot projects are going to use the data contained in the FRAMESPORT portal's database, thus ensuring the full interoperability and scalability of data and actions. Furthermore, the WP5 aims at identifying the relevant horizontal themes and priorities which are going to be transferred to the upper level of discussion in WP4. In this way, these information are going to be translated into actions and, consequently, used as backbone of the overall FRAMESPORT strategy delivered in WP3.

## 2. Objective

The WP3 has two main objectives. The first one is to create an ICT platform, or portal, that is going to include the main data related to small ports and the various stakeholders of the Adriatic basin. The second is to delineate, according to this information, a strategy to promote the sustainable development of the area. In particular, the WP3.1 aims at designing the portal and, therefore, define its structure, data requirement, features, and functionalities.

This document depicts the outcome of the activities of the WP3.1.2. Therefore, it is going to focus on the steps that lead to the definition of the FRAMESPORT portal implementation guidelines. It is therefore a document where all the info about the final structure, feature and functionalities of the platform are collected.

The final objective of the WP3.1 is creating an efficient, useful, and appealing IT platform. The projects partners wanted to create a portal that would be useful to all the stakeholders involved in the project. Therefore, this platform has not only the aim of presenting the network of small ports and organisations of the Adriatic basin but also to support their sustainable development. Thus, sections to present the various small ports and local businesses/institutions were included as well as sections about best practices, performance monitoring and improvement, pilot project and their outcome, business continuity, and regulations. In this way, it was possible not only to create a platform where all the stakeholders of the Adriatic basin are adequately presented to the public and potential clients, but also an IT tool that could provide an efficient and effecting monitoring and improvement of the sustainable performances of these actors. This double objective was chosen to overcome the problem of a limited participation to the project by the various stakeholders of the area. Providing the opportunity to gain visibility and attract customers, together with the one of improving economic, social and environmental performances, was assumed to be an effective strategy to attract as many Italian and Croatian stakeholders as possible.

Achieving this double objective requires collecting an adequate amount of data and constantly update them. A desk research and literature review on small ports, marinas and their sustainable development provided a solid background to gather all the required information (see the Methodology section below). In relation to the portal's data update, two strategies are going to be adopted. The first one consists of establishing partnerships with associations that can provide updated data on a daily basis (e.g., weather forecast and potentially dangerous meteorological phenomenon). The second one is involving the various stakeholders that can interact with the platform. They have the opportunity, according to their role and related permissions, to update the information contained in the portal (FRAMESPORT platform implementation guidelines → PRIVATE AREA). In this way, the various actors are capable of maintaining the platform's data constantly updated. To ensure validity and reliability of these information, a third part is going to take care of data validation in order to guarantee that only trustworthy and updated information are going to be displayed in the portal (FRAMESPORT platform implementation guidelines→PRIVATE AREA→Third Party). In this manner, also sensible information, such as those related to sustainable performance monitoring and best practices, are assured to be valid and reliable. This prevents the risk of jeopardising the creation of an effective action plan to drive sustainable development due to the lack of trustworthy and transparent data.

Another aim of the WP3 is to support also pilot projects by emphasizing their scope as well as monitoring their achievements. In this purpose, there are going to be two sections in the portal dedicated to pilot projects. The former is going to be open to public and aims at presenting the various initiatives, their progress status, and outcomes (FRAMESPORT platform implementation guidelines→PUBLIC AREA→About Us→Knowledge and Experience→Pilot Projects). In this way, the people that interact with the portal can grasp the pragmatic approach of the FRAMESPORT project. The latter is going to be in the private section of the portal and has the objective of containing the tools for the management and innovation of small ports that are going to be the output of the various pilots (FRAMESPORT platform implementation guidelines→PRIVATE AREA→Tools for management and innovation of small ports). These tools are providing a practical support to overcome some of the challenges related to the sustainable development of the Adriatic basin. Therefore, all the experiences, lesson learnt, and tools related to the various pilot projects are going to be available to the stakeholders that need them. This is also going to be beneficial to the project partners, who are going to have valuable data and know-how to delineate the strategy for the sustainable development of the area.

As we can understand from the previous paragraphs, the mission of the FRAMESPORT portal is becoming a fundamental tool to drive, in a proactive manner, the socio-economic development of

the Adriatic basin. In fact, local companies and institutions are going to be supported in promoting their activities, enhancing their performances, and becoming more sustainable, profitable, and attractive. In this way, it is also possible to create a network of small ports, businesses and institutions that is consistent, resilient, and sustainable and that constitutes a fundamental pillar of the Italian and Croatian economies.

The aforementioned mission of the portal is related to the second objective of the WP3, namely the creation of a strategic framework to drive the sustainable development of the Adriatic basin. In fact, the platform and the data contained in it are the backbone of this action plan. Moreover, the data and experience coming from WP4 and WP5 are going to be fundamental to achieve this objective. In fact, WP4 is providing information about the small port's phenomenon, its best practices and initiatives, consequently delineating the actions that could be implemented on an upper level. WP5, is going to translate the platform's data into action by performing pilot projects to develop tools and methodologies to enhance and promote sustainable performances and practices among the various stakeholders involved in the FRAMESPORT project. Therefore, the combination of activities and outcomes of these three WP will allow to delineate an effective and efficient framework to move the Adriatic basin towards sustainability.

To sum up, the FRAMESPORT portal and project is going to create a bridge between the Italian and Croatian sides of the Adriatic Sea, while the network of small ports, businesses and institution is going to become more solid, resilient and sustainable. The infrastructure and services offered to the various stakeholder of the area are going to be improved and aligned, providing a better and more consistent set of benefits to the people visiting and working in these places. Sustainable practices and initiatives are going to be promoted and supported, thus improving the overall economic, environmental, and social performances of the Adriatic basin. Policy makers can also benefit from the FRAMESPORT portal and project: it allows to create policies that are better aligned to the needs of stakeholders of both sides of the Adriatic basin thanks to the stronger and unified network of actors created by the project.

A schematic overview of the positioning of the present deliverable within the overall logic of WP3 is presented in the following figure.



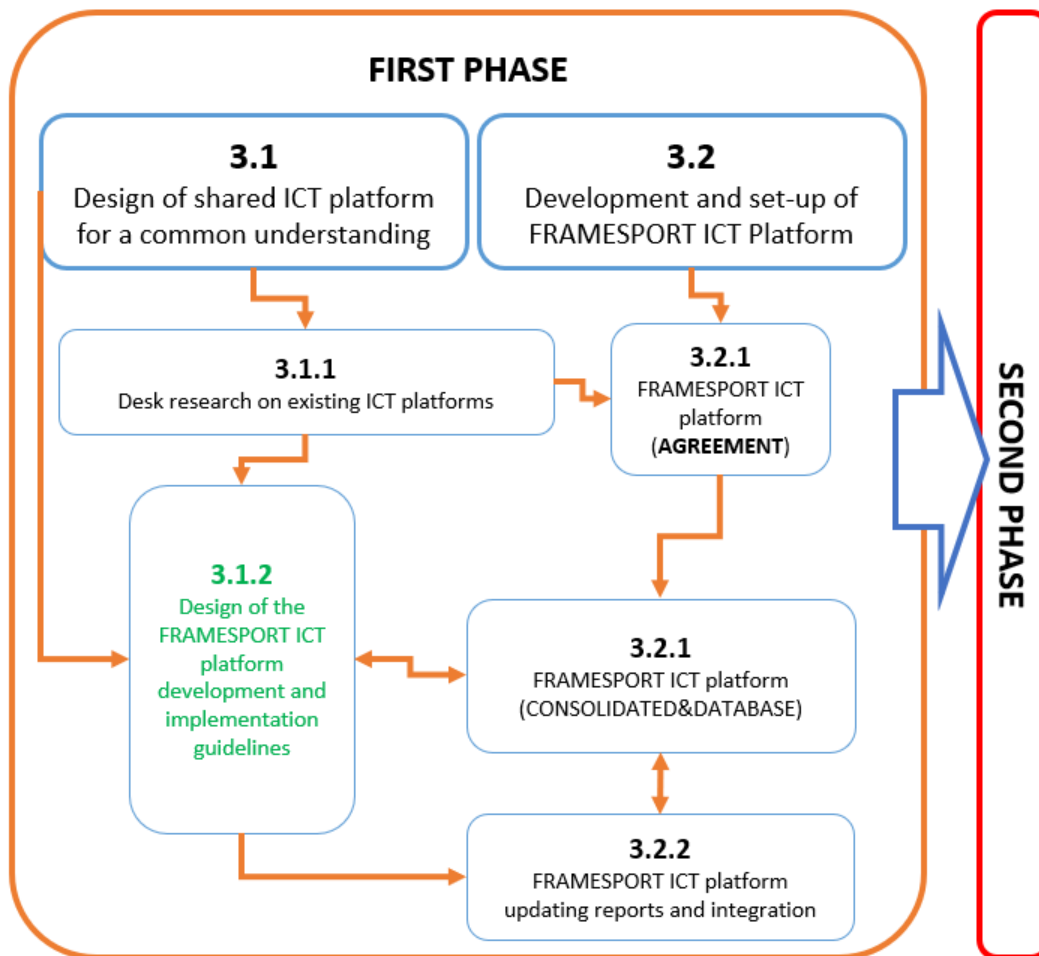


Figure 1. Overall structure of the WP3/Phase 1, positioning the present deliverable (in green)

### 3. Methodology

This chapter describes the methodology that was adopted to create the implementation guidelines of the FRAMESPORT portal and delineate its final structure, features and functionalities. The following list is presenting the methodological steps that have been performed to achieve this objective.

- Building up on WP3.1.1:** The desk research and literature review performed in the WP3.1.1 allowed delineating the risks and opportunities coming from the context in which we are operating and the overall objectives, features and functionalities that the portal shall have



in order to become an effective and efficient driver of touristic and sustainable development of the Adriatic basin.

- **Data collection and update:** Delineation of a strategy to collect the data required by the platform and definition of a methodology to constantly update and maintain the portal. The desk research and literature review provided a great amount of data and potential sources of information. These references were used to delineate the data requirement and potential partnerships to obtain updated and trustworthy information.
- **Portal structure:** Creation of a model of the FRAMESPORT platform using the obtained data and features. This is the first draft of the portal which was presented to the project partners both in a graphic and written way to provide a visual representation of the structure and an in-depth description of the various sections.
- **Feedback and improvement:** Involvement of the project partners in the definition of the final structure of the platform via a collection of their feedback. About 20 comments from 4 partners were collected. This step allowed improving the portal's structure according to comments and suggestions coming from the various stakeholders. Furthermore, it was very valuable to understand the relevant sections and to obtain new ideas for improvement. The outcome of this step was the final structure of the portal.
- **Implementation guidelines:** A report containing the data related to the platform and its features and functionalities provided clear and efficient instructions on how to create the portal. The Croatian colleagues of the PFRI, thanks to their experience in organising tenders to select ICT companies, supported the creation of this report providing feedback to its draft.

## 4. Results

This chapter is presenting the process that led to the development of the FRAMESPORT portal implementation guidelines. First, the overall features of the platform are presented followed by an in-depth description of the public and private areas of the website.

### FRAMESPORT platform overall features

The aforementioned methodology allowed establishing the objective of the platform and its features. The objective is twofold. On the one hand, sponsoring the small ports and coastal organization in order to promote tourism. On the other, supporting and driving a sustainable development of the area. For these reasons, descriptive sections about the stakeholders involved should have been displayed together with ones about sustainable development. Thus, the portal has the function of presenting and sponsoring the various businesses and institutions, facilitating tourists in travelling within the area and supporting continuous performance improvement.

Therefore, the portal shall contain information about the following topics (the various sections are going to be presented in detail in the following chapters):

- The FRAMESPORT project, its partners, achievements, and news. To provide concise but clear information about the various stakeholders involved and on the objective of the project.
- A section about knowledge and experiences to allow an adequate exchange of know-how among the various small ports and coastal organizations. Together with the aforementioned sections about best practices and performance monitoring, this section provides information about articles, pilot projects and regulations. In this way, it is possible to include in a single section all the know-how of the FRAMESPORT project and make it available to all the interested stakeholders in an easy and efficient manner.
- Information about the territory to promote a better understanding of the area and support touristic activities. This section shall include data about the coastal area and its features (i.e., sea characteristics, human activities, and infrastructure), local organizations (small ports, local businesses, cultural sites and events), the weather forecast and a tool to support tourists in planning their itinerary.
- A forum to collect all the opinions and experiences of the various people that are interacting with the Adriatic basin for various purposes (e.g., tourism, business, research).

The methodology also allowed defining the first draft of the platform that was improved thanks to the involvement of the various project partners. The structure of the platform was presented to them in order to collect their feedback and suggestions. Initially three project partners provided their feedback and after a reminder another partner did. A total of about 20 feedbacks related to various aspects of the platform were collected. The various feedbacks were put together in a document to explain how and if they would be implemented in the FRAMESPORT portal. This document was circulated among the partners for a final collection of comments but none of them replied. As a consequence, the structure of the portal presented in the aforementioned document was considered as the final one. This process of collecting and implementing the feedback from the project partners represented an added value because many valuables' ideas, recommendations and corrections were proposed. The implementation of these feedback allowed defining the final structure of the portal and the delineation of all its functionalities that are presented in the following section.

## FRAMESPORT Platform Implementation Guidelines

This section is presenting the implementation guidelines of the FRAMESPORT portal. It is therefore depicting the role of the network leader, the landing page, the public and private areas of the platform, and the strategy to keep it updated in the future.

### **NETWORK LEADER**

The network leader is the actor responsible of running the FRAMESPORT platform and make it capable of meeting its objectives in the upcoming years. Therefore, it has the aim of managing the platform, update the data contained in it, and organise periodic and occasional maintenance. Thus, the main role of the network leader is keeping the portal functional and assure that all its information and functionalities are updated and functioning. Moreover, it has the aim of proposing new activities and projects to maintain a good level of attractiveness of the platform and of the Adriatic basin.

This role is therefore fundamental for the FRAMESPORT project, and the stakeholder involved. Consequently, the actor responsible of these activities shall be carefully chosen. For this reason, a SWOT analysis (presented in Annex A) was performed to assess if it is better to have a public or private organization as network leader.

### **LANDING PAGE**

The landing page of the FRAMESPORT portal is composed of the title of the platform on top followed by a bar with the various sections of the portals (i.e., About us, Land and Sea, Plan your Trip and Forum). Underneath the bar, there is the Home page (see: PUBLIC AREA→Home) which is presenting the FRAMESPORT project, its news and a map of the Land and Sea. In addition, on the top right is going to be possible to choose between various languages (Croatian, English and Italian are a must, other languages are nice to have) and there is going to be the “Log-in” button to access to the Private section. In fact, the portal is going to be composed of a public and private section. The former is accessible to everyone and is presenting the publicly available information. These info are related to:

- The FRAMESPORT project, its actors, pilots and achievements;

- The knowledge and experience, to facilitate the sharing of know-how and to promote the monitoring and improving of sustainable performances;
- The Adriatic basin, its geographical features, infrastructure, businesses, cultural sites and events;
- Touristic activities and a support to plan the itinerary and book the various structures.

On the other hand, the private area requires specific credentials to be accessed. This section of the portal allows the various stakeholders to edit the data contained in the portal related to them and see additional sections and information that can bring benefit to their way of making business.

The public and private area are going to be presented below.

## PUBLIC AREA

This section is describing the public area. All the info presented in this section are publicly available. The figure below is representing the structure of the public area.

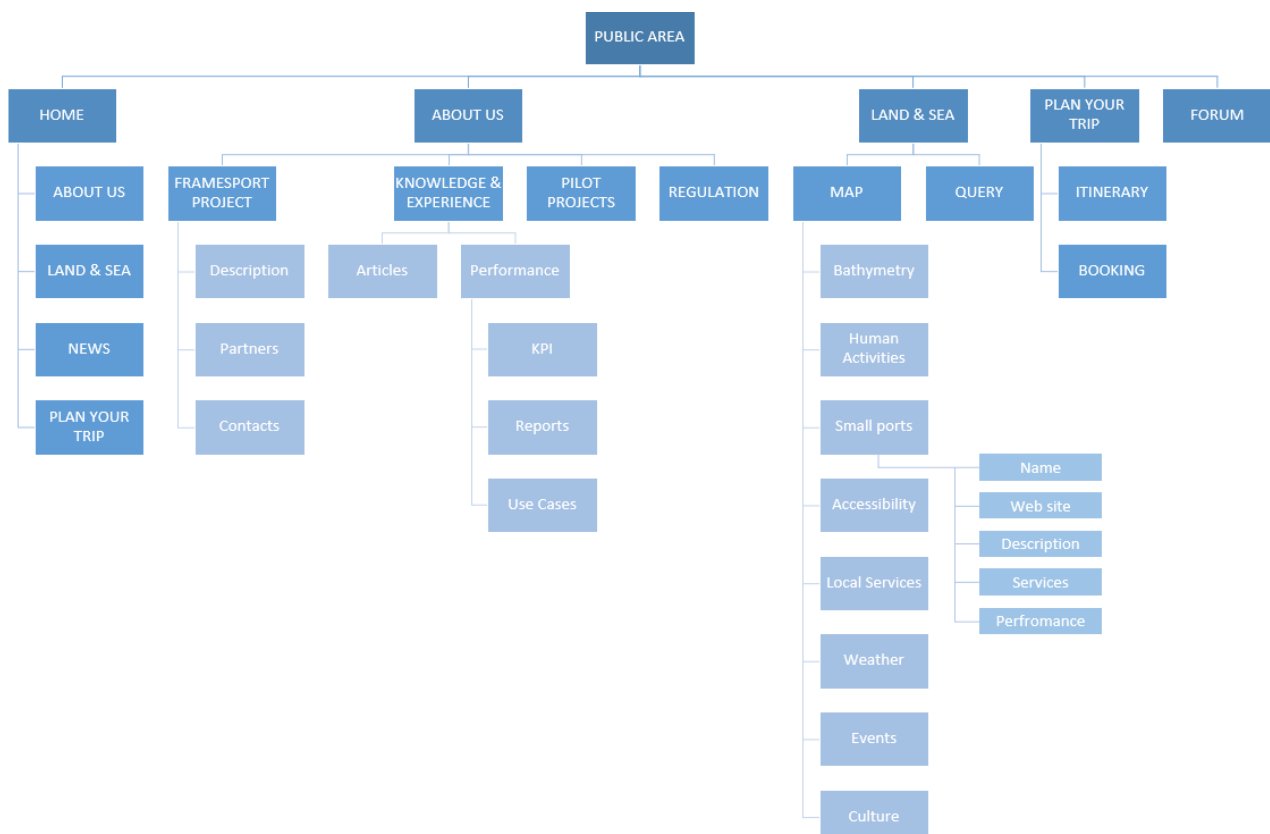


Figure 2. Structure of the Public Area

A description of the various sections of the portal and what they entail is provided below.

### *Home*

The user of the portal is going to land on the Home page when opening the FRAMESPORT portal. This section is going to present three sub-sections in the following sequence:

- **About Us:** a brief description of the FRAMESPORT project and its stakeholders, with a focus on the aim, history, mission of the project.
- **Land & Sea:** a map of the territory (see section Land & Sea below);
- **News:** the last information about the FRAMESPORT project and its initiatives.

### *About us*

This section has the aim of presenting, in greater details, the FRAMESPORT project and the know-how that has been developed.

### *FRAMESPORT project*

#### *Description*

Description of the aim, history, mission, of the FRAMESPORT project.

#### *Partners*

List and short description of the various partners involved in the project.

#### *Contacts*

List of the various contacts of the portal administrators. List and short description of the job vacancies, plus a link to the job vacancy and the application process.

### *Knowledge and experience*

This section is containing all the know-how developed during the FRAMESPORT project. It is divided into the following sections:

#### *Articles*

This section is going to present all the articles related to the Adriatic basin and the FRAMESPORT project. These articles are going to give a perspective of how people see this project and the stakeholders that are part of it.

### *Best practices*

The best practices adopted by the various stakeholders are going to be included in this section in order to provide a valuable collection of the know-how (how to solve an issue, how to handle a certain situation, how to improve sustainable performances, how to improve customer satisfaction...).

### *Performances*

This section is going to provide an overview of the performances of the FRAMESPORT projects, and the stakeholders involved in it. It is going to be divided in the following sub-sections:

- **KPI:** This sub-section displays the KPI used to monitor the performances of the FRAMESPORT projects and of the stakeholders involved in it. These KPI are going to monitor the economic, social and environmental performances of the various small ports and stakeholders. In this way, it is possible to define the areas of improvement and see how performances have been developed over time.
- **Reports:** This sub-section presents the publications related to the performances (e.g., annual report and sustainability report)
- **Use cases:** This sub-section presents use cases that used data contained in the portal for a valuable purpose (e.g., a study on how the performance of the small ports of a region have improved through time thanks to the data provided by the portal).

### *Pilot Projects*

This section is containing the info about the various pilot projects (or pilots). It is going to be organised in two tiers. The former one is presenting the macro-themes of the various pilots. The projects are divided into macro-themes according to their features and purposes (i.e., Planning&Management, E&E aspects, T&K aspects, ICT&Services, Business Aspects). While the latter tier presents the various pilots, including a brief description of the project, its expected and actual output, the work progress, the experiences, and know-how developed.

### *Regulations*

Presents the regulation that the various stakeholders need to follow and recommendations on how to conform to it.

### *Land and sea*

This section is presenting the territory of the Adriatic basin. It is going to be composed of two tools. The former is a map with different layers that gives to possibility to switch from one player to another and to show different data. The latter is a tool that allows to run queries and find specific data according to the one contained in the various layers of the map.

### Map

The map of the territory is composed of different layers that present the various features of the sea. It is possible to open multiple layers at the same time and see how the data displayed are related to each other. The map is going to initially show the entire Adriatic basin with a satellite view, according to the layer(s) chosen various info are going to appear. There is the possibility to zoom and see the features of a specific location. The layers are presented below:

### *Small ports*

This layer is a map with the location of the various small ports. Each port is going to be identified with a colored dot. When clicking on the small port, the user gets access to its information that are shown on a window that is going to open on the side (Figure 3).











Figure 3 – Example of Small Ports layer of the Map

It is possible to select multiple small ports and compare their features. In this way, customers can compare and choose the small port that best suits their needs and wants.

The windows of the various small ports are going to contain the following information:

- Name: of the small port;
- Web Site Link: to access to the website of the small port;
- Short Description: A section where the main info about the small port is going to be collected. It should be brief and a limited number of characters should be given when people are filling it;
- Services: Kind of services and facilities offered by the small port (e.g., restaurant, pool, boat maintenance, charging station, gas station...). Figures and signs (see figure below) of the available services and facilities are going to be adopted to easily convey the performances and to allow a rapid comparison with the other ports. Some examples of services are provided in the table below.

Table 1. Examples of the symbols related to the Services

FAMILY OF SYMBOLS	OF	SYMBOL NAME	PROPOSED ICONS	DESCRIPTION
Services for Navigation		Fuel station		Station where boats can be filled with fuel
		Charging station		Charging station for electric boats or their electric equipment
Services for People		Showers		Showers available for the customers
		Laundry		Laundry infrastructure and service
Territory		Touristic info		Info point for touristic purposes
		Restaurants		Restaurant available at the small port

- Performance: This section is going to provide a summary of sustainability performances (economic, social, and environmental) of each port. Figures and signs are going to be adopted to easily convey the performances. The small ports that are taking part in the portal will receive a tool/module to calculate their sustainability performances. The result of this evaluation is going to be presented in each website of the small ports. The results of the evaluation are going to be summarized and displayed on the portal in the way described above. This section is also going to be helpful in relation with the pilot projects because it allows to understand their impact on the sustainability performances of the small ports.

### *Bathymetry*

Layer with info about the seabed and depth. It is very useful for navigating in the area. It is going to be possible to zoom on a specific site and see the relative seabed features. The figure below depicts this layer.

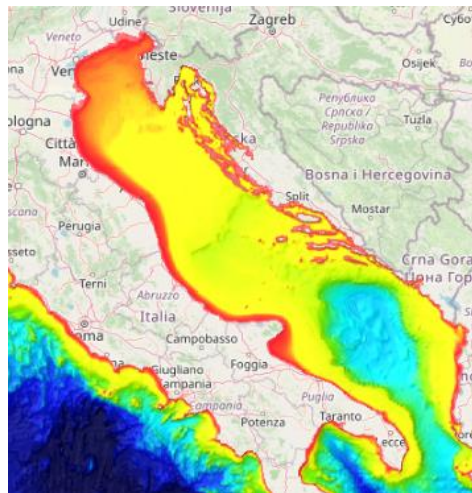


Figure 4 – Example of Bathymetry layer of the Map

### Human Activities

Layer with info about the human activities in the area (e.g., fishing areas, drilling platforms, protected areas...). Each coloured dot is going to open a small window with a few information about the human activity. See figure below for an example.

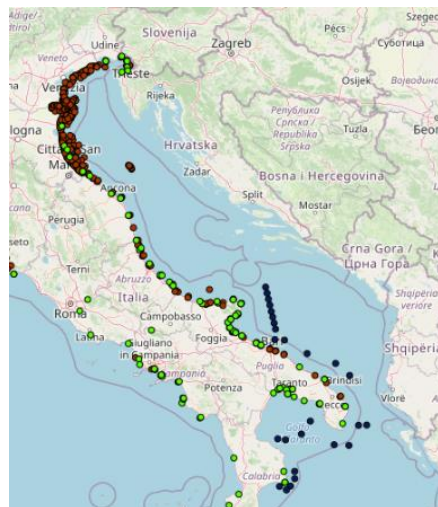


Figure 5 – Example of B Human Activities layer of the Map

### Accessibility

The map layer that is going to show the roads, highways, railways, airports, car rental/sharing ... of the area around the small port. Therefore, all the information that can be useful to travel around the area are going to be depicted by this layer. It is going to be similar with the classic view of google

maps where all the streets and relative names are shown. It would be nice to have a sign for the various infrastructures (e.g., a plane for the airport, a train for the train station, a pump for a gasoline station...) to make them easier to find.

#### *Local companies*

Layer with a presentation of the local companies (e.g., restaurants, bars, sport clubs, associations, car rental...) in the area using coloured dots. If you click on one dot, the name, website and a brief description of the local company is going to be shown.

#### *Weather*

Layer with information about the weather of the area (e.g., precipitation, temperature, pressure, wind, waves). This layer and the related data should also be used to prevent damage due to strong weather events.

#### *Events*

Layers with the events that are happening in the area using coloured dots. When the user clicks on one dot, the name, website and a brief description of the event is going to be shown. There is going to be a focus on events and initiatives related to sustainability.

#### *Culture*

Layer that depicts places and associations related to our cultural and historical heritage. These cultural areas are presented with coloured dots: when the user clicks on one dot, the name, website and a brief description of the cultural site is going to be shown.

#### *Itinerary*

The itinerary tool (see section) could be a layer of the map. In this way, the users of the platform can find, for instance, a place they want to visit or an event they want to attend and insert it directly in the itinerary. However, this feature can be constrained by technical barriers. Its feasibility needs to be assessed with the IT company that is going to implement the portal.

#### Query

Tool to create queries and find specific information about the sea features within a certain area or boundaries. The kind of data are the same of the one used in the aforementioned layers of the map.

Therefore, the query tool allows to navigate into the data contained in the various layers and find a single or a group of information according to its needs.

### *Plan your trip*

#### Booking

In this section is going to be possible to book the various structures of the Adriatic basin. There is a pilot project about this matter and its outcome is going to be valuable to define how to manage this section. The pilot may suggest creating a FRAMESPORT booking platform and therefore there may be the need to implement it. However, this pilot project can also show that it is better to cooperate with an external company that is expert in providing booking services (e.g., Expedia, Trivago) or that it may be sufficient to provide the websites of the various structures that the customers want to book. Consequently, the IT company should provide flexibility to implement this section at a later stage.

In addition, the Booking section shall work in close relation with the Itinerary section. In this way, it is possible to book the various structures while planning the itinerary. Also, this aspect of the portal needs to be defined later, finding the right trade-off between the outcome of the pilot project on booking and the possible technical limitation.

#### Itinerary

This is a tool to support customers in planning their routes. It is going to use the same info contained in the other layers of the map. This tool can work in three ways. The first is that the customer chooses its own route and places to visit. The tool is going to optimise the journey by assessing the best (considering the shortest route and therefore the one with the overall best environmental performances) route. It is also going to calculate the emission and fuel consumption for a certain itinerary as well as the safety of the itinerary according to weather conditions. The second way suits the customers that do not know where to go. This tool is going to provide hints and suggestions about the itinerary according to the preferences of the customers (e.g., specific places, finishing, sightseeing, relaxing, events). Based on the input (preferences), the tool is going to calculate a possible route and suggest places to visit according to the interests of the customer. The third way is a mix of the two, where the customer can choose a part of the route and let the tool suggesting the other. In this way, it is possible to support clients in creating a better, safer and more sustainable journey.

This itinerary planning tool is of added value to customers and can become an important strength of the FRAMESPORT portal. However, there may be technical limitations to the implementation of instrument. Consequently, the features of this tool can vary according to the potential limitations and suggestions from the IT company that is going to implement the portal.

Another important aspect to consider is how to integrate this tool with the other layers. It would be nice to have a tool that is related and can interact with the other layers (e.g., a customer likes a certain event, seen in the event layer, and can add it to the itinerary). This interaction may not be possible, and the Itinerary layer may need to be on its own or another way to manage it should be developed. Therefore, the suggestions from the IT company once again are going to be valuable to handle this challenge.

#### *Forum (nice to have)*

A forum where all the stakeholders can express their opinion about the experiences in the area. There is the need to find a moderator to prevent inappropriate behaviour from the users. It would be nice to have this section, but it can be excluded if not necessary or difficult to manage.

#### PRIVATE AREA

The portal is also going to have a private section where the various users can access with their credentials. The various actors can edit different sections in order to update them. According to the kind of stakeholder that is going to access the portal, different kinds of actions are going to be possible and different sections are going to be visible. The part below is going to present the authorisation of the various stakeholders.



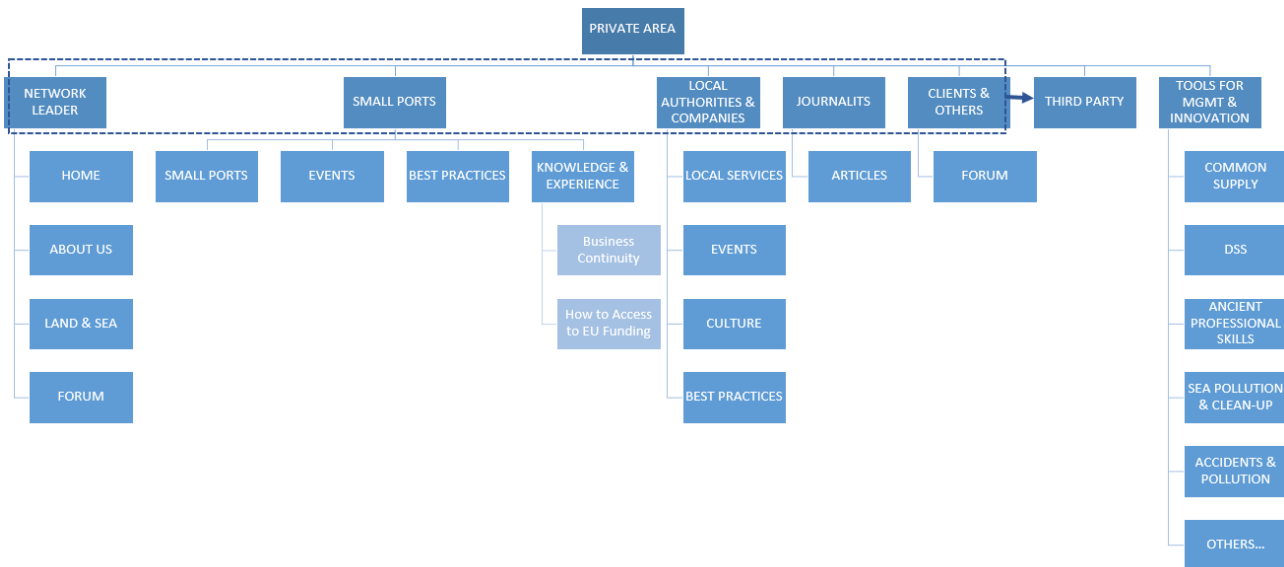


Figure 6 -Structure of the Private Area

### Network leader

Can see and edit all the information in the portal (i.e. the various sections of the Home, About us, Land and Sea, Plan Your Trip, Forum). The network leader has not been defined yet. The next chapter is going to provide a SWOT analysis to present the pros and cons of the two alternatives (See Annex).

### Small ports

The small ports can interact with the section related to their own small port (small port), and with other sections such as Events, Articles & Best practices, Knowledge & Experience. In addition, they can see other two sections. The first is about Business Continuity, which provides general suggestions and actions plans to overcome current challenges such as climate change, Covid-19 pandemic, strong and dangerous meteorological phenomenon. The data about Business Continuity are going to be general and applicable to the various actors. If a small port wants something specific for their circumstance, they need to ask for an ad hoc consultancy service and pay for it. The second section is How to Access to European Funding. This section is a NICE TO HAVE and it is going to include all the info to get funding from the EU.

### Local authorities and companies

These stakeholders can see and edit info related to Local companies, Events, Culture.



### *Journalists*

Can publish an article about related to the FRAMESPORT project, its focal area and stakeholders and upload it in the Articles section.

### *Clients and other stakeholders*

All people can log-in and express their point of view, experiences...in the Forum.

### *Third party*

There is going to be a third party that is going to take care of the data validation. This is a crucial task because it allows to provide only reliable and valid data in the portal. The third party checks the validity and reliability of the info and data provided by the various stakeholders. Without validation is not possible to edit and update the portal's information.

The third party needs to be unrelated to the other businesses and institutions involved in the FRAMESPORT project. It needs to be neutral, transparent, and truthful, therefore it shall not try to take advantage of the project and to favour the fraudulent activities of certain companies. For these reasons, the third party needs to be chosen carefully involving all the project partners in the decision-making process.

### *Tools for management & innovation of small ports*

This section of the private area is going to be seen by the small ports (and potentially other stakeholders if needed) and it is going to contain all the tools that have been created as an output of the various pilot projects. These tools can be used to improve certain aspects and performances of small ports. The sections below are presenting some of the potential tools that are going to be created via the outcome of the various pilot projects:

- **Common supply**  
This is a strategy to manage all the supply of a certain kind of stakeholder. It is going to be very valuable to create a supply system that is cheaper and more efficient, sustainable and effective. This is still not a pilot project but it could become one not only because it can provide a valuable outcome but also because it may be the driver to keep the platform working in the future. This common supply system, in fact, can become the future way the stakeholders of the Adriatic basin are supplying their materials, thus keeping the portal alive and working.
- **DSS**

It is an ICT tool containing info about an action plan to improve the management of small ports. The data on best practices and performances are going to be very useful to create this tool.

- **Ancient Professional Skills**  
It is a tool containing info about how to provide new and better knowledge to the ship crew and craftsman in relation to historical ships.
- **Sea Pollution and Clean-up**  
It is a tool that allows to develop a methodology, instruments, and technologies to collect floating waste from the sea and monitor the level of water pollutants. The data related to water pollution could be potentially used to create a new layer in the Land and Sea section.
- **Accidents & Pollution**  
It is the tool to forecast and prevent pollutants dispersion in the sea caused by an accident.
- **Others**  
Other tools derived from pilot projects.

#### CHANGES TO THE FRAMESPORT PLATFORM'S STRUCTURE AND FUNCTIONALITIES

The various sections of the portal, their features and functionalities may be subject to technical limitations and/or future developments. Therefore, it is essential to maintain a certain degree of flexibility in order to be able to edit certain characteristics of the platform in an agile and effective manner.

Furthermore, the pilot projects and their outcome can delineate changes in certain sections of the FRAMESPORT platform. Therefore, a certain degree of flexibility needs to be guaranteed to implement the potential editing in the future. For instance, the way the Booking section is going to be managed depends on the outcome of the related pilot project and therefore it needs to be realised later on.

Platform updating and integration

Keeping the FRAMESPORT portal working and maintaining its efficiency and effectiveness through time is a fundamental aspect of the project. Therefore, keeping the portal updated and functional is an essential objective, but also a challenge. For this reason, in relation to the portal's data update, two strategies have been developed. The first one is establishing partnerships with associations that can provide updated data on a daily basis (e.g., cooperating with a weather forecast company to get daily data on the weather and predict potentially dangerous meteorological phenomenon). The second one is involving the various stakeholders that can interact with the platform. They have the opportunity, according to their role and related permissions, to edit and update the information contained in the portal via the access to the private section (FRAMESPORT platform implementation guidelines → PRIVATE AREA). In this way, the various actors are capable of maintaining the platform's data constantly updated. To ensure the validity and reliability of these information, a third part is going to take care of the data validation in order to guarantee that only trustworthy and updated information are going to be displayed in the portal (FRAMESPORT platform implementation guidelines → PRIVATE AREA → Third Party). Thus, also sensible information, such as the one related to sustainable performance monitoring and best practices, are assured to be valid and reliable, and it is possible to prevent the risk of jeopardising the creation of an effective action plan to drive sustainable development due to the lack of trustworthy and transparent data.

Another challenge is related to involving as many stakeholders as possible in the FRAMESPORT project. Without a wide participation of small ports, restaurants, shops, cultural sites and other businesses and institutions, the portal would lose its effectiveness, thus affecting the value of the entire project. Therefore, the aim is to make the FRAMESPORT platform as much appealing as possible. To do so, it is fundamental to offer a great variety of services to the various stakeholders. It is fundamental to give them the opportunity to promote their business and attract new clients, to improve their sustainable performances and become more profitable, and to make them play an active role in supporting the socio-economic development of the Adriatic basin. For this reason, the FRAMESPORT portal has not only the aim of presenting the network of small ports and organisations of the Adriatic basin but also to support their sustainable development. Thus, sections to present the various small ports and local businesses/institutions were included as well as sections about best practices, performance monitoring and improvement, pilot project and their outcome, business continuity, and regulations. In this way, it is possible not only to create a platform where all the stakeholders of the Adriatic basin are adequately presented to the public and potential clients, but also an IT tool that could provide an efficient and effective monitoring and improvement of the sustainable performances of these actors. This strategy is therefore capable of supporting the various stakeholders in becoming more appealing, resilient, and sustainable, thus contributing to the socio-economic development of the Adriatic basin.

## 5. Conclusion

The WP3 is also aimed at selecting an ICT company capable of implementing the FRAMESPORT portal and create the appropriate documentation for the tender as well as the one to provide to the selected business to create the platform according to the project requirements. This report is therefore valuable not only for the project partners and the stakeholders involved in the project to understand how the platform is going to work and look like, but also to create an appropriate documentation for the ICT company that will implement the platform. For this reason, it is of primary importance to produce this report to provide a clear overview of the portal's features and functionalities.

However, it is relevant to underline that the platform may be subject to changes during the implementation phase. Technical and economical limitations, as well as opportunities of improvement may arise in the later stages of the FRAMESPORT project. In addition, the outcome of the pilot projects may also influence the structure of certain sections of the portal. Thus, it is fundamental to maintain a certain degree of flexibility in order to assure that these potential editing will be realised without any major impacts on the time, costs and effectiveness of the FRAMESPORT project.

## Annex A - SWOT analysis to decide the network leader

This section is going to present the advantages and disadvantages of having a public or private company that is going to manage the platform. This task was performed via SWOT analysis. The main strength and weaknesses of the two actors are going to be highlighted, together with the opportunities and threats coming from the market in which they operate.

Private company



Figure 7 - SWOT Analysis for a Private Company as Network Leader

A private company can be specialized in providing this kind of services and therefore it can potentially be faster and more efficient regarding the management of the platform. In addition, private companies are more numerous than public ones so there is a wider choice and therefore it may be possible to contain the expense for this kind of service. For private companies is also easier to create a business plan and to find sponsors to their tasks.

On the other hand, it may be difficult to find a reliable one, especially if its cost is small. Their operations can also be subject to cheating and the private company may favour a certain actor. Moreover, public companies are considered to be more reliable than private ones and it may be difficult to find a private business that is accepted by both the Italian and Croatian stakeholders.

Finally, private companies are more subject to failing than public ones and this may be a big problem if the FRAMESPORT portal loses its leader.

Public company

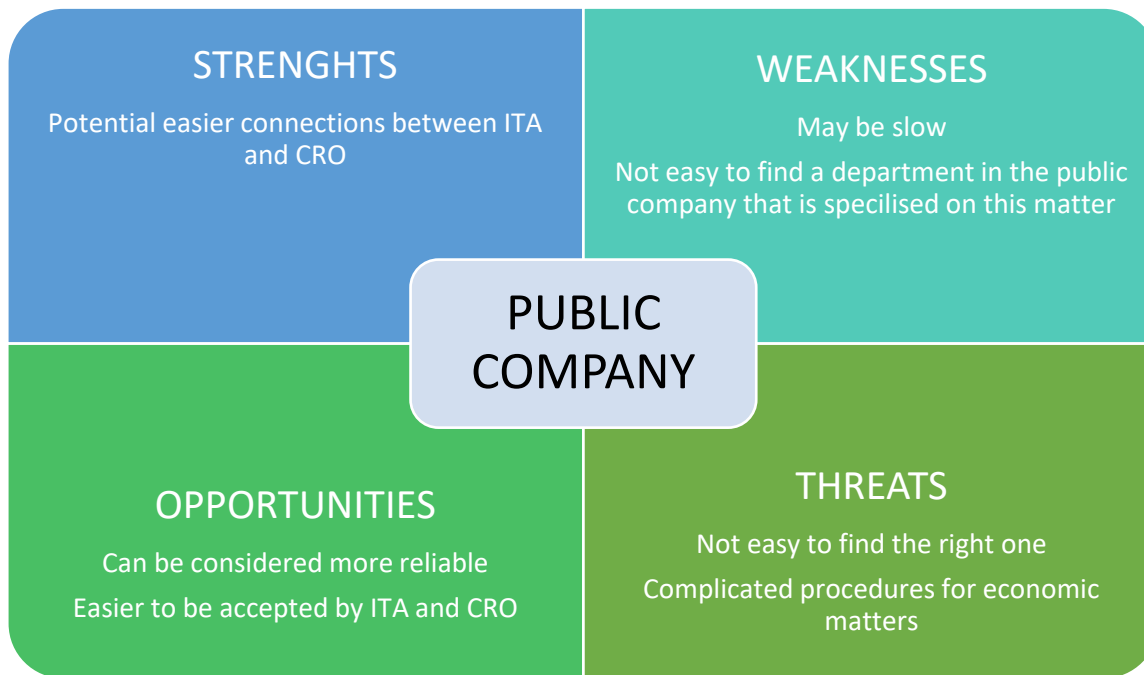


Figure 8 - SWOT Analysis for a Public Company as Network Leader

Public companies can favour the cooperation and communication between the Italian and Croatians sides. For instance, if the ministries of the environment of the two countries are going to be selected, then the collaboration between them it may be easier. Also, public institutions are considered as more reliable than private ones and less subject to fraudulent behaviours. As a consequence, it may be easier to get the various stakeholders agree on a public actor.

However, a public company can be slower in performing its tasks and may not have the knowledge and competence to manage the platform in an appropriate manner. It is therefore complicated to find a good public provider of this service. Finally, the procedure for economic matters is very complicated with public companies and this may negatively influence the efficiency and effectiveness of their work.

## Recommendations according to the SWOT Analysis

The SWOT analysis highlights the risks and opportunities related to choosing a private or a public actor as the network leader. This analysis demonstrates that a public company is better for the following reasons. First, a public institution would facilitate a cooperation between Croatia and Italy. It is possible to select the same kind of organisation (e.g., the Ministry of the Environment) and make them cooperate to run the FRAMESPORT portal. Secondly, choosing a public company means reducing the risk of fraudulent behaviour and preventing favouritism to a certain actor. Finally, there is less competition among private institutions and therefore it may be easier to find a public partner that is willing to become the network leader.