

# Regional report on small ports phenomenon in the Puglia Region

Final version of 05/05/2021

D.4.2.1



Project Full Title	Framework initiative fostering the sustainable development of Adriatic small ports
Project Acronym	FRAMESPORT
Project ID	10253074
Project Website	https://www.italy-croatia.eu/web/framesport
Priority Axis	4 – Maritime Transport
Specific Objective	4.1
Work Package	4
Work Package title	CONVEYING KNOWLEDGE OF MACRO-THEMES INTO ACTIONS
Deliverable Nr.	4.2.1
Status	<del>Draft/Revised/</del> Final
Partner in charge	ASSET & CMCC
Dissemination Level	Public/ <del>Partnership</del>

#### **ACKNOWLEDGEMENT**

The work described in this document was supported by the INTERREG V-A IT-HR CBC Programme - "Strategic" Subsidy Contract - Project: "Framework initiative fostering the sustainable development of Adriatic small ports, FRAMESPORT" (Project ID: 10253074).

#### **DISCLAIMER**

The content of this deliverable represents the views of the author only and is his/her sole responsibility; it cannot be considered to reflect the views of the INTERREG V-A IT-HR CBC Programme or any other body of the ITALY CROATIA CROSS-BORDER COOPERATION PROGRAMME. The INTERREG V-A IT-HR CBC Programme does not accept any responsibility for use that may be made of the information it contains.



#### **Table of Contents**

1. Introduction	4
1.1. Purpose of the document	4
2. The region in a nutshell	5
2.1. Geographical context and socio-economic description of the region/county	5
2.2. Regional transport and mobility overview and main features	9
2.3. Overall governance and transport planning references	11
3. Analysis of regional small ports phenomenon	12
3.1. Overall description of available infrastructures (position, visualisation, berth det capacities, hinterland connection)	
3.1.1. The Port of Trani	12
3.1.2. The Port of Vieste	13
3.1.3. The Port of Otranto	14
3.2. Overall description of available services for users (technical services, nautical ser collection, touristic services)	
3.2.1. Nautical technical services	16
3.2.2. Ecological aspect	16
3.2.3. Touristic services	17
3.3. Overall information on annual traffic data (cargo/ro-ro/passengers/locals)	18
4. SWOT analysis on small ports phenomenon	19
5. Summary and conclusions	20



#### 1. Introduction

The FRAMESPORT project has the aim to create 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 by 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, the project aims at developing 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 promote their sustainable performance, infrastructure and policies in order to favor their development and growth.

#### 1.1. Purpose of the document

The purpose of this document is to depict an overall picture of the current state of the ports and harbors in Apulia Region, by presenting relevant information on the existing facilities and single port characteristics and services, on the basis of the data collected through the questionnaire provided under WP5<sup>1</sup>. The key is, after collecting the data from questionnaires, to present the baseline information on the existing facilities and individual port characteristics and services it provides.

<sup>&</sup>lt;sup>1</sup> https://ec.europa.eu/eusurvey/runner/IUAV questionnario framesport servizi porti



#### 2. The region in a nutshell

#### 2.1. Geographical context and socio-economic description of the region/county

Apulia Region is located in the southern peninsular section of Italy, bordering the Adriatic Sea to the east, the Ionian Sea to the southeast and the Strait of Otranto and Gulf of Taranto to the south.

It is bordered by the other Italian regions of Molise to the north, Campania to the west, and Basilicata to the southwest. Its chief town is Bari, that is also a metropolitan area. The region is divided into six provinces: Bari, Barletta-Andria-Trani, Brindisi, Foggia, Lecce, Taranto. It occupies an area of 19.358 km2 and has 4.063.888 inhabitants.



Figure 1: Map of Apulia

Apulia's coastline is longer than that of any other mainland Italian

region. In the north, the Gargano promontory extends out into the Adriatic sea like a 'sperone' ("spur"), while in the south, the Salento peninsula forms the 'tacco' ("heel") of Italy's boot. The highest peak in the region is Monte Cornacchia (Daunian Mountains) (1.152 m/3.779 ft above sea level) within the Daunian Mountains, in the north along the Apennines.

It is home to two national parks, the Alta Murgia National Park and Gargano National Park. Outside national parks in the North and West, most of Apulia and particularly the Salento peninsula is geographically flat with only moderate hills.

The climate is typically Mediterranean with hot, dry and sunny summers and mild and rainy winters. Snowfall, especially on the coast is rare but has occurred as recently as January 2019 (following on from snow in March 2018 and January 2017). Apulia is among the hottest and driest regions of Italy in summer with temperatures sometimes reaching up to and above 40°C/104°F in Lecce and Foggia.

The coastal areas, particularly on the Adriatic Sea and in the southern Salento peninsula, are frequently exposed to winds of varying strengths and directions, strongly affecting local temperatures and conditions, sometimes within the same day. The Northerly Bora wind from the Adriatic sea can lower temperatures, humidity and moderate summer heat while the Southerly Sirocco wind from North Africa can raise temperatures, humidity and occasionally drop red dust



from the Sahara desert. On some days in spring and autumn/fall, it can be warm enough to swim in Gallipoli and Porto Cesareo on the Ionian coast while at the same time, cool winds warrant jackets and jumpers/sweaters in Monopoli and Otranto on the Adriatic coast.

The area that is in between Otranto and Santa Maria di Leuca is part of the Regional Natural Coastal Park of "Costa Otranto - Santa Maria di Leuca e Bosco di Tricase" wanted by the Apulia Region in 2008. This territory has numerous natural and historical attractions.

Puglia	REGIONE PUGLIA
Area	19.358 km <sup>2</sup>
County seat	Bari
Settlements	257 municipalities
Population	4.063.888 inh.
Population density (per km²)	210 inh/km <sup>2</sup>
Official language	Italian

Table 1: Puglia - statistical data from 2019



Figure 2: Resident population in Apulia

The population of Apulia shows some fluctuations: in the period 2014-2019 decreased. The parallel in the fluctuation with Italian condition is shown in the following figure.



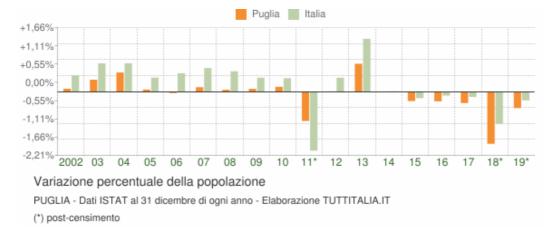


Figure 3: Population in Apulia compared with Italy

Emigration from the region's depressed areas to northern Italy and the rest of Europe was very intense in the years between 1956 and 1971. Subsequently, the trend declined, as economic conditions improved, to the point where there was net immigration in the years between 1982 and 1985. Since 1986 the stagnation in employment has led to a new inversion of the trend, caused by a decrease in immigration.

According to the results of ISTAT (2019) the biggest minorities came from: Romania, Albania, Morocco, China, Senegal, India.

The biggest town is Bari with 324.198 inhabitants (ISTAT 2017).

The region's contribution to Italy's gross value added was around 4.6% in 2000, while its population was 7% of the total. The per capita GDP is low compared to the national average and represents about 68.1% of the EU average.

Among the regions of the South, the economy of Puglia is the one that has recorded the best trend in recent years. GDP growth relative to 2018, according to ISTAT data, marks a + 1.8% (+ 1.5% in Italy as a whole and + 0.7% in the South) mainly due to the growth of the tertiary sector (+2,9%) and Industry (+ 0.7%) against a significant decline in the agricultural sector (-8.8%). The GDP at market prices per inhabitant shows a growth rate of + 3.9% (compared to + 3.0% nationally and + 2.6% in the South). Despite the results obtained, the region's per capita GDP is still among the lowest in Italy, higher only than Campania, Sicily and Calabria. In 2019, the unemployment rate, among the highest in Europe, was 14.9%, higher than the national average of 10%, while employment stood at 46.3%, far from the national average (59%) and European (69.2%). Drought constitutes an obstacle



to the Apulian economy, a problem which was largely solved by the construction of the Apulian aqueduct.

Puglia has experienced an accelerated development of tourism in recent years, which however has limits: it is above all national and, in particular in Gargano and Salento, seasonal. The region was named in the top 20 Best Value Travel Region in the World by National Geographic. Tourist arrivals in 2007 were 2 276 402 Italians and 417.479 foreigners.

Puglia has managed to combine its traditions, its history and production vocations with innovation and technology. Indeed, it has achieved good levels of specialization in numerous industrial sectors. Various policies with the aim of developing innovation processes together with a wide availability of investment incentives, have ensured that the local production system has grown and attracted over 40 international industrial groups belonging to the aerospace, automotive, chemical and IT sectors.

The regional research system has over 5,000 researchers and boasts specialized scientific expertise in interdisciplinary fields: Biology, information technology and nanotechnology, which have contributed to the birth and consolidation of three technological clusters: biotechnology, high technology and mechatronics.

The region also has a highly skilled and specialized human capital of over 103,000 university students and nearly 15,000 new graduates per year.

The share of gross value added by the agricultural and services sectors was above the national average in 2000. The region has industries specialising in particular areas, including food processing and vehicles in Foggia; footwear and textiles in the Barletta province, and wood and furniture in the Murge area to the west.

Between 2007 and 2013 the economy of Apulia expanded more than that of the rest of southern Italy. Such growth, over several decades, is a severe challenge to the hydrogeological system.

Apulia's thriving economy is articulated into numerous sectors boasting several leading companies, but most of them produce materials or components, not finished goods:

- Aerospace (Leonardo, Avio Aero, Sitael, Blackshape)
- Automotive (Bosch, Magneti Marelli, Magna Gertrag, Bridgestone)
- Mechanics (New Holland Construction, IVECO Motori, Isotta Fraschini Motori, MERMEC)



- Furniture (Natuzzi)
- Food and Beverage (De Carlo, Divella, Quarta Caffé)
- Agriculture (Casillo Group, G.C. Partecipazioni)
- Publishing (Laterza, Edizioni Dedalo)
- Tourism (Nicolaus tour)
- Logistics (GTS Rail)
- I.C.T. (Exprivia)

Other economic sectors of importance are fishing and aquaculture, agriculture, viticulture and oliviculture.

#### 2.2. Regional transport and mobility overview and main features

Regional transport and mobility are represented by the presence of various infrastructures of national importance: highways, airport, ports and railways.

In the region there are two motorway connections: A14 (Bologna-Taranto) and A16 (Napoli-Canosa di Puglia). There are three main airports in Bari, Brindisi and Foggia and some minor airports. The railway network is partially managed by the Italian Railway Network and other minor railways.

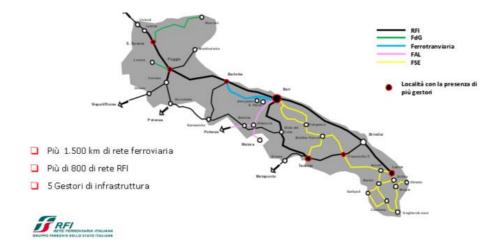


Figure 4: Railway network in Apulia

The Apulian Region has 900 km of seacoast.

The main ports are:



- **Bari** is merchant, commercial and tourist (cruise terminal); the main connections are for Albania (Durres), Montenegro (Bar) and Greece (Corfu, Igoumenitsa and Patras). The multiple operational functions of the port of Bari can count on docks equipped for the handling of all types of goods and on an excellent network of connections with each mode of transport. Thanks also to these characteristics, the Port of Bari has been indicated as a "western terminal";
- **Brindisi** is mercantile, commercial, tourist and military; it makes connections with Albania (Vlora), Greece (Corfu, Igoumenitsa, Kefalonia, Pass, Zakynthos, Patras), Turkey (Çeşme);
- **Taranto** is mostly military, commercial and industrial; it is one of the most important ports in Italy and in the Mediterranean and is the second Italian port by number of goods. It makes connections with other Italian ports and with those of the Mediterranean, the Middle East and China;
- Manfredonia has 3 ports: one fishing, one industrial and one tourist ("Marina del Gargano");
- **Polignano a Mare** has a marina located in San Vito and inaugurated in June 2015, which has 316 berths between 5 and 40 meters;
- **Mola di Bari** has a fishing and tourist port; in addition to 350 pleasure boats, it hosts 115 fishing boats for a total of 2 616 gross tonnage, which make Mola the second navy in the metropolitan city of Bari is among the first in the entire Adriatic;
- Tourist port of **Rodi Garganico** has 310 berths from 8 to 45 meters and is equipped with a yacht club. Daily hydrofoils sail there for the Tremiti Islands and weekly for Dalmatia;
- Barletta is one of the most popular in the Adriatic Sea for its breadth of basin and safety;
- Trani, mainly for tourism and fishing, occasionally there are connections with the Croatian coast;
- **Bisceglie** is a fishing and tourist boat; mainly fishing boat, recently adapted to accommodate about 500 pleasure boats;
- Molfetta, mainly a fishing boat;
- Monopoli;
- **Otranto** is commercial and tourist; it makes connections with Vlora (Albania), Corfu, Igoumenitsa (Greece);



- Gallipoli is commercial and tourist.

### 2.3. Overall governance and transport planning references

Acts and Reference Documents:

1. Piano Attuativo del Piano Regionale dei Trasporti (Delibera di Giunta n. 598 del 26/04/2016).



#### 3. Analysis of regional small ports phenomenon

## 3.1. Overall description of available infrastructures (position, visualisation, berth details and capacities, hinterland connection)

#### 3.1.1. The Port of Trani



Figure 5: Port of Trani

Port of Trani is formed by a natural inlet enclosed by two piers, the Molo S. Lucia to the west and the Molo S. Antonio to the east, based in Trani. The seabed is sandy. It has 550 boat berths.

Different authorities manage the traffic port. On the west side there is the commercial area, on the east one the touristic area. The first one is controlled by Capitaneria di Porto, the touristic part is managed by Lega Navale Italiana and Darsena Comunale.







Figure 6-7: Port of Trani

#### 3.1.2. The Port of Vieste



Figure 8: Port of Vieste

Port of Vieste is formed by the fishing port and the refuge port of S. Eufemia. The fishing port consists of a pier of about 750 m and the refuge port which is located between the S. Lorenzo pier and the small island of S. Eufemia, where there is a pier about 300 m long. The moorings are currently still located on the quay of the old port. It has more than 750 boat berths.

Different authorities manage the traffic port. On the east side there is the Capitaneria di Porto. The touristic part is managed by many stakeholders, among them there is the Lega Navale Italiana.







Figure 9-10: Port of Vieste

	Distance by the port (km)
Railway station	100
Airport	105/190
Bus station	0,3
Highway	90

#### 3.1.3. The Port of Otranto



Figure 11: Port of Otranto



Port of Otranto looks like a small gulf, characterized by the presence of the San Nicola pier with three docks and numerous piers that lean towards the shore. It has 390 boat berths. Different authorities manage the traffic port: Municipality of Otranto and Lega Navale Italiana.





Figure 12-13: Port of Otranto

	Distance by the port (km)
Railway station	2
Airport	100
Bus station	0,2
Highway	200



## 3.2. Overall description of available services for users (technical services, nautical services, waste collection, touristic services)

Services offered inside ports are mostly decentralized, meaning that most services are being offered by each stakeholder, not included in a common offer. There are also serviced that are offered by the city area around the port.

The different sailing and nautical centers have different technical services dedicated to the costumers (construction site, launching, hauling, sale of technical products, sail repair, bodywork, mechanical workshop, electrotechnics, carpentry).

In some of them there is the presence of separate collection of waste. Upgrades are underway to increase energy supply based on renewable energy. In the three areas there are services available for tourists, in particular various tourist itineraries are promoted for half a day or a whole day trip in the surrounding area. Information materials is available at tourist centers and online.

#### 3.2.1. Nautical technical services

The Port services are the provision activities needed to ensure the running of the Port, aimed at enabling the operations associated with maritime traffic to be carried out in conditions of safety, efficiency, regularity, continuity and non-discrimination.

A shipyard is present in the port of Trani and Otranto and the fuel provider in all the three ports.

Electrical energy and water are provided all around the ports; lighting service is provided by the municipalities. Video surveillance too is provided by municipality in Trani.

There is a fire protection system in the port of Vieste and a partial one in the port of Otranto.

In all three ports there is a mooring service that works 24h during summer only.

In the port of Otranto there are nautical shools and in all three ports there are nautical associations.

#### 3.2.2. Ecological aspect

Waste collection is provided by the municipalities and in some port they are going to provide ecological islands.



In the port of Otranto there is the service for the waste of batteries and for the waste of oils too in Vieste.

In the port of Otranto there is a point to recharge electrical vehicles.

#### 3.2.3. Touristic services

In all the port areas there is the presence of technical and nautical shops, markets and restoration activities.

The link with the surrounding cities is provided by public transport lines and there is the connection with the railway station in Trani and Otranto. The boat berthing services also organize touristic tours by boat.



#### 3.3. Overall information on annual traffic data (cargo/ro-ro/passengers/locals)

From the data collected, in all ports there are annual contracts for residents who moor their boats (also for maintenance needs) and seasonal ones during summer.



#### 4. SWOT analysis on small ports phenomenon

#### Strengths

- Natural beauty, clear sea
- Favorable climatic characteristics
- Ecologically preserved landscape and underwater world
- Strategic position
- Supporting tourist infrastructure (service activities)
- Hospitality
- Nautical infrastructure (nautical ports tourism)

#### Weaknesses

- Level of technical service in marinas
- Seasonality of demand
- Content of the destination offer and quality of services
- Need for a more sustainable management and improvement of services for waste collection and water treatment
- Lack of nautical development strategy
- Traffic connection / accessibility
- Traffic data not updated

#### **Opportunities**

- Opening new markets
- Apulia is becoming an increasingly popular tourist destination
- Improving traffic accessibility
- Adoption of a nautical development strategy tourism
- Climatic conditions favorable for significant season extension
- Collaboration with associations and local authorities

- Marine pollution
- Insufficient awareness of the need for protection of environment and biodiversity conservation
- World pandemic
- Onerousness of the initiatives aimed at increasing the capacity and potential of the port structures



#### 5. Summary and conclusions

The aim of this regional report was to provide an overview of the current state of the Apulian port areas thanks to the processing of data collected through the questionnaire filled by the stakeholders.

Apulian ports have one of the best predispositions for success due to favorable geolocation in the Mediterranean, as well as vicinity to neighboring states that share a similar view on the sector. They are also in a region full of cultural and touristic attractions. The three examined ports work as commercial and touristic ports. They need a better connection among them and the other Mediterranean coast.

Apulian ports are one of the greatest assets to the Italian tourism. The next step is becoming sustainable ports.