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The cover image shows the building of Kharkiv National University of Civil Engineering and Architecture, destroyed as a result of a missile and bomb attack. March 2022 (Source: STRINGER/Reuters/Forum. https://www.pism.pl/publications/sweden-on-the-russian-aggression-against-ukraine)

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Social aspects in small ports tourism sustainability

Planning small ports and marinas through the lens of tourism and sustainability

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Abstract
The attraction of the place, the perception of services, the awareness, and the tourist satisfaction play an important role to motivate a tourist to visit and revisit a destination. Sustainability has also been receiving increasing attention and require also to promote inter-generational and intragenerational equity, to guarantee the cultural integrity and social cohesion of the communities, and to protect the environment and ecosystems. In this context, nautical tourism assesses some impacts to the economy, with the construction of port and the relative infrastructures and with all services to the boat, to the society and the local community that participate to the development and choices, and to the environment with significant potential risks. This paper focusses on small ports and marinas and investigates the real situation about services offered and the related possible tourism satisfaction for a socio-cultural sustainable development. In addition, FRAMESPORT project (FRAMEwork initiative fostering the sustainable development of Adriatic-Ionian Small PORTs) assists to these objectives collecting relevant experiences and feedbacks and developing a strategic guidance. For this reason, it has collected data from people connected to Italian and Croatian docks and are analyzed with statistic methods and georeferenced maps. The significance of the study is to understand similarities and differences of tourism in these two States and provide suggestions for a socio-cultural sustainable development.

Keywords
Social aspects; Small ports; marinas; Nautical activities and services; Sustainability.

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1. Introduction

According to the World Tourism Organization, "tourism is a social, cultural and economic phenomenon which entails the movement of people to countries or places outside their usual environment for personal or business/professional purposes. These people are called visitors (which may be either tourists or excursionists; residents or non-residents) and tourism has to do with their activities, some of which involve tourism expenditure" (World Tourism Organization, n.d.).

Most studies have listed and explained which are the factors to motivate tourists to particular destinations. Indeed, tourist satisfaction refers to the pleasure that the tourists feel due to their travel experience (Chen & Tsai, 2007; Kozak & Remington, 2000; Quintal & Polczynski, 2010) and comprises of satisfaction related to services received by tourists, tourist destinations, and satisfaction with tourists (Lee et al., 2011; Santoso, 2019). Thus, tourist satisfaction represents the emotional feelings and pleasure derived from visiting various tourist places (Cole & Scott, 2004; Quintal & Polczynski, 2010). In addition, the literature documented a positive relationship between attraction, perception of service, and awareness and tourist satisfaction (Chiu et al., 2016; Naidoo et al., 2011; Okello & Yerian, 2009; Nguyen Viet et al., 2020; Zhang et al., 2018). Furthermore, opportunities available in tourist destinations play an important role in influencing tourist satisfaction and motivate tourist to revisit the destination and recommend them to others (Murphy et al. 2011; He & Luo, 2020; Joseph et al., 2021).

In general, tourism industry can be subdivided in several sectors as educational tourism, film tourism, health tourism, justice tourism, etc. (Weeden, 2013). Among various types of tourism, nautical tourism is in the middle between sea tourism, defined as tourism driven and motivated by marine resources, in which the sea and the marine environment represent the center of the tourist experience and its main motivation, and boating, defined as the set of leisure activities carried out with a pleasure boat (Benevolo, 2011). Nautical tourism is characterized by three aspects (Fortezza, 2008; Benevolo, 2010):

- the nautical tourist, that is who travels and stays on the sea and in the ports;
- the boat employment, for travel and accommodation (Candela & Figini, 2003);
- the tourist demand on the mainland with a several number of activities, once the boat has landed.

Some places are linked to this type of tourist experience:

- to sail (seas, lakes and other navigable inland waterways);
- to rest and stay, as ports and docks. Here, three main functions are carried out from a tourist point of view: i) origin or departure of tourists, with a possible permanent function (the boats remain "parked" there for most of the year, go out to sea for cruises or day trips, are often used for a stay in the port, like second homes. This last aspect is particularly critical in places that already have high tourist pressure for the impact on access infrastructures, consumption and uses related to the location); ii) stop or transit, as a stage for supplies or environmental, naturalistic, sporting interests, etc.; iii) destination;
- to visit and discover coastal and inland territory as natural, anthropic, cultural, historical, landscape resources etc. which the nautical tourist could be interested and can access from the sea through the landings (Benevolo, 2011).

In this context, sustainable tourism is when it "contributes to creating equality and economic and social welfare for the local community" (Aronsson, 1994). Indeed, tourism has socio-cultural, economic and environmental impacts on the population and the place; for the first effect, tourism can change traditional lifestyles, value systems, family relationships, individual behavior and community structure (Puczko & Ratz, 2000); for the economy, the region has greater benefits which are employment income and foreign generations but also socioenvironmental impacts (Vijayakumar, 2009; Zacharias et al., 2010); for the environment, tourism has different types of impacts, from soil/air/water pollution to ecosystem degradation, that derive from tourism

activities (Fachrudin & Lubis, 2016) and the different level of environmental literacy that tourist have (Chandy & Rajesh, n.d.).

In these terms, tourism development is truly sustainable if:

- "meet the need of the host population in terms of improved living standards both in the short and long term" (Carter, 1993) and guarantee the cultural integrity and social cohesion of the communities (Pearce et al., 1996; Burns & Holden, 1995; Wall, 1997; Murphy, 1995; McIntyre, 1993; Bramwell & Lane, 1993);
- control, evaluate, and improve host community quality of life (Christensen, 1994), promoting inter-generational and intragenerational equity (Kokkranlkal & Morrison, 2002);
- protect biological diversity and maintain ecosystems;
- use sustainable indicators to diagnose problems and understand their underlying causes, identifying sustainable solutions, defining goals and helping to determine future targets and goals (Bossel, 2002; Fraser et al., 2006; Shamim, 2012).

In addition, there is a relationship between competitiveness and sustainability, because the competitiveness is illusory if it is not sustainable, and sustainability can be a factor of competitiveness (Ruozi, 2005). Indeed, the literature (Ritchie & Crouch, 2003) affirms that a destination is competitive if it is capable to generate and preserve a tourist experience superior to the same offered in other territories and the destination success depends on the allocation resources and the ability to use and enhance them.

About nautical tourism sustainability, some impacts must be assessed: regarding economy, the construction of port and the relative infrastructures represent significant investments and also all services to the boat create a new economy; for social aspects, it is important that local community perceive ports as source of development, employment and income and participate to the choices; at the environmental level, existing ports have significant environmental impacts and significant potential risks, linked above all to the size of the infrastructures (Candela & Figini, 2003). There is an ample amount of literature about the consequences of tourism on environment and they analyze from the waste which are generated from house boats, hotels and resorts, oil from engines, plastic wastes and food wastes and propose an effective management of these predominant wastes (Chandy & Rajesh, n.d.), to the spatiotemporal trends in the tourist flow and changes in the ecology and environment (John, 2018).

This paper focusses on small ports and marinas and investigates the real situation about services offered and the related possible tourism satisfaction for a sustainable socio-cultural development. For this reason, it has collected data from people connected to Italian and Croatian docks and are analyzed with statistic methods and georeferenced maps.

2. Project background

Nautical tourism is a branch of maritime tourism—the "water-based" counterpart to "land-based" field of coastal tourism (Hall, 2001; Agarwal, 2002; Jennings, 2004). There's a strict link between nautical tourism and blue economy as clearly described in the EU's Blue Growth strategy. In detail, coastal and maritime tourism bears large potential to promote a smart, sustainable and inclusive Europe: coastal areas and islands tend to be major tourism hotspots. These areas have always been sought for their unique characteristics making them ideal places for leisure and tourism activities to take roll. In recent years, the increasing number of tourists have led to concerns around the sustainable development of coastal areas, especially those characterized by high-density building and expanding environmental footprints (European Commission, 2021).

In 2016, recreational nautical activities created around 234,000 jobs in the EU and generated an annual revenue of EUR 28 billion (European Commission, 2017) and have contributed significantly to the creation of the Adriatic area's identity, especially in countries as Italy and Croatia. In recent time, a study developed by the United Nations Conference on the impacts of COVID-19 on the blue economy projected a growth in preferences for outdoor experiences and contact with nature and water (UNCTAD — United Nations

Conference on Trade and Development, 2020), so the expansion of the boat-rental market worldwide is estimated to grow at 5% per year until 2025 (Report Linker, 2020). This trend can encourage the nautical tourism sector especially in consideration of the fact that, in some cases, it suffers from an important crunch in use (see Italian condition) linked to the economic and financial crisis.

From a touristic point of view, one of the main prerogatives is the presence of a recreational unit; so, this is a branch of marine tourism, with seasonal value, characterized by various distinctive aspects that will determine different types of boating tourism and therefore different profiles of users. Themes as the size of the boat used, then the type of propulsion, whether sailing or motor, thirdly the ownership of the right of use of the boat, still the socio-economic level of the users and the time which he dedicates to navigation, the type of experience pursued, the tourist offer "on the ground" of the place of arrival, the kinds of services sought and other aspects that differentiate boaters and influence the choice of final destination, are all aspects that can influence the boating activity and the success of a marina. Moreover, the traditional relationships between the Italian and Croatian systems in the Adriatic turns out to be unbalanced, as far as the Croatian marinas are attracting more users, especially in relation to fees and to the diffusion of small port in the territory. In fact, an overall issue of lack of competitiveness, exists for both Italian and Croatian small ports and marinas in the Adriatic. The presence of overcapacity implies that the most strategic goal for Italian marinas consists of implementing new business models, measures and actions aimed at recovering overall efficiency, that is, optimizing the existing assets as to be more competitive and attractive. Moreover, we need to understand the relationship between the characteristic of the marinas and the touristic demand as:

- the hiking practice, featured by a predominantly daily or limited duration (weekend), exercised to explore new shores and to pass a few hours in absolute relaxation with your boat, usually in places of natural beauty;
- the itinerant practice, that means living the boat to cruise and provide a period of stay. The purpose is the holiday at sea, to discover different places and coasts and their tourist attractions;
- the navigation practice, activity driven exclusively by the pleasure of sail. These are mainly sailors, both those who sail with very fast small sailboats (the drifts), which those who own boats to sailing capable of great crossings, even oceanic;
- the playful and sporty practice, characterized by short exits. The boat is used as a support for water sports (water skiing, freediving, underwater fishing), for diving or for sport fishing.

In this context, FRAMESPORT (FRAMEwork initiative fostering the sustainable development of Adriatic-Ionian Small PORTs) project aims to develop an initiative where framing the further developments of Adriatic small ports and marinas. It both deliver strategic guidance on how developing small Adriatic ports in a homogeneous way, as well as collecting relevant experiences and feedbacks coming from best practices and piloting experiences along the Adriatic coasts. This could be obtained through a strong cross-border cooperation meant to develop new and more effective planning processes, enforcement of new business models and innovative management and environmental protection tools. In order to facilitate this process, there is a wide range of past and on-going projects with various addresses as:

- improving ports capacity and maritime accessibility (ADRIAMOS, NAPADRAG, NAPAPROG, NAPA4CORE, Trelleborg-Swinoujscie MoS services);
- developing innovative IT solutions for a more efficient multimodal integration (ITS Adriatic Multiport Gateway, MOS4MOS, B2MOS, ANNA);
- improving accessibility and multimodality (SEE Programme: ADB Multiplatform, SETA, WATERMODE, GIFT, NEWADA; ADRION: SUPAIR; GREENBERTH, MEDNET, MEDITA; IVC: CASTLE, SUGAR, POLITE; IPA: EASYCONENCTING, INTERMODADRIA; ITALY-CROATIA: PROMARES, DIGLOGS, TRANSPOGOOD, ICARUS and CHARGE that focused on improving PCSs and related interoperability and security services.

In order to create a harmonized and more efficient development for Adriatic small ports and marinas, the project proposes through cooperation a collection, storage and then use of data to make a photograph of small ports and marinas, dealing with its own characteristics and enlarged to a geographical perspective. Thus, is created through a joint methodological framework and common survey tools to be applied in investigating different small ports characters. In particular, the data survey used to build the sustainable development of small ports and marinas deeps several aspects as contest characters, small port description, regulations, spatial and urban governance, transport topics, environmental data. The result is a common background mainly dealing with the delivery of concrete testing initiatives, where technical solutions and experimental initiatives are tested to identify innovative paths to solve existing problems and to address small ports and marinas towards a sustainable growth.

The data harvest has produced a database of 501 records that investigate seven different pillars (characteristic dimension, type of application and expected rates, technical services to the boat, services to the yachtsman within the tourist port, accessory services for the consumer, environmental services, services for the enhancement of the territory) that can offer some initial results on the role of small parts and marinas in development of tourism boating.

3. Small ports and marinas survey: topics of interest

In academic literature, topics related to commercial ports exist in a mixed-disciplinary space between engineering, business/tourism management and economy. A large number of papers are concentrated into design and operational/managment activities inside small ports and marinas as the project features, the maintenance of navigational access, efficiency of use, maximum allowable vessel size, etc. (De Langen et al., 2018; Green Marina Education and Outreach Project team, 2017; Martín & Yepes, 2019), many others focalize topics related to sustainability and resilience in relation to the impacts of sea level rise, heavy storms, etc. (Casas-Prat & Sierra, 2010; Nursey-Bray et al., 2013; Chhetri et al., 2014; Sierra et al., 2015; Christodoulou et al., 2018). Another important topic is referred to impacts on nature and to the efforts to regulate them (Poletan Jugović et al., 2022; Biondi, 2017; Darbra et al., 2009; Petrosillo et al., 2009; Di Franco et al., 2011). For the management, the topics are the evaluation of the future project's impact, the marina maintenance, facilities and habitat, the waste management and recycling (Green Marina Education and Outreach Project team, 2017; Berman et all., 2002).

The topic of small port in planning literature (spatial and urban planning and design) seem to receive little formal academic attention. In spite of port and waterfront literature where the bibliography is large and varied (Olivier & Slack, 2006; Woo et al., 2012, Sakalayen et al., 2022; Parola et al, 2021, Pagés Sánchez & Daamen, 2019; Garcia-Alonso et al., 2017; Hesse, 2017; Oniszczuk-Jastrząbek et al, 2018; Giovinazzi & Moretti, 2010; Üzümcüoğlu & Polay, 2022; Flynn & Valverde, 2019; Ragheb & EL-Ashmawy, 2020; De Ciutiis, 2009; Russo & Formato, 2014; Fonti et al., 2009; Giampaola, 2009; Leonardi, 2009; Giannì, 2009, Falzetti, 2009), focusing the attention on topics as fragility and threatened environments, rapid urbanization processes, relationship among port and city, maritime infrastructure and inland one, the role of the port in the coastal landscape and in processes of urban regeneration. The common result to all these treats of the topic port & city is the prevalence of design on planning, the importance of the interventions at various scales, the practical approach and the role of urban processes in defining physical form and articulation of socio-economic strategies. Water quality, public and free access and to water, public spaces, gradual and flexible development and shared participation in the entire process as well as a mix of functions and uses and the collaboration between public and private entities are some of the key aspects that needs to be taken into account in new interventions.

But marinas need to deal with coastal tourism and recreation development that can create great pressure on coastal ecosystems and resources such as energy, land, landscape, and water. The case of port shows as main feature the importance of shipping or commercial trade, while marinas might provide the bare essentials, such

as fuel and fresh water, but it may offer also an integrated onshore complex of luxury amenities, including hotel suites, dining, and shopping, literally above and beyond its utilitarian services for vessel repair, maintenance, and provisioning (European Commission, 2016). Then the principal function of a marina is hospitality, and the main object of interest is tourism.

As shown by La Rocca (2014), "The challenge that tourist cities have to face consists exactly in their ability to find a balance between promotion and safeguard of their (historical, cultural, architectural, territorial, environmental) resources. From a town planning point of view, this condition requires intervening through actions and policies targeted to the optimization of urban liveability. Moreover, a good quality of urban life is an unavoidable condition for building the future smart cities. At the same time, one of the factors of urban smartness consists exactly in making city attract tourists (investments, enhancement, image promotion, attractions of tourist flows, and so on)". So, the most important approach in planning (strategically) and promoting the tourism in small ports and marinas seems to be able to create a holistic vision of the relationship port/city, identifying the structural features towards a complex system of elements able to increase the tourist experience on which to build policies/strategies of development and promotion of the territory in tourist key.

For this reason, in this paper we tried to adopt the exploratory research approach for assessing the main services existing in the small Italian and Croatian ports. First of all, we analyzed the data available in the survey to understand which were the most interesting to study the relationship between place, marina and tourism. The evaluation has been articulated defining as references the theme of environmental sustainability, touristic appeal and accessibility. In the following figure it is possible to see how parameters have been evaluated: each group of available information has been categorized according to their possible consideration respect to the nautical tourism activities. This analysis leads to the subsequent selection of certain data for the marinas' sustainability assessment.

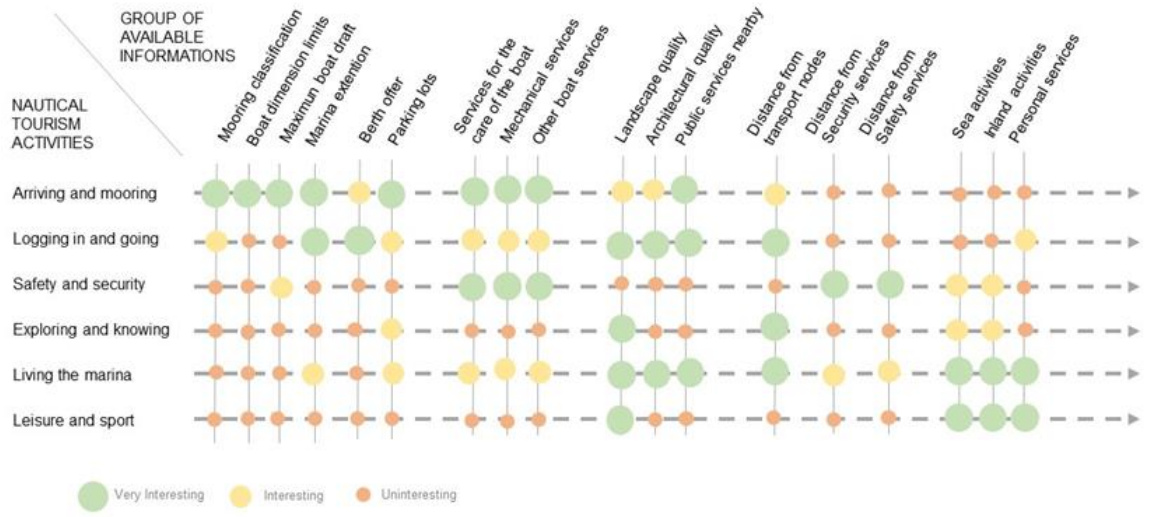

Fig.1 Incidence of the marinas' characteristics in relation to the nautical tourism activities

4. Some evidence on small port and marinas in the Adriatic Sea

Starting from the previous analysis, the small ports and marinas represent the interface between land and water of coastal communities and are used for trade, transport, fishing and boating. There are many urban centers coastal areas that have developed and enriched over time thanks to the functions of the port, in particular role of stopover for tourists with and without boat. The degree of attractiveness of a port strongly depends on the environmental context within which it is inserted, by the position and purpose for which it was conceived, which will make it the destination of a specific customer. A port can also bring various criticalities, if the structure is in contrast with the surrounding landscape or even, since the presence of the same may

cause damage to the nearby coast, may affect or damage other tourist modes connected to the sea, such as beach tourism. Moreover, small ports and marinas are the last link in the long and varied chain of the nautical chain and are, together with boat moorings, the biggest indicator of the offer of boating tourism: here the boaters have the opportunity to call and enjoy the many services offered both inside of the port area and in the immediate hinterland. So that, small ports and marinas may be considered may consider as complex bidding systems, systems with which they interact and where relationships between the human and natural elements of an area. In this perspective, the users of the ports have different needs and objectives and must coexist in the same space, thus a specific offer on this tourist targets may be developed: leisure facilities, links with the cities or other inland services (for examples transport services), are examples of this necessities.

Another aspect of interest is related to environmental sustainability. The transformation of a portion of coastline should be positive and not cause discomfort to the environment, to the landscape and to the community of the place; that is why the planning policies and monitoring is essential to integrate these works with the environment. The problems related to the possible environmental alterations caused by the nautical activities can be traced back to two different aspects: the movement of the boats and the bases nautical. As for the first, the oil and fuel spills are the first danger to the marine environment and its fragile ecosystem, because it deposit on the surface and prevent the normal exchange of oxygen between air and water; moreover weighs the still rampant uncivility of many boaters who do not care to dispose of bilge sewage or toilet waste water in ports, throwing everything in the sea despite being forbidden in the first 3 miles from the coast.

This make a strict relationship between small ports and marinas and their water and land hinterland that can be at the basis of line coast crisis due to the loss of landscape quality as the excess of fixed installations at sea (as piers, docks, dams, artificial reefs) or the dams and the ground plants alter with time the coastal morphology and affect the cover-up both inside the port and in the mouth. These lasts aspects have not been considered in this contribute, because it is necessary to collect other details of the theme and carry out further investigation. However, this issue will soon be analyzed in other related publications through Life Cycle Assessment and other ratings systems.

The study design adopts the exploratory research approach for assessing the main services existing in the small Italian and Croatian ports. The questionnaire was submitted on a voluntary basis but with different methods: in Croatia the ministry was involved, while in Italy the trade associations. The result was that in Croatia more questionnaires were filled in and in a short time.

The data have been collected from the connected people in the small ports and marinas and initially divided according to the dimension. Indeed, the 501 records have been divided between mooring, with less than ten berths and no presence of a toilet, and ports, the remaining records. In Fig.1 it is possible to see the results in a map and to notice as the Croatian area has a lot of moorings, probably for his insular territory and because moorings are used by specific tourism sectors like the island destination, resorts, or hotels. In this manner, a different social services distribution it is possible to notice; indeed, in Croatia dockings are primarily an infrastructure for navigation, while in Italy small ports and marinas are used also for social activities, can be found also in following maps.

For this study, only the number of small ports and marinas, in this manner selected, have been considered. In the database, different types of berths have been inserted according to the available dimension in ports (from 2.5x7.0 m to 8.0x36.0 m), with the biggest total dimension in Italy with 80.000 square meters while in Croatia the biggest have a size of 33.000 square meters. In Fig.2, it is possible to see the division of ports between four different ranges based on the number of available berths. In Italy, ports normally have more than 50 number of berths (from 10 to 1,205 with an average of 263), while in Croatia the dimension of ports is smaller (from 10 to 898 with an average of 146). Furthermore, Croatian small ports and marinas are inserted in the 420 moorings that aren’t considered.

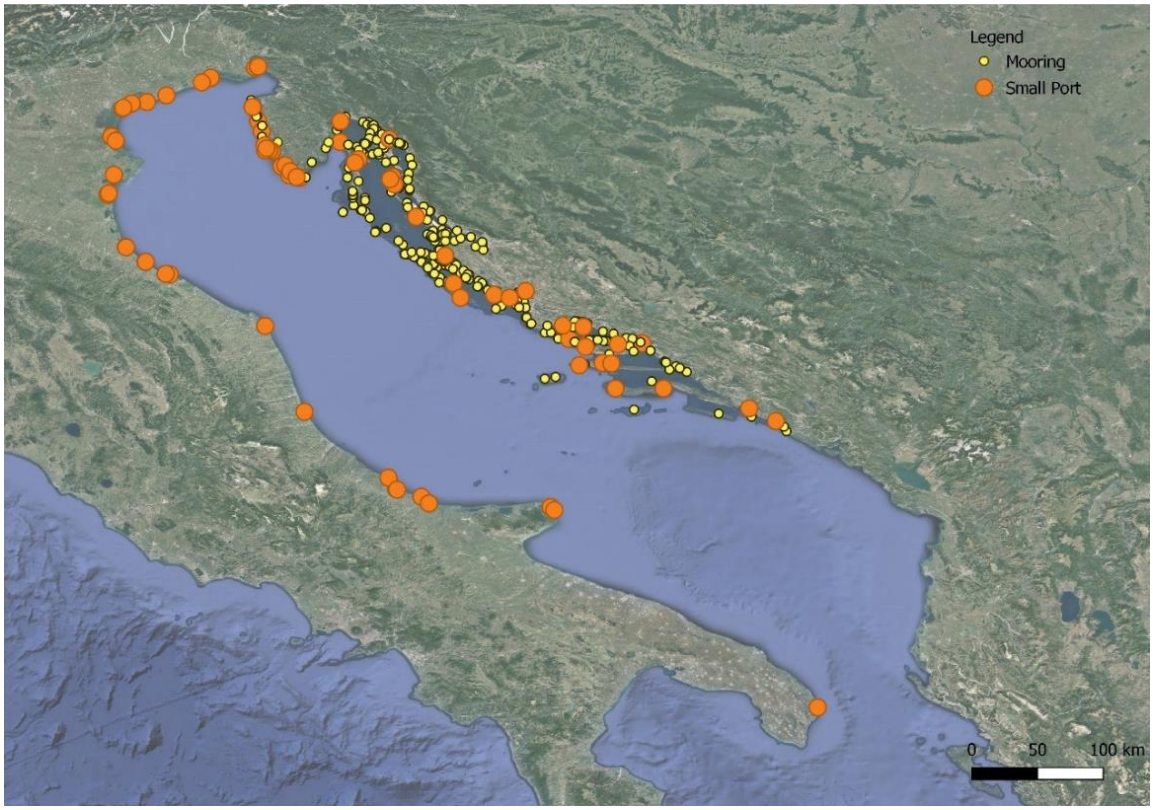

Fig.2 The study area with the arrangement of 420 mooring (small yellow circle) and 81 ports (orange circle)

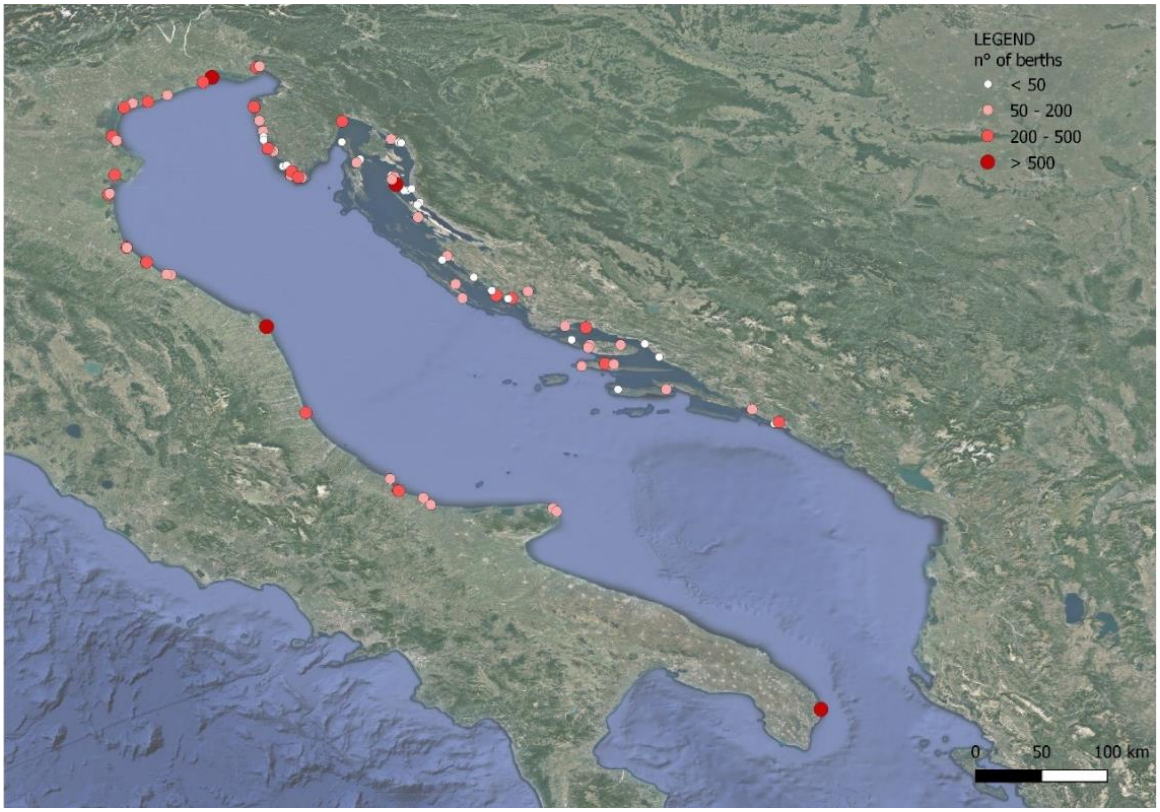

Fig.3 The study area with the 81 ports divided according to four different ranges about the number of berths. It is possible to see that major are in Italy

To satisfy the tourist request on water sports and activities and to develop the competitiveness, some ports insert the possibility to do and learn some sports like wind surf, sailing or diving (Fig.3). Almost all Italian ports offer nautical activities (almost two per port) unlike Croatian ports (less than one per port). These results

probably find an explanation in ports dimensions to see in Fig.2; indeed, with the ratio of water sports and activities to berths it is possible to find the same value (1.13) both for Italy and Croatia. In the same manner, the data about place for other sports available, inside or in proximity, has been collected (Fig.4).

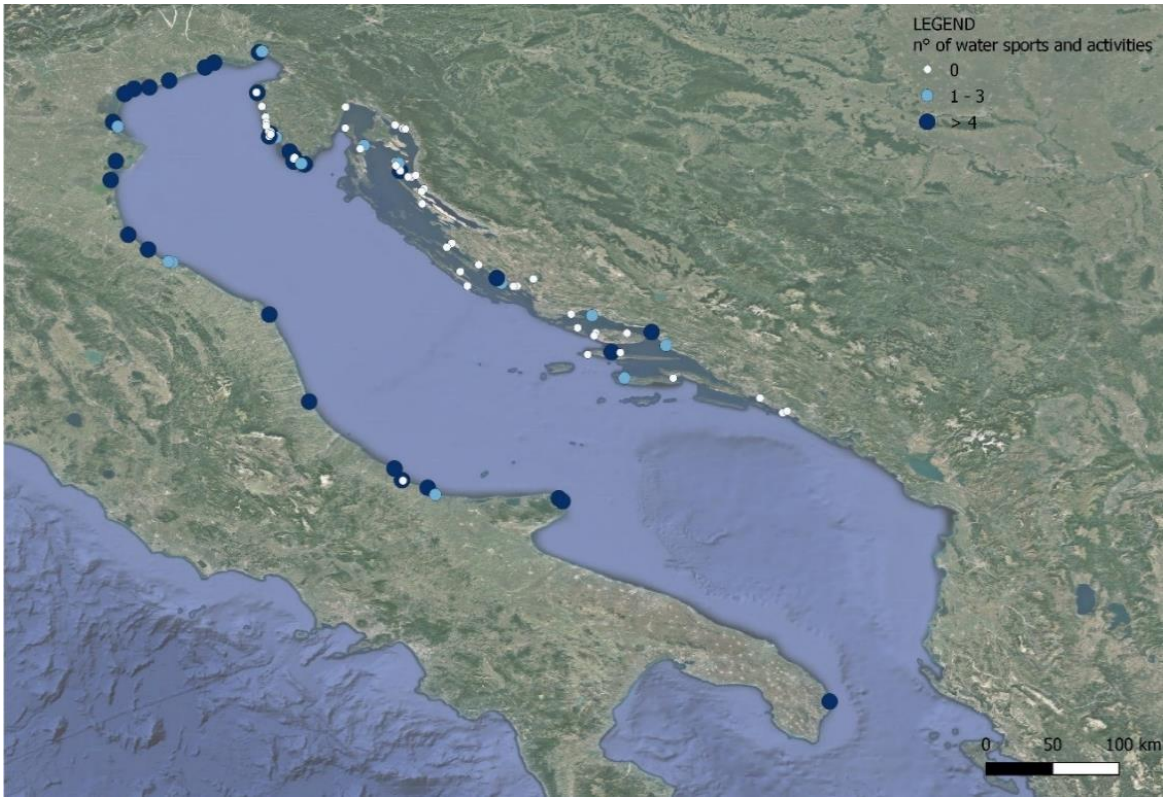

Fig.4 The 81 ports divided according to the number of possible water sports and activities. It is possible to see that Italian ports are better provided.

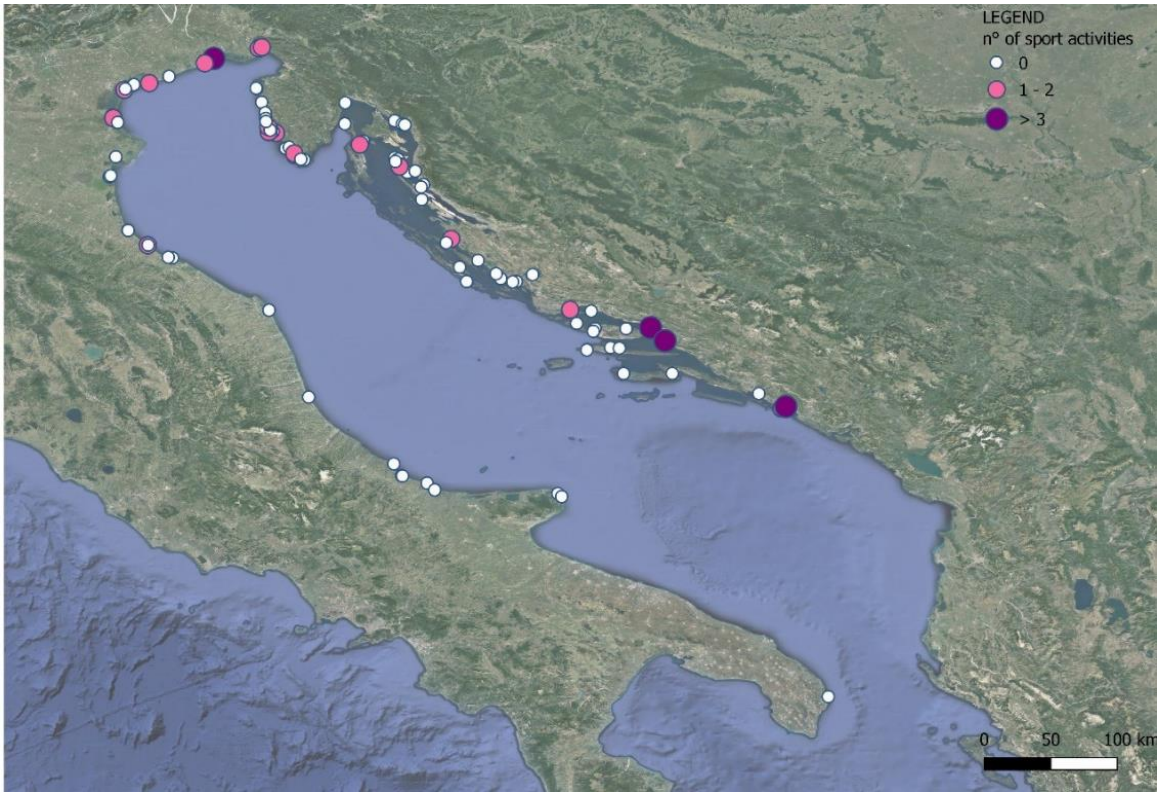

Fig.5 The 81 ports divided according to the number of possible sport activities. It is possible to see that Croatian ports are better provided.

The sports facilities reported are, for example, tennis court, football pitch, swimming pool, riding school, golf course and gym. Conversely to the Fig.3, in Italy almost no one proposes other activities beyond nautical activities.

The same analysis about personal care services inside or in proximity of the port, like wellness centers, beauty centers, hairdresser, barber shop or SPA, where Italian ports are more equipped than Croatian (Fig.5).

To attract tourist inland, it is necessary that the port is well connected to other infrastructure. Distance from train station and bus stop are analyzed with the average of data (1).

$$D = \frac{distance\ from\ station\ [km] + distance\ from\ bus\ stop\ [km]}{2} \quad (1)$$

In Fig.6 it is possible to see the results and that Italian ports are closer and better connected, with only 6 km of distance on average, than Croatian, with 21 km.

In the same manner, distances from hospitals, fire brigade and police stations are evaluated. In this case, small Croatian and Italian ports have similar results approximately 8 km of average distance.

About the possibility to have information with digital or paper documentation of the inland, the results show that small Croatian ports are more virtuous, with the 73% of yes answers, than Italian (only 50%).

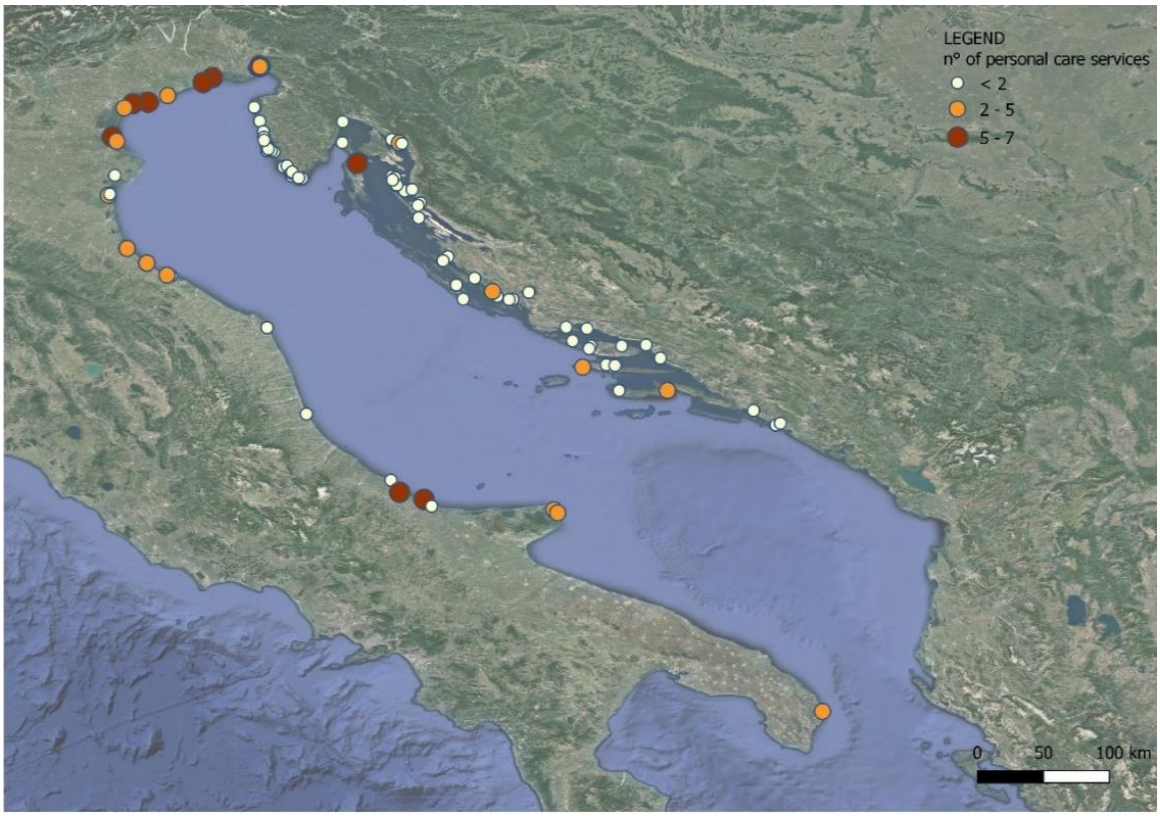

Fig.6 The 81 ports divided according to the number of possible personal care services. It is possible to see that Italian ports are better provided.

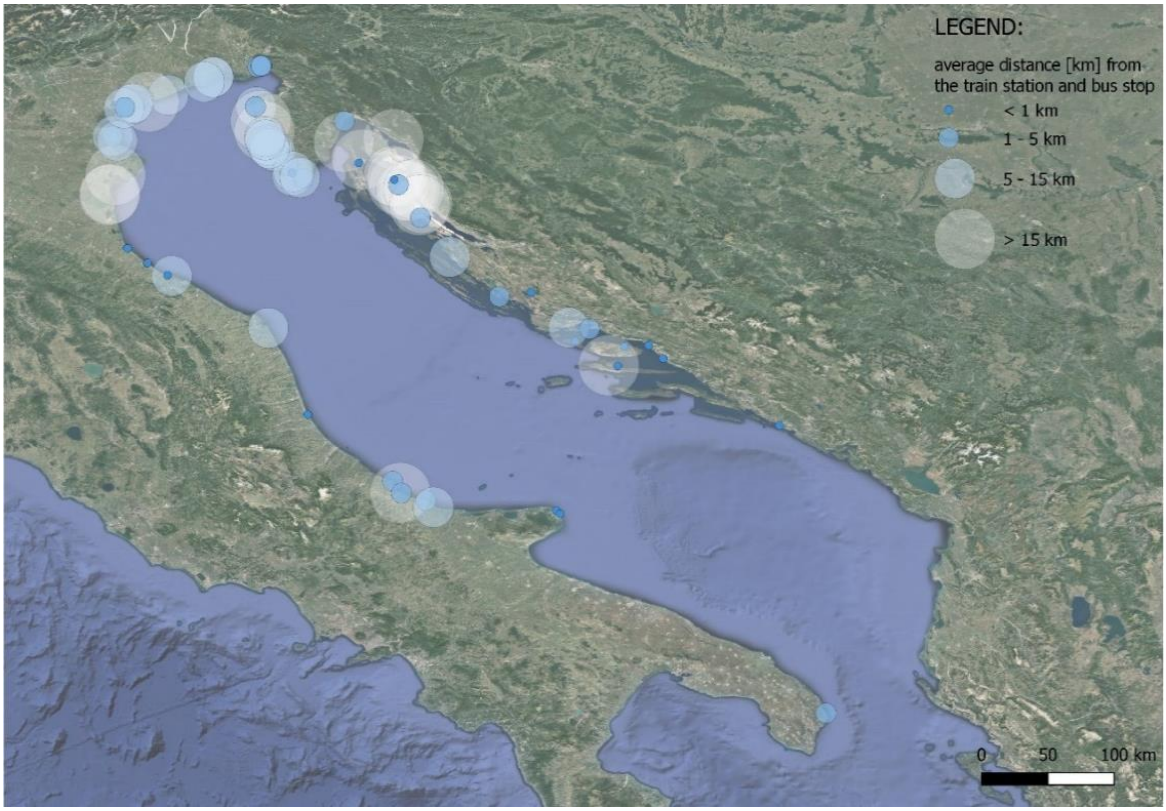

Fig.7 The 81 ports divided according to the average distance from the train and the bus stop. Italian ports are closer than Croatian

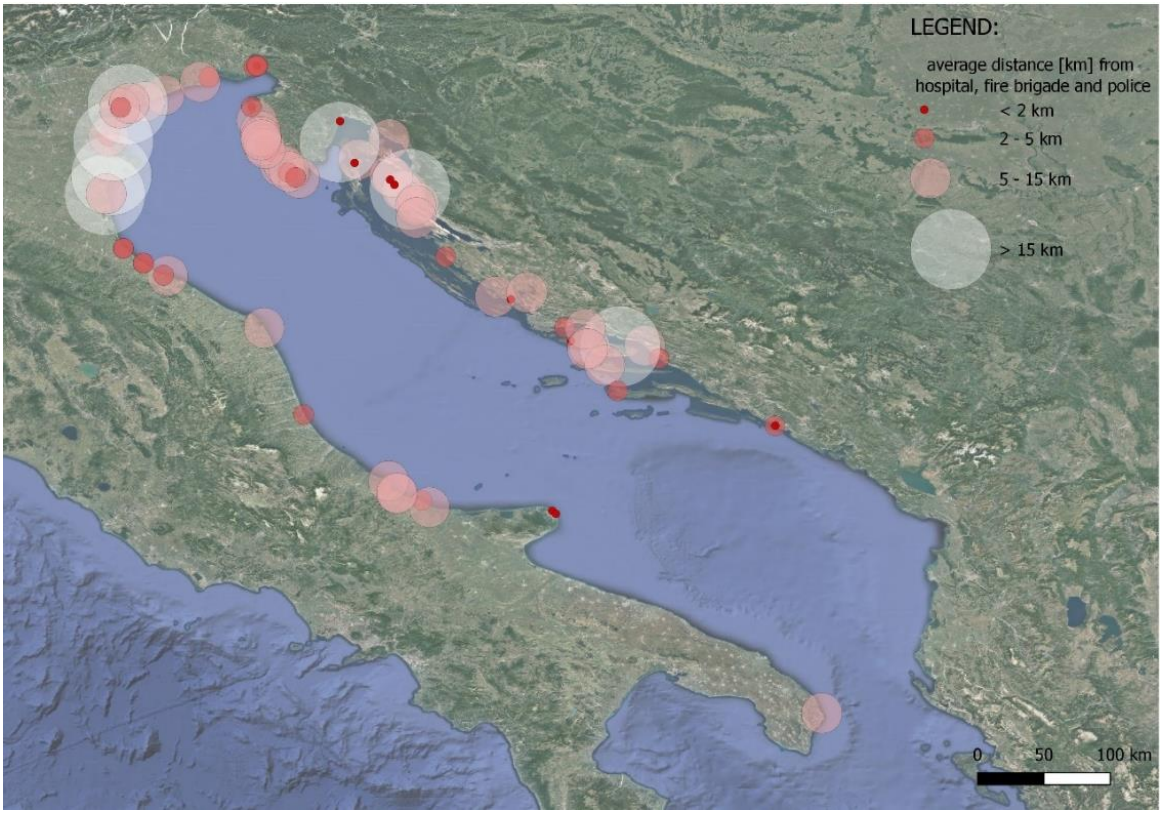

Fig.8 The 81 ports divided according to the average distance from hospitals, fire brigade and police stations

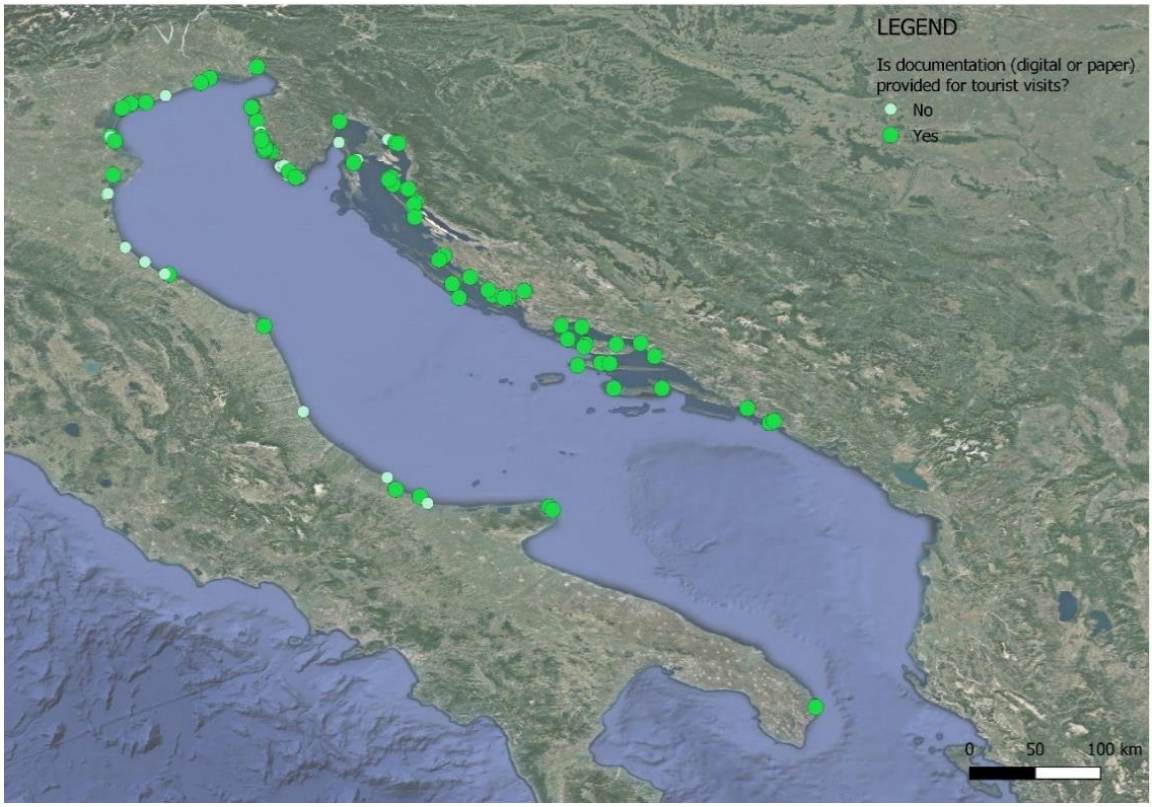

Fig.9 The ports divided according to the possibility to have digital or paper documentation available

5. Conclusion

Planning and designing a small port/marina needs a multicriteria/holistic approach because, as shown in the paper, there are many aspects, from environmental one, to engineering, to aspects related to operational activities, that influence the choices that are taken. Moreover, it seems important emphasizing that the key factors to deal with can change in relationship with the expected results or the enhancement strategies that marina authority/management intend to pursue. One of these key factors is certainly the nautical tourism. Reading the planning/design of a marina through the lens of nautical tourism is a way to address choices related with services offered to the nautical tourist, not only referred to the principal nautical aspects (i.e., all the activities related to the maintenance of the boat of the mooring activity), but also all the elements that can qualify the offer, as the landscape quality, as the cultural interest of town and inland territories, as all services to the person like the offer of leisure activities should be considered. So, it seems possible to conclude that the best marina is the one that avoids most of its potential negative impacts by siting and design, and further incorporates social and environmental features as part of the value of the project itself. This is the result of a multiple-purpose design approach, which endures that the social design elements are fully integrated and contribute synergistically to the project objectives, as opposed to forced add-ons resulting from the negation of nautical tourism necessities. As seen in the case study of Italian and Croatian marinas, this multiple-purpose design approach requires a particular attention to the general management of the whole tourist area, integrating the aspects of accessibility and living the nautical experience as a part of the place, not only referred to the marina. In this way it seems to be possible to attract new clients as well as to offer a new variety to regular customers. On the other hand, neighboring resorts with similar or complementary supply, transport infrastructures and cultural touristic offer must be combined to organizational units so that it is possible to create a sort of 'wider catchment area'. The necessity of an integral management of whole tourist region and the planning to manage resources and prevent environmental problems, the strictly

consideration of the territory and his conformation for all the future development of existing marinas, the use of web to inform and describe the possibilities, etc., demonstrate that.
That means that marinas with its specific infrastructures and characteristics those can be subjected to an adequate conversion towards the function of improving nautical tourism, developing specific services which require a certain level of knowledge and specific technologies which are not represented often with existing one.

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