



**CHINA-CEE INSTITUTE**

**THE ROLE OF**

**NORTH ADRIATIC PORTS**

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**Chief Editor: Dr. Chen Xin**

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# **“The Role of North Adriatic Ports”**

Research project report

(2019)

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## **PREFACE**

China-CEE Institute had announced “Call for Proposal” research programs in December 2018. One of the proposed research projects is “The Role of North Adriatic Ports”. What we are presenting here is the result of the research project, conducted by a consortium led by Science and Research Centre Koper (Slovenia) and Centre of International Relations, Faculty of Social Sciences, University of Ljubljana, Slovenia.

This project provides a comprehensive overview of the five main North Adriatic Ports and the North Adriatic Ports Association (NAPA), analyzes the cooperation trends among NAPA ports and the challenges they are facing, sheds light upon the role of Northern Adriatic Ports in the Maritime Silk Road framework and the status of Northern Adriatic Ports within the China’s Belt and Road Initiative and China-CEEC cooperation framework, and finally deals with how the North Adriatic Ports-related projects influence domestic and EU narratives on China’s presence in the ports concerned.

The China-CEE Institute, registered as a non-profit limited company in Budapest, was established by the Chinese Academy of Social Sciences (CASS) in April 2017. The Institute aims to build ties and strengthen partnerships with academic institutions and think tanks in Hungary, Central and Eastern European countries, as well as other parts of Europe. The China-CEE Institute encourages scholars and researchers to carry out joint researches and field studies, organizes seminars and lecture series, holds training programs for students and junior researchers and publishes publications, etc.

I hope this book will help enriching the research literature on the North Adriatic Ports and their role in international cooperation.

**Prof. Dr. CHEN Xin**

Executive President and Managing Director, China-CEE Institute

Deputy Director General, Institute of European Studies, CASS

# 1 INTRODUCTION

With the technological development of maritime transport, we detect its higher importance to national economies, which is true for both Chinese and European markets. One of the end points of the Maritime Silk Road in the context of the Belt and Road Initiative is the group of ports in the Northern Adriatic, gathered in the so-called NAPA (North Adriatic Ports Association), which have been recognized by the European Commission as “European core ports”, while Northern Adriatic was recognized as “the key EU entrance”. This is important, especially in the light of the fact that a result greater awareness of NAPA ports in the world their throughput grows constantly. Last year the sum of NAPA ports made 124 million tons of cargo throughput, which places NAPA on the fourth place among the European ports. NAPA ports handled 1,8 million TEU containers, which represent the biggest and most competitive cargo group for NAPA and still offers much more potential. A study estimates that around 6 million TEUs can be reached until 2030.

The status of the Northern Adriatic ports is in itself specific, since the main factor influencing their position is the North Adriatic Ports Association (NAPA), established in 2010 by the authorities of the ports of Koper, Rijeka, Trieste and Venice, with Ravenna leaving the alliance in 2012 and re-joining in 2017 (Putten van der *et al.* 2016). Launched in 2014, the five ports alliance has encountered some problems, mainly due to domestic political dynamics between the three neighbouring countries and their economic, political and infrastructural policies and agendas. The project has, however, been resurrected in late 2017 on the incentive of the Chinese authorities keen on promoting the Belt and Road Initiative. The North Adriatic consortium aims to attract – and service – China’s huge cargo ships reaching the Mediterranean Sea via the Suez Canal. Chinese investors having already shown interest for this project include: the port authorities of Shanghai and Ningbo; the China Communication Construction Company - CCGG Group (the world’s sixth largest infrastructure

company) and the Industrial and Commercial Bank of China (ICBC)” (Casarini 2017, pp. 86–87). Apart from their role in the Maritime Silk Road framework, the issue of Northern Adriatic Ports can also be reassessed within the Central and Eastern European 16+1 framework.

Nevertheless, the specificity of the NAPA ports and the countries in which they are placed in, require significant attention in terms of research. The region itself faces significant challenges which are influencing the perceptions and the acceptance of foreign, which is partially a result of the complex relationship especially between countries of the former Yugoslavia. An additional challenge in this region is a different status of countries in relation to EU and EU integration policies, but also in relation to EU's own infrastructural and economic agendas (e.g. Trans-European Transport Networks Program, adopted in 1993), as well as the different levels of the execution of the ten Pan-European Corridors and Areas (established during the three Pan- European Transport conferences).

The study ahead aims to investigate deeper into the newest constellations that have motivated the changes mentioned above. The main themes of the research project are containing:

- The overview of the main North Adriatic Ports (Ravenna, Venice, Trieste, Koper and Rijeka)
- The overview of the North Adriatic Ports Association itself, as the network contributes to the overall status of its member ports in world's maritime transport power constellation
- The challenges and potential of NAPA, including cooperation projects between NAPA ports.
- Existing logistics overview to the ports hinterlands, which enable the cargo to enter European markets
- The models of competition/collaboration between Piraeus and NAP
- Status of Northern Adriatic ports within the Belt and Road Initiative and its status within the 16+1 framework

- Northern Adriatic port-related projects influencing the domestic and EU narratives/framings of the Chinese investments with the overview of the relevant political and media discourse

Through these themes, the proposed research aims to provide a comprehensive and thorough analysis of the issue of the Northern Adriatic ports within the new geopolitical and economic constellation in the world from several interrelated aspects.

## 2 PREVIOUS STUDIES

Several aspects of this topic have already been researched. The (the so-called “Blue Banana”) in Northern Adriatic that put emphasis on the role of these ports within the EU (Brady 1998; Hospers 2002; Trupac and Kolenc 2002; Turocy and Stengel 2003), and expansion of the EU eastwards brought research on the new possibilities within the port systems (Colson et al. 2007; Imai et al. 2009; Wang and Wang 2011; Tuljak and Suban 2017). Weaknesses and the competitiveness of the mentioned ports have been identified (eg. Liu and Medda 2009), ports being mainly restricted due to relatively poor transport infrastructure (Paoletti 2001). Possible further financing has been researched (eg. Momot 2008), however, the newest circumstances arising with the recent reality of the constellation of the global powers in the region have not yet been taken into account seriously enough within academic field. Most research has actually been made by the investigative journalists or think tanks on occasional basis (Merics 2016; Financial Times 2017; Bloomberg 2018; Geographical 2018) or were conducted even as a EU body research brief (eg. European Parliament Briefing March 2018).

Rare exceptions are Božičnik (2017), which summarizes several aspects of the individuality of ports inside the cooperation and the influence of European regional policies and macro view (geopolitics) on the North Adriatic region and Chaziza (2018), which connects the Maritime Silk Road with the role of the Mediterranean. Taking into account specific role of the NAPA ports in the new constellation of actors presents in the region one should also mention the study of Kristijan Stamatović, Peter de Langen and Aleš Groznik, on “Port cooperation in the North Adriatic ports” (2018), focusing on internal cooperation and positioning of each port in the NAPA association. Going deeper into the ports functioning itself, Dejan, Intihar, Prah and Kramberger (2013) performed a preliminary research study “*Forecasting Of Maritime Cargo Flows To Support The Planning Activities In Napa Ports*”. The study focuses on the functioning and

forecasting the cargo flows entering into the NAPA ports, as well as specifies useful details on logistics and infrastructure of each port included into the association itself.

Reviewing the current literature authors find that in the area of NAPA ports in association to the Belt and Road initiative or even a more specific regional instrument of 16+1 Framework, there is almost a complete lack of research papers considering the topic in detail. The research of the field needs to be renewed *both factually and theoretically*:

- from the position of the Chinese presence in the region (through the Belt and Road Initiative) and the contemporary institutional frameworks created in this geographical area (such as 16+1 Platform) and their influence on NAPA ports
- through the perspective of the newest policy developments connected to the NAPA port infrastructure that are opening the way for the Chinese cargo in Europe, such as the XI Pan-European corridor
- through the perspective of new developments in terms of NAPA ports' access to the hinterlands leading to European markets
- from observing the framing of (both media and political) discourse connected to the foreign actor's presence in the region (including China), as well as local reactions to the foreign presence

The following research is planning to focus on all four points, focusing on the Chinese presence in NAPA ports, as well as NAPA ports themselves. It includes also an additional connection to the Piraeus port, considered both a parallel and competitive route of cargo to Europe. Due to various scenarios sought for the relation between these transport hubs, contesting the lengths of land leg, maritime leg, availability and status of land

transport routes to the inland Europe and other factors, it is important to look at the possibilities of complementing or combining the services of the NAPA Ports with the Greek Piraeus, which is outlined in the second part of the report. Research is based on the analysis of relevant official documents, statistical analyses, governmental, companies' and media reports. The relevant previous analyses and research is reassessed and reviewed in the light of the more comprehensive framework. Interviews were conducted with the representatives of the NAPA ports and the relevant governments' officials in order to also analyse their and their views on the current status of NAPA; their participation in BRI and 16+1 context; and their strategies for the future development of the collaboration.

### 3 NORTH ADRIATIC PORTS

Given its geographical location, the Adriatic Sea has since the historical period of the maritime domination of the Venetian republic, been an important entry for the European continent, since it comes closer to the central European region than any other part of the seas surrounding the continent. Due to their geographical location and other factors, the ports in four countries that surround the Adriatic (Italy, Slovenia, Croatia, Albania) are an important group, among the most important cargo hubs in Europe. Most of the big ports in the Adriatic are located along the Italian coast; starting from the south, these are the ports in the Apulia region, the largest being Brindisi, followed by Bari, Barletta, and Manfredonia. Further north, the most prominent ports are Ortona in the Abruzzo Region, Ancona in the Marche Region, and Ravenna in Emilia-Romagna. Italy's main ports on the Adriatic coast, however, are located at the northernmost part of the sea, most notably Venice in Veneto and Trieste in Friuli-Venezia Giulia. Several other ports are present in these two regions, including Chioggia in Veneto; and Monfalcone and Porto Nogaro in Friuli-Venezia Giulia.<sup>1</sup> The northern Adriatic region is also the location of the only cargo port in Slovenia, the port of Koper. In Croatia, several important ports are located along the north-eastern Adriatic coast. The most important port for goods is Rijeka with its connected ports of Bakar in Primorje-Gorski Kotar County and Raša in Istria County. Other larger ports in Croatia are Omišalj on the island of Krk in Primorje-Gorski Kotar County, Split in Split-Dalmatia County, and Ploče in Dubrovnik-Neretva County. In Montenegro, the largest port is Bar, while Albania has its major port in the coastal town Durrës.

With the whole of the Adriatic being positioned as a sort of inlet into continental Europe, the northern part of the Adriatic especially works as the start of a natural corridor running deep into the continent, with

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<sup>1</sup> According to ISTAT statistical data for 2017 and 2018 (<http://dati.istat.it/>).

proximity to both Alpine regions and the Pannonian. It is the quickest naval route from Asia and the Middle East: the distance to the northern Adriatic ports is on average 2,000 nautical miles shorter than to northern European ports.<sup>1</sup> The main ports in this region of the Adriatic emphasise this geographic advantage, in recent years portraying themselves as thereby that much more important a factor in maritime transport and commerce. The five main ports in the northern Adriatic, which also have the status of “core ports” in the TEN-T infrastructure framework<sup>2</sup> of the European Commission, are Ravenna, Venice and Trieste in Italy, Koper in Slovenia, and Rijeka in Croatia.

### **3.1 Overview of the five main northern Adriatic ports**

#### **3.1.1 Ravenna**

The port of Ravenna, historically a descendant of Classe, was one of the most important ports in the Mediterranean in antiquity,<sup>3</sup> dating back to the first century BC when the Roman emperor Augustus placed one of the two imperial fleets there. After the collapse of the Roman Empire, the port in Ravenna enjoyed another prosperous period when the city became the seat of Byzantine rule on the Apennine Peninsula, the so-called Exarchate of Ravenna, which lasted until the middle of the 8th century. The ancient history of the port ended with floods and other natural disasters.<sup>4</sup> It was only revived in the 18th century when it began its activity as “Corsini port”

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<sup>1</sup> “EU projects”, *NAPA*, <http://www.portsofnapa.com/eu-projects> (acc. 20 May 2019).

<sup>2</sup> “List of Sea Ports in the Core and Comprehensive Networks”, *European Commission*, [https://ec.europa.eu/transport/sites/transport/files/modes/maritime/ports/doc/2014\\_list\\_of\\_329\\_ports\\_june.pdf](https://ec.europa.eu/transport/sites/transport/files/modes/maritime/ports/doc/2014_list_of_329_ports_june.pdf) (acc. 23 May 2019).

<sup>3</sup> Andrea Augenti and Federica Boschi, “Classe (Ravenna): An Abandoned Town in an Urbanized Landscape”, *CHNT*, Proceedings of the 17th International Conference on Cultural Heritage and New Technologies 2012 (CHNT 17, 2012) [http://www.chnt.at/wp-content/uploads/eBook\\_CHNT17\\_Augenti\\_Boschi.pdf](http://www.chnt.at/wp-content/uploads/eBook_CHNT17_Augenti_Boschi.pdf)

<sup>4</sup> “Storia”, *L’Autorità di sistema portuale del Mare Adriatico centro-settentrionale*, <http://www.port.ravenna.it/pagina-porto-2/storia/> (acc. 10 May 2019).

with an 11 km canal from the sea to the city of Ravenna. Ravenna again became a port of international importance after World War II, which coincided with the discovery of methane deposits in the sea before the city and the building of refineries and the growth of the petrochemical industry. After the 1970s oil crisis, the port started specializing in other types of commercial goods, most notably container transport.<sup>1</sup>

Port of Ravenna lies at 44° 25' 27" N latitude and 12° 13' 22" E longitude. It is categorized as a medium sized seaport with small harbor size, good shelter and maximum vessel size accepted over 500 feet in length. Marine railroad size is medium and so is the size of the drydock. It has both mobile cranes and floating cranes and offers the supplies of provisions, fuel oil, water and diesel oil. Limited ship repairs are possible.<sup>2</sup>

The port of Ravenna is closely linked to the surrounding area where offshore gas fields enabled the development of a large petrochemical industry. Refineries and petrochemical plants that were established after World War II, grew stronger during the oil crisis in the 1970s. Today, refining of petroleum and natural gas, as well as the related industry of producing synthetic rubber are the strongest industries in that region.<sup>3</sup>

Today the Port of Ravenna is the only port in the Italian region of Emilia-Romagna. It is the leading port in Italy for the trade with the eastern Mediterranean and the Black Sea region, where it serves almost 40% of the national total (excluding coal and oil products). It is also an important port for the trade with the Middle East and east Asia.<sup>4</sup> Ravenna is linked with main transport networks in Italy through a system of highways, railroads

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<sup>1</sup> *Ibid.*

<sup>2</sup> All information from: <https://www.searates.com>.

<sup>3</sup> »Port of Ravenna«,

[http://www.worldportsource.com/ports/review/ITA\\_Port\\_of\\_Ravenna\\_1171.php](http://www.worldportsource.com/ports/review/ITA_Port_of_Ravenna_1171.php) (23.9.2019).

<sup>4</sup> «Caratteristiche del porto», *L'Autorità di sistema portuale del Mare Adriatico centro-settentrionale*, <http://www.port.ravenna.it/pagina-porto-2/caratteristiche-del-porto/> (acc. 12 May 2019).

and an airport. Highways going through Ravenna are the A14 (“Autostrada Adriatica” between Bologna and Taranto), European route E45 (connecting Norway and Sicily) and European route E55 (connecting Sweden and Greece). The Ravenna railway station and Ravenna Airport connect the city with regular links to other Italian and European towns. Being a node accessible from main Italian and European markets, Ravenna was included as a core port in the TEN-T network framework of the European Commission.<sup>1</sup> It is the southern terminal of the Baltic-Adriatic corridor (which also includes the railway connections between Ravenna, Venice and Trieste). Ravenna port relies on a well-connected road, railway and airport system for activities handled by over 50 shipping houses, working with road and rail distribution, door-to-door maritime and storage services for FCL and LCL containers, and consolidated air shipments. The container and cargo handling terminals provide intermodal connectivity.<sup>2</sup>

There are 18 concessionary companies operating in the port of Ravenna: Bunge Italia S.p.A., Buzzi Unicem S.p.A., Docks Cereali S.p.A., Eurodocks S.r.l., Fassa S.r.l., I.F.A. S.r.l., Italterminali S.r.l., La Petrolifera Italo Rumena S.p.A.-Magazzini Generali, Lloyd Ravenna S.p.A., Marcegaglia Carbon Steel S.p.A., NADEP Naval Depositi S.r.l., NADEP Ovest S.p.A., S.A.P.I.R. Porto Intermodale Ravenna S.p.A., SETRAMAR S.p.A., SOCO S.p.A., T.C.R. S.p.A. – Terminal Container Ravenna, Terminal Nord S.p.A. and Yara Italia S.p.A.. Four non-concessionary companies also operate in the port: Colacem S.p.A., Docks E.C.S. S.r.l., Impresa Compagnia Portuale S.r.l. and Italterminal S.r.l.<sup>3</sup>

The terminals of Ravenna port receive different types of goods. This is the leading port in Italy for solid bulk, especially raw materials for the manufacture of ceramics, cereals, fertilizers and flour, and an important

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<sup>1</sup> *Ibid.*

<sup>2</sup> *Ibid.*

<sup>3</sup> “Operatori e Servizi”, *L’Autorità di sistema portuale del Mare Adriatico centro-settentrionale*, <http://www.port.ravenna.it/pagina-porto-2/operatori-e-servizi/> (acc. 12 May 2019).

stopover port for metallurgical products. It is also an important port for container transport and a key junction for ro-ro services. The port is complemented by five coastal deposits: Alma Petroli S.p.A. for crude oil, heavy semi-finished products, fuel oil and bitumen, the Petrolifera Italo Rumena S.p.A., which specializes in chemical and petroleum products, Petra S.p.A. for petroleum products, and Versalis S.p.A. and Fosfitalia S.p.A., which mostly store liquid chemicals.

### **3.1.2 Venice (Venezia)**

The historical development of the Venetian port was closely linked with the rise and a millennium long existence of the Venetian Republic as one of the greatest powers in medieval and Early Modern Europe and the Mediterranean. After refugee communities from inland freed themselves from Byzantine control in the 9th century, Venice became a trading intermediary between countries and peoples of the western and eastern Mediterranean, and, eventually, between Europe and Asia, building its maritime empire from the 12th century onwards. Shipbuilding and other business connected to expanding naval trade became the pillars of Venetian wealth and prosperity. Its prosperity started declining from the 15th century onwards, being damaged both by the onset of Ottoman domination in the Mediterranean and the ocean explorations and colonial imperialism of England, Holland, Spain and Portugal. The port of Venice remained strong until Venice was defeated by Napoleon and subsequently handed over to Habsburg rule at the end of the 18th century. A new era started in the mid-19th century, when Venice was finally connected to the mainland by a causeway allowing a railway, soon after which it also formally became part of the mainland country, the newly established Kingdom of Italy. It was

not until the 1930s that automobile and truck traffic had a road connecting Venice with the mainland.<sup>1</sup>

Port of Venezia lies at 45° 26' 8" N latitude and 12° 18' 27" E longitude. It is categorized as a large sized seaport with large harbor size, good shelter and maximum vessel size accepted over 500 feet in length. It has a large drydock. It has fixed cranes, mobile cranes and floating cranes and offers the supplies of provisions, fuel oil, deck, water, diesel oil and engine. Major ship repairs are also possible.<sup>2</sup>

The industry around Venetian port is concentrated around the Marghera industrial area, developed especially to keep the industry separated from the central urban area, not to hinder Venice's main industry, tourism. Through the 20th century Marghera developed into a strong industrial hub, closely related to the cargo port area. The largest industrial area in Italy, it is a location of strong chemical industry, oil refineries, aluminium and semi-finished material production, flat-glass production and corn and cereal processing.<sup>3</sup>

Today, Venice as a town is the capital of the Italian region of Veneto and the port of Venice acts as one of the most important gateways into central Europe. It is also located at the intersection of three main European TEN-T transport corridors, the Scandinavian-Mediterranean Corridor, the Mediterranean Corridor, and the Adriatic-Baltic Corridor.<sup>4</sup> The modern port is constituted of two areas, Marghera and Marittima, and has 30 km of available quayside.<sup>5</sup> The two accesses to the port each serve a different type

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<sup>1</sup> "Port of Venice", *World Port Source*, [http://www.worldportsource.com/ports/review/ITA\\_Port\\_of\\_Venice\\_1175.php](http://www.worldportsource.com/ports/review/ITA_Port_of_Venice_1175.php) (acc. 10 May 2019).

<sup>2</sup> All information from: <https://www.searates.com>.

<sup>3</sup> »EZI, Porto Marghera Industrial Zone Institution«, <http://www.sdcommunity.org/ezi?page=2> (acc. 23.9.2019).

<sup>4</sup> "The Port", *Port of Venice*, <https://www.port.venice.it/en/the-port.html> (acc. 10 May 2019).

<sup>5</sup> "Access from the Sea", *Port of Venice*, <https://www.port.venice.it/en/access-from-the-sea.html> (acc. 10 May 2019).

of transport, the Malamocco port mouth serves cargo ships, while the Lido port mouth serves passenger ships.<sup>1</sup> The only port in Italy to have this special attribute, the port of Venice also has an inland waterway port to the Po, the only navigable river in Italy, which means that cargo can also be transported inland by river transport to Cremona and Mantua.<sup>2</sup> The port itself has an operating internal railroad network of over 200 km, which supports intermodal transport by connecting different terminals along the coast. The Marghera cargo port is connected by railroad to the international railway network through the Venezia/Mestre train station. Through Venezia/Mestre the port is connected to main European destinations, but there are also plans to avoid the transfers through the busy Mestre station by building a bypass from the Fusina peninsula to the Venice-Milan railroad line. Both the cargo port in Marghera and the passenger port in Marittima are connected with regional roads to the motorways A4 (“Serenissima”, linking Torino and Trieste) and A27 (Mestre-Belluno). Changes are planned in the way road traffic is organized, especially in the Marittima port area, due to frequent congestion during peak hours.

The port is organized into 7 commercial terminals, 1 passenger terminal and 16 other terminals. Cargo handled ranges from containers, liquid and solid bulk, steel products, ro-ro/ro-pax to general cargo.<sup>3</sup> The seven commercial terminals are: the private port Terminal Intermodale Adriatico (specializing in bulk, iron products and general cargo), Multi Service (in particular iron and steel packaged products and bulk cereals, grains, fertilisers, sand, etc., parts, other varied goods and ro-ro), Terminal Intermodale Venezia (all types of cargo, especially containers), Euroports-Terminal Rinfuse Venezia (mostly cereals and coal and iron bulk), Transped (connected with the inland petrochemical plant of Marghera port), PSA-Vecon (containers) and Venice Ro-Port MoS (mostly ro-ro).

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<sup>1</sup> *Ibid.*

<sup>2</sup> *Ibid.*

<sup>3</sup> “Terminals”, *Port of Venice*, <https://www.port.venice.it/en/terminals.html> (acc. 11 May 2019).

The other 16 companies which operate in the port of Venice are oil terminals (Eni, Decal, Petroven, San Marco Petroli, Ies, Versalis) and other industries (Alcoa Trasformazioni, Cereal Docks Marghera S.r.l., Colacem, Enel Produzione Fusina, Grandi Molini Italiani [GMI], Idromacchine, Ilva, Acciaierie Beltrame, Consorzio Venezia Nuova, Simar).<sup>1</sup>

### 3.1.3 Trieste

After being part of the territories of Venice, Trieste was ceded to the Habsburg Empire in 1382. It grew to become an important port and a hub for sea trade in the 17th and 18th centuries and was declared a duty and tax free port by Charles VI, Emperor of Austria.<sup>2</sup> The port was deepened during the reign of Empress Maria Theresa and as the most important port of the Austrian Empire, it became a rich and flourishing multi-ethnic, multicultural, multi-religious and multi-lingual town. Its status as a free port was temporarily abolished during the Napoleonic wars, when the town was annexed to the French Empire. As “Imperial Free City of Trieste” it regained its position and prosperity after it became Austrian again in 1813. The Austrian Lloyd merchant shipping line was established in Trieste in 1836. An additional push in its development followed in 1857 when a railway connection (“Southern Railway”) was established between the port and Vienna, the Austrian capital.<sup>3</sup> The opening of the Suez Canal in 1869 made Trieste an important hub for trade with Asia and a new port was built, which is now called “Porto Vecchio” (lit. “the old port”). The status of free port, since 1891 limited to the port (not the entire town), is still in place despite the numerous political changes during the 20th century. Its status was confirmed by the Paris Peace Treaty in 1947 and the 1954 Memorandum of Understanding signed in London.

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<sup>1</sup> *Ibid.*

<sup>2</sup> “Trieste”, *The Maritime Heritage Project*, <https://www.maritimeheritage.org/ports/Italy-Trieste.html> (acc. 13 May 2019).

<sup>3</sup> *Ibid.*

The status of free port of the port of Trieste is unique in the legal systems of both the EU and Italy.<sup>1</sup> Two regimens determine the status of a free port: unrestricted access and transit and customs clearance exemption.<sup>2</sup> An additional online computer system was put in place in 2009 - i.e., the “Black Box” system - which allows goods entering the free port by sea or land to be traced in compliance with EU regulations, while respecting the particular guidelines of the Free Port of Trieste and the customs clearance exemption.<sup>3</sup> The system makes it possible to identify the holder of goods at any given time, and ensures the holders’ responsibility.

Port of Trieste lies at 45° 39' 3" N latitude and 13° 46' 24" E longitude. It is categorized as a medium sized seaport with medium harbor size, good shelter and maximum vessel size accepted over 500 feet in length. Marine railroad size is small. It has a medium drydock. It has fixed cranes, mobile cranes and floating cranes and offers the supplies of provisions, fuel oil, deck, water, diesel oil and engine. Major ship repairs are also possible.<sup>4</sup>

Port of Trieste is well connected with high-frequency intermodal connections to industrial centres of north-east Italy and in Central and Eastern Europe (Germany, Austria, the Czech Republic, Hungary, Slovakia, Switzerland and Luxembourg). It is multi-sectorial with the leading oil terminal in the Mediterranean and a major European access point for Ro-Ro from Turkey. Trieste is also the leading Italian port for train traffic.<sup>5</sup>

Trieste port is located at two TEN-T network corridors, the Baltic-Adriatic and the Mediterranean corridor. Similar to other important ports of the northern Adriatic, the port of Trieste connects the long-distance

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<sup>1</sup> “Free Port”, *Autorità di Sistema Portuale del Mare Adriatico Orientale Porti di Trieste e Monfalcone*, <https://www.porto.trieste.it/eng/port/free-port> (13 May 2019).

<sup>2</sup> *Ibid.*

<sup>3</sup> *Ibid.*

<sup>4</sup> All information from: <https://www.searates.com>.

<sup>5</sup> »Port of the Month: Port of Trieste (Italy)«, <https://www.espo.be/news/espo-port-of-the-month-port-of-trieste-italy> (23.9.2019)-

intercontinental supply chains with the short and medium distance inter-Mediterranean connections. Ocean transportation services from east and south-east Asia also link Trieste to other Adriatic and Mediterranean ports on their way. Trieste port has possibilities for intermodal connectivity by being linked with railway connections to central Europe and north-east Italy. The company Adriafer S.r.l. organises intermodal, combined transport for the various goods in the last mile of the port area. To cater especially to the intermodal services to central and eastern Europe, direct trains are run by the multi-client company Alpe Adria S.p.A.<sup>1</sup> The link to international railway is provided by 70 km of internal railroad track, connecting the docks and terminals. By road, Trieste is at the end point of the A4 highway (“Serenissima”), which connects it to Venice, Milan and Turin. The border with Slovenia at Ferneti/Fernetiči is only 11 km away by road.

The Free Port of Trieste today consists of five free zones. Three of those are commercial zones: the Old Free Zone, the New Free Zone and the timber terminal. Two are primarily focused on industrial activities (the Mineral Oils Free Zone and the Zaule Channel Free Zone). The oil terminal is the most important, for it generates the majority of the traffic in Trieste port and is linked to the Transalpine Pipeline.<sup>2</sup> The terminals within those zones are managed by private operators. The general cargo terminals are operated by Romani & C. S.p.a. and Saipem S.p.a., the passenger terminal and maritime station is operated by Trieste Terminal Passeggeri S.p.a. The ro-ro terminals are operated by Samer Seaports & Terminals S.r.l. and Trieste Intermodal Maritime Terminal (T.I.M.T.) S.r.l. The fruit terminal is operated by Terminal Frutta Trieste S.p.a., the multipurpose terminal by Europa Multipurpose Terminals (EMT), the grain terminal by Promolog S.r.l., the coffee terminal by Pacorini Silocaf S.r.l., the container terminal

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<sup>1</sup> “Description”, *Autorità di Sistema Portuale del Mare Adriatico Orientale Porti di Trieste e Monfalcone*, <https://www.porto.trieste.it/eng/port/description> (14 May 2019).

<sup>2</sup> “Terminal Operators”, *Autorità di Sistema Portuale del Mare Adriatico Orientale Porti di Trieste e Monfalcone*, <https://www.porto.trieste.it/eng/port/terminal-operators> (14 May 2019).

by Trieste Marine Terminal (T.M.T.) S.p.a. The ferry terminal is operated by Trieste Terminal Passeggeri S.p.a., the multipurpose terminal/timber terminal is operated by General Cargo Terminal S.p.a., the metals terminal by Siderurgica Triestina S.r.l., the oil terminal is operated by S.I.O.T. S.p.a. and the oil products terminals are operated by Depositi Costieri S.p.a. and Kri S.p.a. The Navigable Channel Terminal (for cement, industrial products, chemicals and frozen goods) is operated by Ortolan Mare S.r.l., Alder S.p.a., Cimsa Adriatico S.r.l. and Frigomar S.r.l.<sup>1</sup>

### **3.1.4 Koper**

The Port of Koper was founded in 1957 in the aftermath of the end of negotiations regarding the status of Trieste after World War II. When it became clear that Yugoslavia would ‘lose’ Trieste, plans were begun to build a port in this part of the northern Adriatic in the former Zone B of the Free Territory of Trieste. The port acquired its present name in 1961. The customs zone was set up in 1963 and it was finally connected to the railway system of Slovenia in 1967. One after the other the terminals opened for different types of goods, the petroleum product terminal in 1968, the chemical terminal in 1972 and the first container terminal almost at the same time. The first container line with the Mediterranean was established in 1974. The reconstructed container terminal built upon steel piles was completed in 1979. The terminal for coal and iron ore was added in 1984 and the grain silo was built. The cotton warehouse and the terminal for borates and phosphorus acid were added in 1988, with the oil and alumina terminals added a year later. After Slovenian independence in 1991 and the period of economic transition, the status of the Port of Koper was finally decided on in 1996 when it became a public limited company and its shares began being listed on the Ljubljana Stock Exchange. The car terminal was added the same year. In 2001/2002 on the initiative of the Slovenian

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<sup>1</sup> *Ibid.*

government, the Port of Koper became the leading company of the Slovene transport logistics cluster.

Port of Koper lies at 45° 32' 55" N latitude and 13° 44' 4" E longitude. It is categorized as a medium sized seaport with a very small harbor size, fair shelter and maximum vessel size accepted over 500 feet in length. Marine railroad size is small. It has a small drydock. It has fixed cranes and mobile cranes and offers the supplies of provisions, fuel oil, water and diesel oil. Limited ship repairs are also possible.<sup>1</sup>

Today the port of Koper is a key port for the Austrian, Slovak and Hungarian markets. It positions itself as one of the leading cargo freight ports in the Northern Adriatic, especially for vehicle throughput and other cargo type on the Southern route to/from Europe (timber, livestock, soy, alumina and iron products).<sup>2</sup> Port of Koper is the biggest container terminal in the Adriatic and one of the biggest car terminals in the Mediterranean. It is also a transit port, which serves more than 70% to non-domestic hinterland markets and less than 30% to the Slovenian market.<sup>3</sup>

It has a status of free zone type A. As for the governance model, the port functions without a classic port authority. Due to historical reasons, the company Luka Koper d. d. (a public company, with state owning the majority of the shares) is at the same time the port developer and operator, having also the commercial role. Such port management is beneficial for the type of port Koper is (with limited area and other related challenges). It enables it to be flexible and to ensure good cooperation between terminals and other port facilities and services. It also optimizes the communication

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<sup>1</sup> All information from: <https://www.searates.com>.

<sup>2</sup> "Summary of Luka Koper d.d. and the Luka Koper Group Business Strategy until 2030 and the Company's and Group's Strategic Business Plan 2016 – 2020", *Luka Koper*, (downloaded from: <https://www.luka-kp.si/eng/mission-vision-strategy>”).

<sup>3</sup> »Port of the Month: Port of Koper (Slovenia)«, <https://www.espo.be/news/port-of-the-month-port-of-koper-slovenia#> (23. 9. 2019).

between the port and the local community, also in the very sensitive aspect of environmental protection.

All terminals are connected with rail system, about 60% of all port's traffics are served by railway services with an average of more than 50 cargo trains daily. The trains connect the port in maximum 2 days with all main hinterland markets: Austria, Hungary, Slovakia, Germany, the Czech Republic, Italy, Croatia, Poland, etc. Road supplements the rest of the traffic with the hinterland within 24 hours to the majority of target destinations.

Today the port of Koper is a key port for the Austrian, Slovak and Hungarian markets. It positions itself as one of the leading cargo freight ports in the northern Adriatic, especially for vehicle throughput and other cargo types on the southern route to and from Europe (timber, livestock, soy, alumina and iron products).<sup>1</sup>

The port of Koper has a core port status in the EU TEN-T system, being located on the Baltic-Adriatic and the Mediterranean corridors. Mostly serving the hinterland and neighbouring countries, its functioning greatly relies on the highway system, where the A1 highway ("Slovenika") between Koper and Šentilj serves as the main road connection. A1, ending on the Šentilj/Spielfeld border crossing with Austria also provides an important link to the Austrian A9 ("Pyhrn Autobahn") and via the Slovenian A5 ("Pomurski krak") highway reaches the border with Hungary and the connecting M70 expressway then leads to the M7 highway to Budapest. The port of Koper is also connected by highway to the neighbouring Italian ports of Trieste (25 km) and Venice (190 km) and the Croatian port of Rijeka (85 km). The port of Koper is connected by railway to the Slovenian capital and through that connection to all the main destinations in Europe. The railway connection is currently being upgraded

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<sup>1</sup> "Summary of Luka Koper d.d. and the Luka Koper Group Business Strategy until 2030 and the Company's and Group's Strategic Business Plan 2016 – 2020", *Luka Koper*, (downloaded from: <https://www.luka-kp.si/eng/mission-vision-strategy>”).

with a second track between Divača and Koper, as this part of the railway connection was outdated and could not cope with the increasing traffic demands of the growing port. It took several years for the second track project to get the necessary political support, but now the works have finally commenced. Currently, the plan is for the investment to mostly rely on the national budget and the assistance of the European Investment Bank.

The port of Koper operates with 12 terminals. The container terminal has regular weekly lines to the Middle East, east Asia and the Red Sea, while also being connected via feeder services with important Mediterranean ports (Gioia Tauro, Malta, Piraeus, Haifa, Port Said, Algeciras)<sup>1</sup>. The car and ro-ro terminal, one of the largest of its kind in the Mediterranean, handles European exports and imports mostly to and from Japan, South Korea and Turkey. Other terminals include: the general cargo terminal, the reefer terminal for perishable goods, the timber terminal, dry bulk terminal (for minerals, industrial minerals and other bulk cargo), silo terminal (for cereals and fodder, with a divided system for storing non-GMO), alumina terminal (for the sandy type of alumina), iron ore and coal terminal, liquid cargos terminal (chemicals, minerals and vegetable oils) and livestock terminal. The port also operates a cruise terminal with an increasing number of incoming cruise ships (75 in 2018).

The port of Koper is operated entirely by the public limited company Luka Koper (Port of Koper), which is 51% state owned, with a large share being owned by other local and state-level public funds and institutions (Slovenian Sovereign Holding 11.13%, Kapitalska družba 4.98%, Municipality of Koper 3.14%, etc.).

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<sup>1</sup> “Container Terminal”, *Luka Koper*, <https://www.luka-kp.si/eng/terminals/single/container-terminal-244> (15 May 2019).

### 3.1.5 Rijeka

References to the port of Rijeka have been found as early as during the 13th century. After becoming part of Habsburg territory, its growing importance motivated Austrian Emperor Charles VI to declare Rijeka a free port in 1719, the same time that this status was granted to Trieste. Empress Maria Theresa gave the territory to the Kingdom of Hungary as a *corpus separatum*, not belonging to the immediately adjacent Kingdom of Croatia, but belonging directly to Hungary and having some degree of autonomy through this designation. Rijeka thus effectively became the only sea port of Hungary and its important link to the world – equivalent to the role Trieste played for the Austrian part of the Empire. An artificial port was built at the end of the 19th century, when Rijeka also became connected to the Austro-Hungarian railroad network by two connections: to Budapest in Hungary and to Pivka in today's Slovenia. After World War I, Rijeka suffered a turbulent period. Despite the Italian territorial claims over the former Austro-Hungarian coast, the Free State of Fiume-Rijeka was established by the Treaty of Rapallo in 1920, but shortly afterwards, the city fell prey to territorial claims of both neighbouring countries and was divided between them by the Treaty of Rome in 1924. Almost completely devastated in World War II, the city and its port become part of the newly formed Yugoslavia in the Paris Peace Treaty. The port slowly recovered. In 1967 the bulk cargo terminal was built, the container terminal was added in 1978 and the phosphates, timber and silo terminals were added in 1979. The complex was improved by the livestock terminal in 1982 and by a general cargo terminal and ro-ro facilities in 1983. Close to Rijeka port and near Bakar terminal, a large Industrial zone has developed.<sup>1</sup>

Port of Rijeka lies at 45° 19' 30" N latitude and 14° 26' 54" E longitude. It is categorized as a medium sized seaport with large harbor size, good shelter and maximum vessel size accepted over 500 feet in length. Marine

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<sup>1</sup> »Industrijska zona Bakar«, <http://www.ind-zone.hr/o-nama/industrijska-zona-bakar> (23.9.2019).

railroad size is medium. It has a medium drydock. It has fixed cranes, mobile cranes and floating cranes and offers the supplies of provisions, fuel oil, deck, water, diesel oil and engine. Major ship repairs are also possible.<sup>1</sup>

Today, the Port of Rijeka is the most important Croatian port in the northern Adriatic. It is run by the company with the same name (Luka Rijeka, d.d.), which currently holds a state concession for the period 2012-2042 and by the companies Jadranski naftovod (JANAF) and Jadranska vrata d.d. and their subcontractors.<sup>2</sup> With its location on the Mediterranean TEN-T corridor and a core port status, it provides an important link into the hinterland of Hungary, the Czech Republic, Slovakia and Bosnia and Herzegovina. It is connected to the Croatian capital Zagreb with the A6 highway (“Goranka”), leading into the A1 (“Dalmatina”) from Zagreb to Split. It is also part of the Pan-European transport corridor V(B) from Budapest to Rijeka, where the railroad connection links Rijeka to Zagreb. For more than a decade, plans have existed to connect Rijeka with the Hungarian border via 270 km of high-speed railway and recent negotiations with China on the project might speed this process.<sup>3</sup>

The Port of Rijeka consists of 8 terminals, located in and around the town of Rijeka. The bulk cargo terminal is located approximately 13 km from the main port area in the bay of Bakar and specializes in iron ore and coal handling; it also handles other types of bulk cargo. One off-site part of the port, the livestock terminal, is in Bršica (75 km from Rijeka) in the bay of Raša. In the main port area, five terminals handle different types of cargo. The cereal terminal for grain and oil plants, the general cargo terminal, the container/ro-ro terminal (run by the concessioner Jadranska vrata), the timber terminal and the frigo terminal. Another off-site part of the port is the warehouse complex at Terminal Škrljevo for the storage of various

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<sup>1</sup> All information from: <https://www.searates.com>.

<sup>2</sup> Cf. <https://www.portauthority.hr/>.

<sup>3</sup> Luka Filipović, “Opet svi govore o nizinskoj pruzi, ovih 10 stvari morate znati o njoj”, *tportal.hr*, 12 April 2019, <https://www.tportal.hr/biznis/clanak/opet-svi-govore-o-nizinskoj-pruzi-ovih-10-stvari-morate-znati-o-njoj-foto-20190412>.

types of goods.<sup>1</sup> Presently, a new container terminal is being added to the complex, the Zagreb Deep Sea Terminal.<sup>2</sup> When finished, this part of the Rijeka port will become the only northern Adriatic port able to receive ships with up to 20 m draught. The selection process for the concession is ongoing. The building of the new terminal is part of a larger Rijeka Gateway project, which aims to improve the international transport connections through Rijeka by modernizing the port and road network connections, while also further privatizing the port operations.<sup>3</sup>

### **3.2 North Adriatic Ports Association**

The five largest ports in the northern Adriatic provide natural access to the hinterland of the European continent and the shortest – and thereby also quickest and cheapest – gateway to Europe from the ports of Asia and the Middle East via Suez. The shorter distance by about 2,000 nautical miles compared to the ports of northern Europe<sup>4</sup> provides a comparative advantage for these ports in the world seaborne trade routes. The five northern Adriatic sea ports handle more than 100 million tons of cargo yearly. By being part of the TEN-T corridor system and with the fifth Pan-European corridor nearby, they also provide a multimodal gateway to over 500 million customers in the European markets.<sup>5</sup>

In order to combine their different profiles and capacities and to be able to compete successfully with larger ports in northern Europe, the five ports established a cooperation initiative, the North Adriatic Ports Association,

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<sup>1</sup> “Terminals and Services”, *Luka Rijeka*, <https://lukarijeka.hr/en/terminals-and-services/> (acc. 15 May 2019).

<sup>2</sup> “Veliki dan: izgrađen Zagreb Deep Sea kontejnerski terminal”, *Lučka uprava Rijeka*, 24 May 2019, <https://www.portauthority.hr/going-deep/veliki-dan-izgraden-zagreb-dsct/>.

<sup>3</sup> “Rijeka Gateway Project”, *World Bank*, <http://projects.worldbank.org/P043195/rijeka-gateway-project?lang=en> (acc. 15 May 2019), “Projekt Rijeka Gateway”, *Grad Rijeka*, <https://www.rijeka.hr/gradska-uprava/gradski-projekti/aktualni-projekti-2/projekt-rijeka-gateway/> (acc. 15 May 2019).

<sup>4</sup> “About NAPA”, *NAPA*, <http://www.portsofnapa.com/about-napa> (acc. 13 May 2019).

<sup>5</sup> *Ibid.*

on 11 November 2009, in Koper in a meeting of the managing directors of four northern Adriatic ports – Koper, Trieste, Venice and Ravenna. Gregor Veselko, President of Luka Koper Management Board was elected president of the association and Giuseppe Parrello (President of the Port of Ravenna Authority) became the Deputy President.<sup>1</sup> The main goals emphasized by the newly formed initiative were to form a means to generate cooperation of maritime and land connections between these ports and to jointly invest effort in the coordinated planning and building of their infrastructure: railways, roads and maritime connections. Another important point they agreed to strive for was the harmonisation of regulations and procedures in the port services. Most importantly, they attempted to form a European logistics platform for transport between the Far East and central and eastern Europe. In addition, they agreed to work together to improve environmental protection and safety, while establishing better communication solutions.

The following year, on 29 November, the representatives of the four ports confirmed the membership of the fifth port in the initiative, the Croatian port of Rijeka. The membership changed again in 2013, when Ravenna left the association over a disagreement with the port of Venice.<sup>2</sup> An additional factor for its decision to leave the association was the fact that the Ravenna port mainly serves the market of the Italian region of Emilia-Romagna and does not cater to the markets of central Europe as the other four ports do.<sup>3</sup> Nevertheless, Ravenna re-joined NAPA in 2017, mostly motivated by the

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<sup>1</sup> “North Adriatic Port Association Founded in Koper”, *Luka Koper*, 17 November 2009, <https://luka-kp.si/slo/novice/single/north-adriatic-port-association-founded-in-koper-2856>.

<sup>2</sup> “Ravenna to Re-Join NAPA”, *Ship2Shore*, 20 November 2017, [http://www.ship2shore.it/en/ports/ravenna-to-re-join-napa\\_65927.htm](http://www.ship2shore.it/en/ports/ravenna-to-re-join-napa_65927.htm).

<sup>3</sup> Kristijan Stamatović, Peter de Langen, Aleš Groznik, “Port Cooperation in the North Adriatic Ports”, *Research in Transportation Business & Management*, Vol. 26 (March 2018), 109-121, [https://www.sipotra.it/old/wp-content/uploads/2018/07/Port-cooperation-in-the-North-Adri\\_2018\\_Research-in-Transportation-Business-.pdf](https://www.sipotra.it/old/wp-content/uploads/2018/07/Port-cooperation-in-the-North-Adri_2018_Research-in-Transportation-Business-.pdf).

prospects of the NAPA position in the transport between East Asia and Europe, especially the Belt and Road Initiative.

Several other important factors contributed to the growing interest and feasibility of the NAPA in recent decades. As pointed out by Božičnik<sup>1</sup>, the first of these is the growing importance of east Asian markets compared to trans-Atlantic markets. The sea route of the Belt and Road Initiative is an important part of the trend. This makes the NAPA ports potentially more interesting for seaborne transport between east Asia and Europe through the Suez Canal. This southern access to Europe naturally makes NAPA an optimum solution. The trend of the increasing importance of this Euro-Asian connection might even become more relevant with the growing protectionist orientation of the USA. As Božičnik summarizes<sup>2</sup>, the changes of European regional policy with the overall stress on macro regions is also important in this regard. Even more importantly, the establishment of the related trans-European transport corridors includes the NAPA five as core ports. Growing environmental awareness will present another framework in which the substantial saving of fuel made possible by the shortened routes will also play an important role.

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<sup>1</sup> Presentation by Stane Božičnik at “The Port of Rijeka, Gateway of the Baltic-Adriatic Core Network Corridor” Conference, Opatija, November 2017, available at: [http://www.stl-conference.eu/documents/presentations/day\\_two/KNS\\_Opatija%2020-22%20Nov%202017%20Stane%20Bozicnik.pdf](http://www.stl-conference.eu/documents/presentations/day_two/KNS_Opatija%2020-22%20Nov%202017%20Stane%20Bozicnik.pdf) (acc. 20 April 2019).

<sup>2</sup> *Ibid.*

## 4 COOPERATION TRENDS AND CHALLENGES

### 4.1 Cooperation among NAPA ports

The main concept behind this association was for the northern Adriatic ports to cooperate internationally while competing locally<sup>1</sup>. The extent to which this held true, however, varied over time. As scholars have already noted, the latest developments in the strategic relations between Asia and Europe, especially the Belt and Road Initiative, increased the levels of competition<sup>2</sup> and limited the willingness to cooperate at an international level. The analysis done by Stamatović, de Langen, and Groznic<sup>3</sup> illustrated the complex dynamics of this “co-opetition”. The term was coined by Noorda<sup>4</sup> and developed by Song<sup>5</sup>, and is an especially apt description for the relationship among port entities such as NAPA ports where the mutual benefit for cooperation originates in the complementarity of their capacities and profiles, while the economies of scale make all ports interested in cooperating to increase their overall competitiveness on a global scale.

As the authors<sup>6</sup> argued, the complementarity that exists between the ports does not necessarily entail cooperation, at least not on all relevant levels. Stamatović, de Langen, and Groznic noted that the main activities where NAPA port cooperate is in marketing activities and obtaining EU funding for security, environmental, and IT related initiatives. This we have

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<sup>1</sup> Stamatović, de Langen, Groznic, “Port Cooperation in the North Adriatic Ports”, 109.

<sup>2</sup> *Ibid.*

<sup>3</sup> *Ibid.*

<sup>4</sup> Ray Noorda, “Co-opetition”, *Electronic Business Buyer*, 8 (12), 1993, 8–12.

<sup>5</sup> Dong-Wook Song, “Regional Container Port Competition and Co-Operation: The Case of Hong Kong and South China”, *Journal of Transport Geography*, Vol. 10, Iss. 2, June 2002, 99-110.

<sup>6</sup> Stamatović, de Langen, Groznic, “Port Cooperation in the North Adriatic Ports”, 109.

confirmed in interviews conducted with representatives of the port of Koper<sup>1</sup>. The respondents have primarily mentioned the joint marketing approach that NAPA ports negotiate among them, especially in large logistics and transport events, such as the Transport Logistics Fair in Munich or the Transport Logistics Fair in Shanghai.<sup>2</sup>

A number of joint projects were also pursued by NAPA ports in recent years<sup>3</sup>. An early initiative, the EU-funded “ITS Adriatic Multi-Port Gateway”<sup>4</sup> started in 2010 and ended in 2013. Under the TEN-T (Motorways of the Sea) program it focused primarily on the ICT solutions to increasing the competitiveness of the whole northern Adriatic range as a gateway for the Motorways of the Sea. The leading partner was the Venice Port Authority, and other partners were the Port Authority of Trieste, the Port Authority of Ravenna and Port of Koper. The Port Authority of Rijeka was an associated partner. Another large scale project, the “Project TEN-T NAPA Studies”<sup>5</sup> was designed to address the issues of integration of existing maritime links into the European intermodal logistics chain by improving hinterland connections (rail and inland navigation) and maritime access of the northern Adriatic ports.<sup>6</sup> The project, which also strove to find pilot ICT solutions, lasted from 2013 to 2015 and was co-funded by the EU. More narrowly focused, the Napa4Core project took place between 2014 and 2018 and aimed at improving the sea and land accessibility of the ports of Trieste and Koper by building new shore space for ro-ro transport and financing container related infrastructure in Koper. It was funded through the Connecting Europe Facility funding instrument. Another NAPA related project, SECNET (2017-2019), joins three ports of NAPA

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<sup>1</sup> Interview with the representatives of the Port of Koper, Koper, 29 May 2019.

<sup>2</sup> Cf. “NAPA at the Transport Logistic exhibition in Munich”, NAPA, 8 May 2015, <http://www.portsofnapa.com/index.php?t=news&l=en&id=91>.

<sup>3</sup> Here we only list those that were limited to NAPA ports and exclude the larger number of projects where NAPA ports partnered with ports in other regions.

<sup>4</sup> Maša Čertalič, “ITS Adriatic Multi-Port Gateway Project”, 2012, downloaded from: <http://www.up.gov.si/fileadmin/up.gov.si/pageuploads/Predstavitve/ITS-NAPA.pdf>.

<sup>5</sup> Cf. *Ten-t NAPA Studies*, <http://www.napa-studies.eu/>.

<sup>6</sup> *Ibid.*

and aims to improve institutional cooperation. It is led by the Port of Trieste, while the two other ports are the Port of Venice and the Port of Koper, and other partners are the Central European Initiative, the University of Trieste and the University of Primorska. One of the main foci of the project was the implementation of innovative ICT solutions to improve port security. The project is funded by the European Regional Development Fund (ERDF).

While in these areas the ports of NAPA cooperate fairly consistently, the challenges that hinder cooperation are manifold. First, although all NAPA ports are part of the EU the different national policies and legislation regulations, sometimes even regional legislation, deter common policy building and other types of cooperation. Any large-scale cooperation also requires stable long-term cooperation between the governments and national institutions of the three countries, which – as Stamatović, de Langen and Groznik, as well as the results of our interviews<sup>1</sup> attest – is difficult to secure, mostly due to periodic government changes. Furthermore, the governance models of the five ports are not the same. The ports of Venice, Ravenna and Trieste are public sector “landlord” port authorities, while the port of Koper and in part the port of Rijeka are commercially operating service port companies.<sup>2</sup> The functioning and interests of these entities is therefore different; the Slovenian and the Croatian ports must take into account the financial and commercial factors of the terminal operations, while for the Italian ports (and partly for Rijeka as well) these must be negotiated with the private terminal operators. For all these reasons, the services and costs of these services are different and difficult to compare across all five ports, making market inequality virtually impossible to overcome.

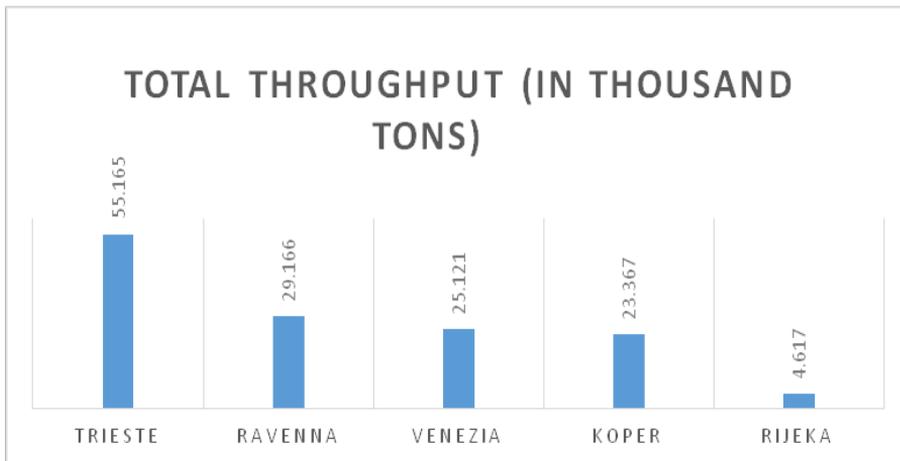
Currently, one of the main factors in NAPA cooperation is the complementarity of their specialisation in cargo handling types. According

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<sup>1</sup> Interview with the representatives of the Port of Koper, Koper, 29 May 2019.

<sup>2</sup> Stamatović, de Langen, Groznik, “Port Cooperation in the North Adriatic Ports”, 116.

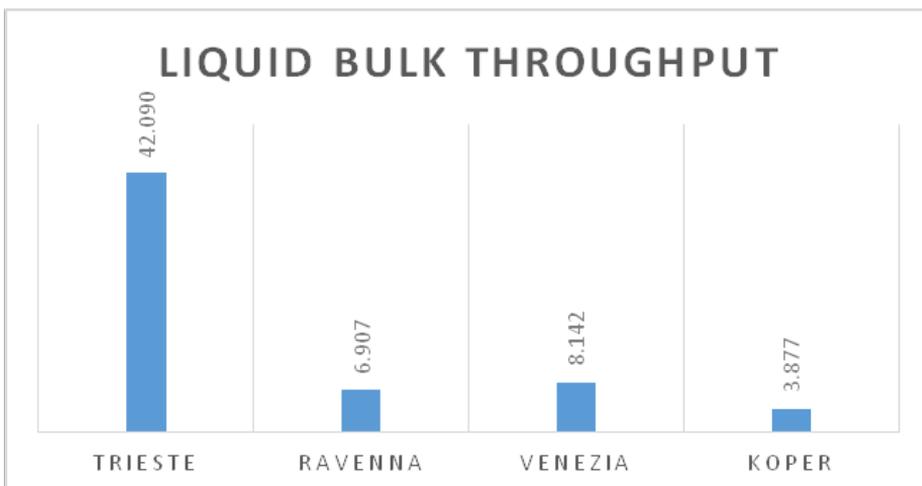
to the statistics for 2017<sup>1</sup>, the total throughput was comparable in Ravenna, Venice and Koper, with a much higher total throughput in Trieste and much lower total in Rijeka.



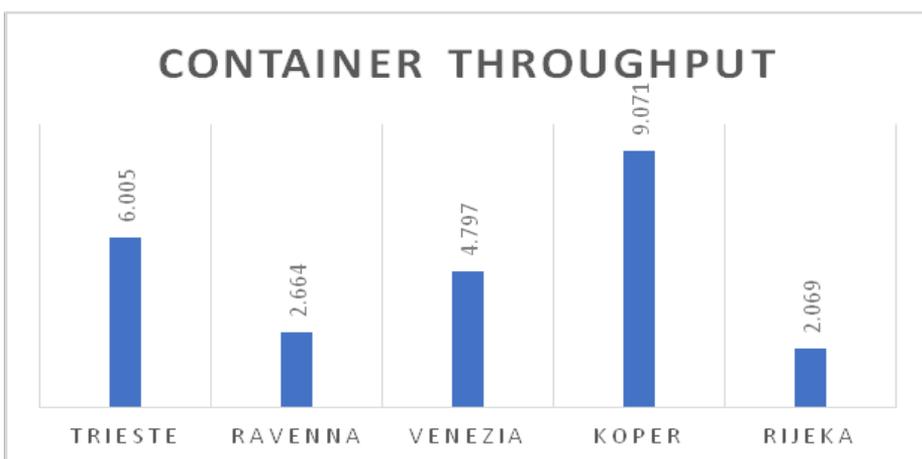
The types of cargo that the ports focus on vary. Two main categories are important for the present analysis. First is liquid bulk, where Trieste is by far the leading port, especially in the crude oil segment.

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<sup>1</sup> Sources of the data used in the comparison: <https://www.luka-kp.si/>, <http://zse.hr/userdocsimages/financ/LKRI-fin2017-1Y-REV-K-HR.pdf>, <https://www.istat.it/en/>.



In the segment of containers, the discrepancy is not as prominent, but one port (Koper) still handles a considerably larger sum than the other four<sup>1</sup>.



The current complementary specialisations in cargo types among the five ports could provide a solid structure for future smart development of the NAPA association. This approach, however, is not feasible, since the potential of the container segment of the global development of seaborne transport makes it unlikely for those ports with lower container throughput

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<sup>1</sup> Cf. also "Koper Port Still Busiest Container Terminal in the Adriatic", *Slovenia Times*, 4 March 2017, <http://www.sloveniatimes.com/koper-port-still-busiest-container-terminal-in-the-adriatic>.

to abolish plans on enlarging their container capacities. The trend toward strengthening this segment can be seen in several of the ports.<sup>1</sup>

*SWOT analysis*

<b>Strengths</b>	<b>Weaknesses</b>
<ul style="list-style-type: none"> <li>- already established cooperation framework in NAPA</li> <li>- already stable and successful project cooperation</li> <li>- complementarity of the ports' capacities and cargo profiles</li> <li>- comparative advantage that these ports have in cooperation compared to individually due to the economies of scale</li> <li>- short distances between the ports and their connectivity to the same railway and road networks</li> </ul>	<ul style="list-style-type: none"> <li>- different governance models of the five ports</li> <li>- cooperation is made additionally difficult by different national policies and legislative regulations</li> <li>- changing political options in national parliaments and national governments result in changing policies towards NAPA cooperation</li> <li>- lack of a stable coordination system among the NAPA ports</li> </ul>
<b>Opportunities</b>	<b>Threats</b>
<ul style="list-style-type: none"> <li>- cooperation can improve strategic prospects of the relatively small ports compared to the large transport hubs of northern and western Europe</li> <li>- cooperation can improve the practices and status of nature conservation and minimize environmental hazards</li> <li>- cooperation can allow for the establishment of better and more efficient communication solutions</li> </ul>	<ul style="list-style-type: none"> <li>- the BRI framework, based on national level agreements, stipulates competition among Italian, Slovenian and Croatian ports of NAPA</li> <li>- the complementarity among the ports, which is currently one of the main pillars of NAPA, is being reduced by the addition of growing container capacities in all of the NAPA ports</li> <li>- if national agendas regarding BRI cooperation start differing more explicitly, this could also harm the cooperation among ports and the related infrastructure</li> </ul>

<sup>1</sup> "Trieste Marine Terminal Increase Container Volumes in July 2018", *PortSEurope*, 15 August 2018, <https://www.portseurope.com/trieste-marine-terminal-increase-container-volumes-in-july-2018/>; "V pristanišču na Reki nov kontejnerski terminal", *Delo*, 25 May 2019, <https://www.delo.si/gospodarstvo/novice/v-pristaniscu-na-reki-nov-kontejnerski-terminal-188190.html>.

## 4.2 Entering the hinterlands

As the five NAPA ports are located at the northern tip of the Adriatic Sea, a natural waterway that penetrates into the middle of the European continent, they provide the cheapest naval route from the Far East (via Suez) to Europe. Furthermore, due to variety of logistic services and extensive traffic network, NAPA forms a multimodal gateway to the biggest European markets. More specifically, the fifth Pan-European transport corridor provides a link to 500 million European consumers, as commercial/industrial hub cities as Vienna, Milan and Munich represent close and feasible options for cargo transfer.

As pointed out by Dejan and others (2013), from the **Port of Venice** this means transport via both land and inland waterways connections. The latter are spreading along the Po valley, to Mantua and Cremona. Inland waterway service uses a push barge and dumb barge of 60 TEU capacity, between Porto Marghera and Mantua via Fissero-Tartaro Canal Bianco, and are as far as Mantua open 365 days a year. This kind of modality handles any kind of cargo during most parts of the year, which effectively lowers road haulage.<sup>1</sup>

On the other hand, transport by road mainly covers northern Italy and inland distribution. Port's hinterland for container traffic covers the north of Italy (Veneto, Lombardia, Emilia Romagna regions). Road access from the Port to strategic road networks: European route E70 (A-Class West-East route) extending from A Coruña in Spain in the west to the Georgian city of Poti in the east (through ten European countries), which more specifically includes Autostrada A4 connecting Turin and Trieste via Milan and Venice.<sup>2</sup> The city of Venice (or rather, Mestre which is the "land" part of Venice) originally formed a bottleneck on the A4, but is now bypassed

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<sup>1</sup> Dejan, Dragan, Marko Intihar, Klemen Prah and Tomaž Kramberger, "*Forecasting Of Maritime Cargo Flows To Support The Planning Activities In Napa Ports*", Preliminary Research Study, University of Maribor, July 2013.

<sup>2</sup> Ibid.

by the Passante di Mestre, which has reduced congestion around the port area. The A4 passes just north of the city of Milan, where it is toll-free. As it runs through the whole Pianura Padana, which is a densely populated and highly industrialized area, A4 is one of the most trafficked motorways of Italy. A4 is a dual-carriageway, six-lane motorway for most of its length. The stretch between Milano Est tollgate and Bergamo has been an eight-lane motorway since 30 September 2007.<sup>1</sup> The stretch from Venice to Trieste is instead still a four-lane motorway, but it is planned to upgrade this stretch over motorway to six lanes, which will influence the density of the traffic in the future.<sup>2</sup>

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<sup>1</sup> SEEITS, “*Intelligent Transport Systems in South East Europe*”, final publication of the SEE-ITS project, 2014.

<sup>2</sup> “*Core Network Corridors On The Ten-T*”, 2019, Available at: <https://ec.europa.eu/transport/infrastructure/tentec/tentec-portal/site/en/maps.html>



*Road A4 providing access to the east and the west.*

As the A4 road provides access to the east towards Friuli-Venezia-Giulia and west to Verona and Lombardia, the A13 road provides direct access towards cities of Rovigo and Bologna to the southeast of Italy.<sup>1</sup>

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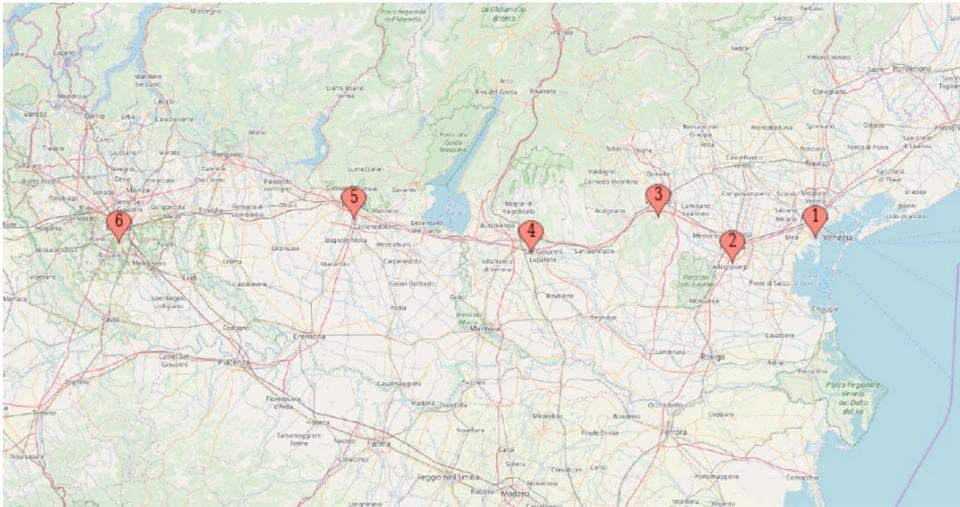
<sup>1</sup> SEEITS, “*Intelligent Transport Systems in South East Europe*”, final publication of the SEE-ITS project, 2014.



*Road A13 providing access to southeast.*

Rail access towards northern Italy is provided by a double-track electrified route from Venice Mestre (1) to Padua (2), continuing via Vicenza (3), Verona (4) to Brescia (5) and finally Milan (6). There is a rail service going from Venice to Milan twice weekly, which provides the suppliers access to international markets across the Alps. The maximum trailing length and

weight of trains on this route is 500 metres and 1600 tonnes respectively, while the modal split is estimated to 3%.<sup>1</sup>



Rail route from Venice to Milan: Venice Mestre (1), Padua (2), Vicenza (3), Verona (4), Brescia (5) and Milan (6).

**Port of Trieste** on the other hand covers Austria, Southern Germany, Hungary and northern Italy and is served by a range of rail freight services. Current hinterland for its container traffic is international, covering not only Italy (where three main regions are Friuli-Venezia-Giulia, Veneto and Lombardia), but also Austria, southern Germany, Hungary and Czech Republic.<sup>2</sup>

Road access to the strategic road network is identical to the one used by Venice Port (A4, as a part of E70 motorway), which provides it access to Slovenia to the north east and to the rest of Friuli-Venezia-Giulia region and Veneto region to the west. It is also using the road A23 (part of the E55 European route) to access Austria.<sup>3</sup> A23 connects the A4 motorway

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<sup>1</sup> Dejan, Dragan, Marko Intihar, Klemen Prah and Tomaž Kramberger, “Forecasting Of Maritime Cargo Flows To Support The Planning Activities In Napa Ports”, Preliminary Research Study, University of Maribor, July 2013.

<sup>2</sup> Ibid.

<sup>3</sup> Ibid.

(mentioned above, Turin-Trieste route) near Palmanova via Udine to Tarvisio and the Austrian Süd Autobahn (A2). The route is a toll road, however, considered one of the main transport links between Northeast Italy and Central Europe.<sup>1</sup>



*Route A23 connecting Port of Trieste to Austria.*

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<sup>1</sup> SEEITS, “*Intelligent Transport Systems in South East Europe*”, final publication of the SEE-ITS project, 2014.

A double-track electrified route mentioned already when discussing the Port of Venice however, provides rail access from the Port of Trieste towards international markets in the west of Europe. The line is going from Trieste to Venezia, Padova, forward to Milan. On the other hand, the rail access to Austrian markets uses the mainline westwards to Cervignano, continuing on the single-track electrified mainline Udine-Tarvisio.<sup>1</sup> Parts of this railway are being reconstructed (mentioned in this report in the Chapter 3.1. as a “Trihub” project). The route to Hungary consists of a double track electrified route to the Slovenian border (at Villa Opicina), via Ljubljana, which is also used by the Port of Koper.<sup>2</sup> The maximum length of trains to the latter is 505 metres, while for the route towards Venice 550 metres (as mentioned with the Port of Venice). The trailing weight for Italian services is 1300 tonnes, while 1100 northbound (for Austria) and 1300 tonnes southbound on international services.<sup>3</sup>

**Port of Koper’s** hinterland for container traffic is international; it covers not only Slovenia, but also Croatia and Italy (served mainly by road), Slovakia and Czech Republic, Hungary, Austria, Serbia, southern Germany and parts of Romania (served mainly by rail). The main roads accessing the strategic road network are accessed by the A1 (part of the E61 and E70 European routes) motorway towards Ljubljana. The A1 motorway provides connection of Slovenia and Austria, with only other motorway with border crossing to Austria being A2 motorway and connects three largest cities in Slovenia - Ljubljana, Maribor and Celje. As of 2013 it is also the only motorway that is connected to all the other motorways in Slovenia. As of 2013 motorway always has at least two traffic lanes in each direction and

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<sup>1</sup> Dejan, Dragan, Marko Intihar, Klemen Prah and Tomaž Kramberger, “*Forecasting Of Maritime Cargo Flows To Support The Planning Activities In Napa Ports*”, Preliminary Research Study, University of Maribor, July 2013.

<sup>2</sup> “Railways, the Port of Trieste signs agreements with China and Austria”, *AdriaPorts*, 23 March 2019, <http://www.adriaports.com/en/railways-port-trieste-signs-agreements-china-and-austria>.

<sup>3</sup> Dejan, Dragan, Marko Intihar, Klemen Prah and Tomaž Kramberger, “*Forecasting Of Maritime Cargo Flows To Support The Planning Activities In Napa Ports*”, Preliminary Research Study, University of Maribor, July 2013.

is rarely without emergency lane. On some parts it has three traffic lanes in one direction and two in another.<sup>1</sup> This provides the cargo with access by road north into Austria, following A2, part of European E61 route, or southeast towards the capital of Croatia, Zagreb following A2, part of E70 route. Since 2008 vignettes are required for all vehicles up to 3.5 tons, while heavier vehicles must still pay the toll at a tollgate.<sup>2</sup>



*A1 route from Port Koper to the north.*

On the other hand, rail access is provided by a single-track route (the double-track route is being built) to the mainline at Divača. From there the trains can take the route towards the west (via Sežana and Trieste, described in the Port of Trieste section) or east towards Ljubljana. Ljubljana serves as a rail hub towards Hungary, Austria, Slovakia, Czech Republic, Serbia

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<sup>1</sup> Only Tunnel Golovec section has three lanes in each direction.

<sup>2</sup> SEEITS, “*Intelligent Transport Systems in South East Europe*”, final publication of the SEE-ITS project, 2014.

and southern Germany. Maximum trail length from Port Koper is 500 metres and weight 1300 tonnes respectively.<sup>1</sup>

The **Port of Rijeka**'s current hinterland for container traffic covers Croatia, Serbia and Bosnia and Herzegovina, and while most traffic is distributed inland by road, there are railways operating toward Zagreb, to the directions of Serbia and Hungary. Road access to the strategic road network is possible with the completion of the D404 road leading to E71 towards Zagreb (and Hungary) and/or via Split on the Adriatic Sea coast. The E71 mostly consists of motorways, but considerable sections are either expressways or two-lane roads with at-grade intersections. Nearly all motorway sections of the E71 are tolled, using various toll collection systems.<sup>2</sup>

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<sup>1</sup> Dejan, Dragan, Marko Intihar, Klemen Prah and Tomaž Kramberger, “*Forecasting Of Maritime Cargo Flows To Support The Planning Activities In Napa Ports*”, Preliminary Research Study, University of Maribor, July 2013.

<sup>2</sup> In Hungary are tolled using an electronic toll collection (ETC) system with charges differing for various categories of vehicles and length of period when the e-vignette is valid. Croatian motorways are also generally tolled, using a ticket system. The toll charged along the Croatian section of the E71 route varies depending on the length of route travelled and the vehicle classification in Croatia. The toll is payable in either Croatian kuna or euros and by major credit and debit cards. A prepaid ETC system is also used. More can be found out here: <http://hac.hr/en?language=en>



*The E71 route from Slovakia to Croatia.*

Rail access on the other hand, is provided towards the east (Zagreb) by the single-track electrified route, while there is also an electrified route north towards Ljubljana, the capital of Slovenia. Maximum trailing length and weight from Rijeka is 500 metres and 1300 tonnes.<sup>1</sup>

The Port of Ravenna is in fact based in a larger area: the docks are on a canal that connects the very town centre of Ravenna in inland with the sea, which is 12 kilometres away from the city. Offshore breakwaters are in two smaller towns of Porto Corsini and Marina di Ravenna. Its current hinterland covers northern Italy and inland distribution is done mainly by road, although smaller volumes of traffic headed to international markets

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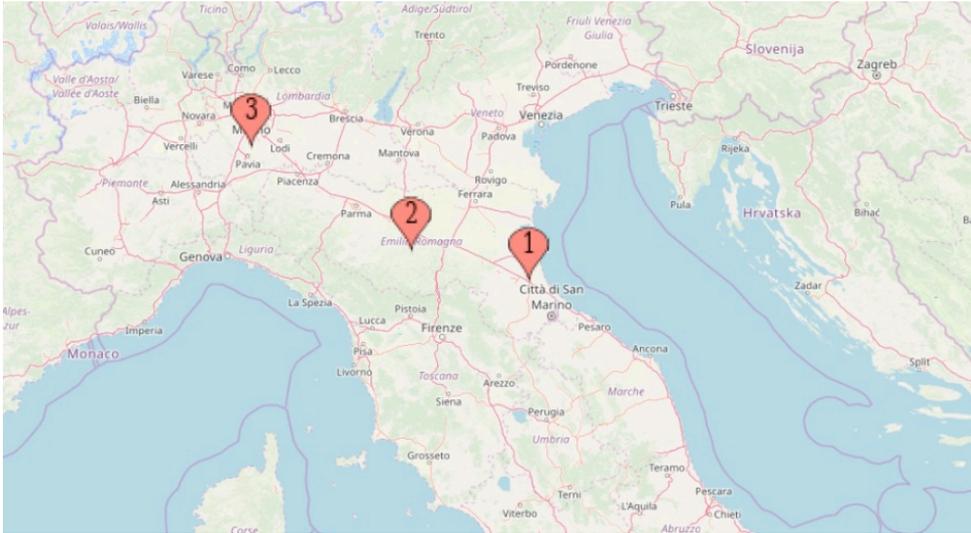
<sup>1</sup> Dejan, Dragan, Marko Intihar, Klemen Prah and Tomaž Kramberger, “*Forecasting Of Maritime Cargo Flows To Support The Planning Activities In Napa Ports*”, Preliminary Research Study, University of Maribor, July 2013.

are handled by railway route to Milan. However, most of the port's hinterland for container traffic is national. It covers particularly Emilia Romagna region, but also Lombardia, Piemonte, Marche and Veneto. A fast motorway link to the A14 route provides also access to north west to Bologna, via A1 to the rest of Emilia Romagna, Lombardia, as well as to the southeast into Marche. A13 via Bologna also provides access to the Veneto region.



*A14 enables both access to inland Italy, as well as connection with other routes, leading outwards of the country.*

Rail on the other hand is provided by a double-track electrified route to the mainline between Ancona and Bologna. The latter provides access to Ravenna's existing inland railways going towards Modena (2) and Milano (3).<sup>1</sup>



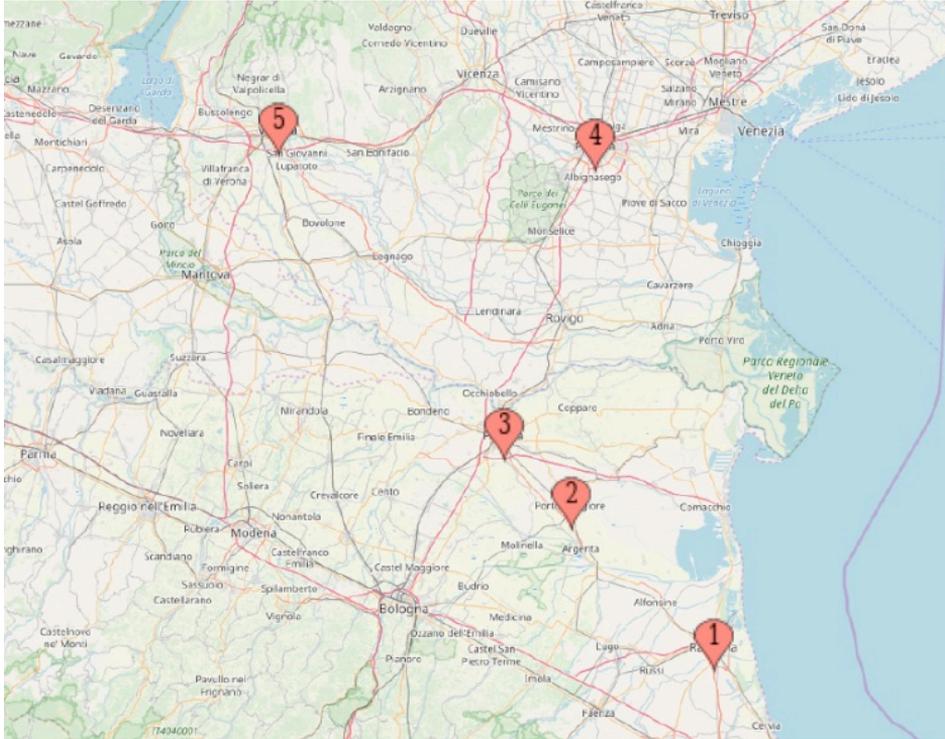
*Railway between Ravenna – Modena and Milan, heading towards international markets over the Alps.*

Verona (5) is available via a double-track electrified RFI rail to Ferrara (3) via Portomaggiore (2), using a FER line. Maximum trailing length and weight of trains is 530 metres and 1300 tonnes.<sup>2</sup>

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<sup>1</sup> Ibid.

<sup>2</sup> Ibid.



*Railway Ravenna-Portomaggiore-Ferrara-Padova-Verona.*

### **4.3 Competition/collaboration between Piraeus and NAPA Ports**

Piraeus port's location – at the entrance to Europe, once a ship passes the Suez Canal – gave China an excellent starting point for entering the European markets by sea and enhancing the trade levels between the two. However, as noted in the previous sections, it is clear that the Chinese attention shifted to the NAPA ports in addition to the already acquired port of Piraeus in 2016. This chapter will briefly analyse the reasons for the shift and focus on developing the current strengths and weaknesses of the Piraeus port in comparison to NAPA ports through analysing the results of the interviews with the ports' governing authorities and secondary sources of the already existing hypotheses in the literature. This will result in an analysis of the existing competition or collaboration points.

In October 2009, Greece leased two docks (docks 2 and 3) of the Piraeus Port Authority to COSCO Shipping Ports Limited for a 35-year period. COSCO agreed to buy 51% of Piraeus Port Authority in April 2016 for €280.5 million under a deal signed with Greece's privatisation agency, and is expected to increase its stake to 67% over the next five years.<sup>1</sup> COSCO said it would also invest up to €612 million in the Piraeus port to upgrade cruise and shipping container facilities, construct hotels and leisure facilities, as well as a COSCO-dedicated logistics centre.<sup>2</sup> After the Chinese COSCO's acquisition of the port of Piraeus in August 2016, the port's capacity, infrastructure, service, operations and revenue have improved significantly, the latter possibly due to "an increased volume of imports from China passing through it".<sup>3</sup> Profits before tax were €42.3 million in 2018, compared to earnings of €21.2 million in 2017. The port's container throughput stood at 3.36 million TEU last year, up from 880,000 TEU in 2010; so traffic has increased and the port has become more competitive. During the first three months of 2019, it even achieved a new quarterly record, handling 1.25 million TEU, bringing Piraeus closer to first place in the Mediterranean.<sup>4</sup>

It was Piraeus' significant geographical relevance for the Belt and Road Initiative that put it on the map as a Greek container port hub connecting Asia, Europe and Africa. Together with the Chinese connectivity plans in the western Balkans (the construction of highways and high-speed railways - e.g., the Belgrade-Budapest line), the aim of Piraeus is to become a hub for trade among Asian, north African and European markets. As Chinese

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<sup>1</sup> Should COSCO achieve conditions established in the agreement, including the successful completion of the mandatory investments up to €300 million, it will pay an additional €88 million and increase its stake by 16% to 67%.

<sup>2</sup> "Chinese Investments in Piraeus Port Facing Local Challenges", *PortSEurope*, 30 April 2019, <https://www.portseurope.com/chinese-investment-in-piraeus-port-facing-local-challenges/>

<sup>3</sup> Xugang, Yu, Rizzi Cristiano, and Tettamanti Mario. *China's Belt and Road: The Initiative and Its Financial Focus*. Vol. 2. World Scientific, 2018.

<sup>4</sup> "Chinese Investments in Piraeus Port Facing Local Challenges", *PortSEurope*, 30 April 2019, <https://www.portseurope.com/chinese-investment-in-piraeus-port-facing-local-challenges/>

goods are currently shipped through the Suez Canal, the ideal scenario for the Chinese would be to take their products directly to Piraeus to be loaded on trains, reaching the markets in central Europe (and from there to be dispatched elsewhere throughout Europe) through high-speed rail links, cutting the transit times, in theory, roughly from 30 to 20 days.<sup>1</sup>

“The Port of Piraeus is not simply growing in size but is also changing in nature. If China’s plan to connect it to Budapest via high-speed train succeeds, the port will be transformed from a transshipment station into China’s main gateway for central and eastern Europe. According to the agreement signed in November 2015 between China and Hungary, the completion of the Budapest–Belgrade line, the first segment of this railway, will be financed by the Export-Import Bank of China with a 20-year loan that covers 85 percent of the total US\$1.8bn needed for the construction made by China Railway International Corporation”.<sup>2</sup>

However, the connectivity plans are currently not establishing one quick and reliant route from Piraeus to central and eastern Europe, as the Belgrade-Budapest high-speed railway still awaits construction, similar to some highway passages that would enable rapid transit. At the moment, the distance between Piraeus and Budapest is almost 1,700 kilometres, without reliable connectivity lines, which is still significantly affecting port Piraeus utility, as, for example, the distance between the port of Koper and

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<sup>1</sup> As opposed to the scenario of transport through northern European ports, shipping the goods through the Suez Canal, through the Mediterranean, past or through the Bay of Biscay, and through the English Channel to the ports on Europe’s north-western coast (such as Rotterdam, Antwerp and Hamburg), from where they would be dispatched by rail and road towards the hinterland of Europe. More at: Xugang, Yu, Rizzi Cristiano, and Tettamanti Mario. *China’s Belt and Road: The Initiative and Its Financial Focus*. Vol. 2. World Scientific, 2018.

<sup>2</sup> Fardella, Enrico and Giorgio Prodi, “The Belt and Road Initiative Impact on Europe: An Italian Perspective”, *China & World Economy*, 25, no. 5 (2017): 132 [http://en.iwep.org.cn/papers/papers\\_papers/201711/W020171109393879132046.pdf](http://en.iwep.org.cn/papers/papers_papers/201711/W020171109393879132046.pdf)

Budapest is three times shorter, a considerable factor even if Slovenia offers only a one-track railway towards Budapest.<sup>1</sup>

Piraeus is a deep sea port. Deep sea shipping lines are generally highly cost conscious and seek to minimise their door-to-door costs. In connection to NAPA, a distinction can be made between western NAPA ports (Ravenna and Venice) and eastern NAPA ports (Trieste, Koper and Rijeka). The western NAPA ports have rich regions in their hinterlands (Veneto, Emilia Romagna, Lombardy and Piedmont), hence inland transit usually takes place by road over short distances, though both ports are well connected with railways as well. However, due to their low-lying locations these two ports lack deep water; they cannot serve very big cargo ships unless they engage in extensive dredging operations. So they focus on different kinds of cargo. The eastern NAPA ports, Trieste, Koper and Rijeka, on the other hand, are situated very close to each other and are appropriately deep; however, they rely intensely on their rail freight connections, which are currently not sufficient in any of these ports; hence the investments into the development of the hinterland infrastructure represent a possibility for their competitiveness.<sup>2</sup>

Two similarities can be distinguished in this regard: as with the eastern NAPA ports, Piraeus is a deep-water port, hence serving the same cargo needs and in this way representing a competitive challenge to the NAPA ports. On the other hand, all of them have a problem with the surrounding transport infrastructure, which is in the development stage: a Belgrade-Budapest railway will enable the port of Piraeus to transfer cargo on trains for a certain part of the route between Greece and central Europe, Croatia has opened a tender for the construction of a Rijeka-Zagreb road and expressed interest in a low-track railway in the same location, Slovenia is constructing a second-track for the Koper-Divača railway, which would

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<sup>1</sup> Interview with the representatives of the Port of Koper, Koper, 29 May 2019.

<sup>2</sup> MDS Transmodal Limited, "NAPA: Market Study on the Potential Cargo Capacity of the North Adriatic Ports System in the Container Sector", (*ITS Adriatic Multiport Gateway*, January 2012).

increase its reliability, and Italy is developing the encompassing rail and road infrastructure around the port of Trieste.

As they have similar shortcomings, in many respects the Piraeus and NAPA ports are therefore actually posing a competitive challenge to each other. An example of such competition is the case of Gioia Tauro, the largest Italian port, the trade at which fell from approximately 3.5 million TEU in 2008 to 2.5 million TEU in 2015 as Piraeus re-directed a large degree of its traffic in the region. Today, NAPA ports still process less cargo than is processed by Piraeus. If Piraeus were to fully develop and complete its railway network with Budapest, the situation of NAPA ports might change drastically.<sup>1</sup>

Besides infrastructure, there is a second limitation for the further development of the port of Piraeus, for it is a local community, which prevents its expansion. On the one hand, a challenge was posed when Greece's Central Archaeological Council (KAS) ruled that some proposed projects at the port of Piraeus would affect local archaeological sites and rejected the Piraeus Port Authority's plan to create a shopping mall, a floating ship repair dock and a luxury hotel. Moreover, local traders and shop owners object to the construction of a mall within the port and close to where tens of thousands of cruise ship passengers enter and leave on a seasonal basis, which would most likely affect their businesses. COSCO's plan was also to build a 12-hectare logistics centre in the adjacent Keratsini municipality, which is now opposed by a shipping ministry-affiliated committee. A logistics centre is necessary for a major commercial port; hence this local community challenge is one of the biggest for Piraeus.<sup>2</sup>

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<sup>1</sup> Fardella, Enrico and Giorgio Prodi, "The Belt and Road Initiative Impact on Europe: An Italian Perspective", *China & World Economy*, 25, no. 5 (2017): 125–137.

<sup>2</sup> "Chinese Investments in Piraeus Port Facing Local Challenges", *PortSEurope*, 30 April 2019, <https://www.portseurope.com/chinese-investment-in-piraeus-port-facing-local-challenges/>

NAPA ports, on the other hand, currently do not face similar challenges in terms of expansion.

From this brief analysis, we can distinguish several modes of possible strategy recommendations in terms of enhancing collaboration between the NAPA ports and Piraeus. First, establishing in-depth dialogue with all parties involved in terms of developing infrastructure in NAPA ports would enable the two sides to smoothly develop according to the EU legal framework and to avoid further damage to reputations. Secondly, the status of the port of Piraeus would be greatly improved by establishing a dialogue with the local communities in the area of the port of Piraeus on the level of a socially-responsible company that caters to the needs of the local population. Thirdly, increasing the importance of regional cooperation and networking between NAPA ports and Piraeus could improve the region's overall competitiveness in global markets and in comparison to the northern European ports. Fourthly, cooperation between the two sides would improve if initiatives were established, aimed toward developing an exchange of best practices and trade facilitation between NAPA ports and Piraeus. Finally, the development of common security measures should be supported. These would especially be important in the field of cyber security, which is crucial for safe functioning of ports and the enhancement of which could lead to trust building in the region as port figures work on a common project, developed out of a common necessity.

## SWOT analysis

<b>Strengths</b>	<b>Weaknesses</b>
<ul style="list-style-type: none"> <li>- high potential in terms of trafficked cargo, if both NAPA and Piraeus improve infrastructure (or at least one of them does)</li> <li>- lowered transport costs and times when using either NAPA ports or Piraeus port</li> <li>- handling larger ships possible in eastern NAPA ports and the port of Piraeus</li> <li>- support of the national governments for any expansion or development projects (Slovenia, Italy, Croatia)</li> <li>- support of the national governments for neighbouring ports' expansion or development (Slovenia, Italy, Croatia)</li> </ul>	<ul style="list-style-type: none"> <li>- port Piraeus' infrastructure connectivity is currently bad and the port remains a hub for the Balkans, as opposed to a hub for further hinterlands of Europe</li> <li>- handling larger ships not possible in western NAPA ports</li> <li>- local communities in the port of Piraeus</li> <li>- Chinese investments into ports is badly received, except by some countries in the cases of rail infrastructure</li> <li>- ports considered critical sectors by the EU</li> </ul>
<b>Opportunities</b>	<b>Threats</b>
<ul style="list-style-type: none"> <li>- using the support for the NAPA ports by the local communities, businesses and governments to establish a dialogue with the EU (Member States and bodies)</li> <li>- sharing practices and experiences in terms of connectivity and common issues (safety)</li> </ul>	<ul style="list-style-type: none"> <li>- Piraeus port represents direct competition to NAPA ports, particularly if it overtakes the role of NAPA ports in terms of transshipment capacity</li> <li>- unused potential, if infrastructure is not developed</li> <li>- northern European ports will most likely remain advanced due to their development and size</li> <li>- FDI screening of the EU and possible other measures towards port developments in Europe</li> </ul>

## 5 NAPA PORTS WITHIN THE NEW STRATEGIC INITIATIVES

### 5.1 Existing cooperation within the new strategic initiatives

According to the 2018 statistics of Chinese exports to the European Union<sup>1</sup> the largest part of the total trade (according to the value of exported goods) was in manufactured goods, and out of these more than half (50.5%) were machinery and appliances (by HS sections). According to another classification, the SITC sections system, more than half of the exports were in machinery and transport equipment, while another 26.3% were in miscellaneous manufactured articles.<sup>2</sup> According to Eurostat-based analysis, the goods most exported from China are telecommunications equipment, automatic data processing machines, baby carriages, electric machinery and related parts, furniture and household equipment, textile and clothing and electronic apparatuses.<sup>3</sup> Regardless of the statistical framework used, such a range of products suggests that the most important part of the port-to-port connections between China and Europe would be in the segment of container transport and – alternatively – in the ro-ro segment. As shown before, the container facilities are present in all of the NAPA ports, with Koper having the largest yearly container throughput. The most important container transport connections between NAPA ports and Chinese ports are provided by two main shipping alliances, 2M and the Ocean Alliance.

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<sup>1</sup> “European Union, Trade in Goods with China”, *European Commission*, [https://webgate.ec.europa.eu/isdb\\_results/factsheets/country/details\\_china\\_en.pdf](https://webgate.ec.europa.eu/isdb_results/factsheets/country/details_china_en.pdf) (acc. 15 May 2019).

<sup>2</sup> *Ibid.*

<sup>3</sup> Data from *Eurostat* database at: <https://ec.europa.eu/eurostat/web/international-trade-in-goods/data/database> (acc. 10 May 2019).

Shipping alliances are a recent way of organizing maritime commercial transport cooperation. Similar to airline alliances, shipping alliances are groups of ocean carriers that unite under a cooperative agreement forming a strategic alliance for trade routes. This form of organizing maritime transport was a response to the current economic conditions, where it has become progressively harder for shipping lines to operate alone. The cooperation is based on vessel sharing agreements, by which the variable costs are cut and common resources such as ships, port terminals and networks around particular routes are used more efficiently.<sup>1</sup> The organisation of shipping alliances is changing the landscape of maritime transport. The biggest change is a trend towards bigger ships with more tonnage. This puts ports under pressure to expand their capacities to accommodate the largest ships. Since the northern Adriatic ports have comparatively shallow seabeds, one of the main issues will be how to deepen the seabed for the increasingly larger container ships.

### 5.1.1 Water Depth in NAPA ports<sup>2</sup>

	Ravenna	Venice	Trieste	Koper	Rijeka
Channel	9.4 – 10 m	11 – 12.2 m	17.1 – 18.2 m	12.5 – 13.7 m	17.1 – 18.2 m
Cargo Pier	4.9 – 6.1 m	7.1 – 9.1 m	11 – 12.2 m	4.9 – 6.1 m	4.9 – 6.1 m
Mean Tide	60 cm	30 cm	30 cm	30 cm	30 cm
Anchorage	4.9 – 6.1 m	12.5 – 13.7 m	over 23.2 m	17.1 – 18.2 m	over 23.2 m
Oil Terminal	9.4 – 10 m	12.5 – 13.7 m	7.1 – 9.1 m	12.5 – 13.7 m	17.1 – 18.2 m

<sup>1</sup> “Shipping Alliances: What Do They Do and What Does It Mean?”, *Freight Hub*, 9 March 2017, <https://freighthub.com/en/blog/shipping-alliances-mean/>.

<sup>2</sup> Data from: <https://www.searates.com> (acc. 3 May 2019).

There are currently three shipping alliances that operate container transport worldwide:

- **The Transport High Efficiency Alliance; i. e., THE Alliance (16.5% market share<sup>1</sup>):** K-Line, Hapag-Lloyd, NYK, MOL and Yang Ming
- **The Ocean Alliance (25.6% market share<sup>2</sup>):** CGM, CMA, Evergreen, Cosco Shipping and Orient Overseas Container Line
- **The 2M Alliance (29.6% market share<sup>3</sup>):** Maersk and Mediterranean Shipping Co.<sup>4</sup>

In NAPA ports, the Ocean Alliance and 2M are better represented with regular weekly services in the five ports. The connections combine several stops within China, and in Singapore, Egypt, Israel, and several ports in the northern Adriatic. As a typical example, Maersk as part of the 2M operates the weekly connection AE12 Westbound, connecting the Chinese ports Xingang, Dalian, Busan, Ningbo, Shanghai and Chiwan, going through Singapore, Port Said East, and Haifa, and ending the line in Koper (37 days), Trieste (40 days) and Rijeka (42 days).

Over the last two decades, Chinese companies have increased their interest in the European ports and maritime transport infrastructure, especially as part of the Maritime Silk Road segment of the Belt and Road Initiative. According to OECD data, they have acquired stakes in a larger number of European ports that cumulatively handle more than 10% of container traffic to and from Europe.<sup>5</sup> The ports where these companies have their shares

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<sup>1</sup> “THE Alliance”, *iContainers*, <https://www.icontainers.com/us/2017/01/12/the-alliance/> (acc. 20 May 2019).

<sup>2</sup> *Ibid.*

<sup>3</sup> *Ibid.*

<sup>4</sup> “Shipping Alliances: What Do They Do and What Does It Mean?”.

<sup>5</sup> “China on Port Shopping Spree in Europe and Globally”, *PortSEurope*, 24 January 2019, <https://www.portseurope.com/china-on-port-shopping-spree-in-europe-and-globally/>.

are the Egyptian Port Said, Morocco's Casablanca and Tangier, Marsaxlokk in Malta, Istanbul in Turkey, Piraeus in Greece, Bilbao and Valencia in Spain, Marseille, Nantes, Le Havre and Dunkirk in France, Antwerp and Bruges in Belgium, and Rotterdam in the Netherlands. The main two state-owned companies responsible for these acquisitions are COSCO Shipping Ports and China Merchants Group (CMG).<sup>1</sup>

Until recently, the NAPA ports were not included in the strategy. Several developments, however, indicate that the ports of the northern Adriatic also started to play a role in the strategic investment framework of the Belt and Road Initiative. As the first of the three countries in the northern Adriatic region, in March 2019 the Italian government expressed its willingness to more actively participate in the Belt and Road Initiative, including by potentially opening some of its ports to Chinese investment. Support was expressed especially by Luigi Di Maio and his Five Star Movement<sup>2</sup> and resulted in a visit from Chinese President Xi Jinping to Italy. On 23 March, a Memorandum of Understanding was signed by the two countries. As part of the more than 30 points that composed the agreement, two port management deals were included. Deals on port management were signed between the China Communications Construction and the ports of Trieste and Genova.<sup>3</sup> Simultaneously with this decision, several other developments in Italian ports point in the same direction of coming closer to the new strategic framework of the Belt and Road.

As early as 2017, the Venice Port Authority signed a contract on the design of Phase 1 of the Venice Offshore Port with 4C3. 4C3 is a consortium of the China Communications Construction Company and two Italian

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<sup>1</sup> *Ibid.*

<sup>2</sup> "Italy Rattles US and EU with Likely Support for China's Belt and Road", *The Guardian*, 20 March 2019, <https://www.theguardian.com/world/2019/mar/20/italy-rattles-us-and-eu-with-likely-support-for-chinas-belt-and-road>.

<sup>3</sup> "Italy Becomes First Western European Nation to Sign Up for China's Belt and Road Plan", *South China Morning Post*, 23 March 2019, <https://www.scmp.com/news/china/diplomacy/article/3002986/china-wants-invest-ports-maritime-transport-italy-xi-jinping>.

Companies, 3Ti Progetti Italia and E-Ambiente. The most important feature of the planned offshore port, 15 km from Malamocco Port, is the seabed, which, at 20 meters of depth, will allow the calls of large container ships holding 18,000 to 22,000 TEUs.<sup>1</sup>

Since 2018, Ravenna has been the seat of the CMIT, the European division of the Chinese giant, China Merchants Group.<sup>2</sup> The agenda behind the decision to position CMIT (The Centre for Offshore Research and Engineering Excellence) in Ravenna was to make this port into a hub of naval engineering, especially with a stress on the oil and gas industry. China Merchants Group<sup>3</sup> is the largest port developer in the world, which controls 36 ports in 18 countries worldwide<sup>4</sup>. So far, the Hong Kong holding company has invested about ten million euros in the start-up phase in Ravenna.<sup>5</sup> CMIT's agenda in cooperating with the Ravenna Municipality, the Port Authority of Ravenna, the Region of Emilia-Romagna, the local terminal operator Sapir<sup>6</sup> and the University of Bologna, is to work towards the deepening of the seabed to 12.5 m in the next three years and then to 14.5 m in the following four.<sup>7</sup> In addition, CMIT is planning to pursue several other directions: basic engineering for floating production storage and offloading ships (FSPO - i.e., ships used for offshore production, processing and storage of oil), engineering for cruise ships, a purchasing centre for shipbuilding, etc.

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<sup>1</sup> Brian Wang, "China-Italy BRI Deal Could Be as Historic as Marco Polo", *nextBIGfuture*, 20 March 2019, <https://www.nextbigfuture.com/2019/03/china-italy-bri-deal-could-be-as-historic-as-marco-polo.html>; Jason Lee, "Sino-Italian Consortium to Design Venice Offshore Port", *Belt and Road Portal*, 24 February 2017, <https://eng.yidaiyilu.gov.cn/wtfz/ssl/8468.htm>.

<sup>2</sup> Alessandro Sperandio, "Porto Ravenna passa il test cinese: è destinato a essere leader nell'oil&gas", *Energia Oltre*, 22 January 2019, <https://energiaoltre.it/porto-ravenna-passa-il-test-cinese-e-destinato-a-essere-leader-nelloilgas/>.

<sup>3</sup> Cf. <http://www.cmport.com.hk/EN/>.

<sup>4</sup> Sperandio, "Porto Ravenna passa il test cinese: è destinato a essere leader nell'oil&gas".

<sup>5</sup> *Ibid.*

<sup>6</sup> Cf. <http://www.grupposapir.it/>.

<sup>7</sup> Sperandio, "Porto Ravenna passa il test cinese: è destinato a essere leader nell'oil&gas".

Similarly, in February 2019, the Port of Trieste signed a cooperation agreement with the Chinese group the China Communication Construction Company – CCCC. The focus of the cooperation agreement is on the infrastructural aspect. In relation to the “Trihub” project, the integrated plan to reinforce the railway infrastructure system in the area between Cervignano del Friuli, Villa Opicina and Trieste, the new cooperation agreement aims at positioning Trieste as an important entry point into the central European railway system, connected to another CCCC project for the construction and management of the Košice intermodal terminal in Slovakia.<sup>1</sup>

A cooperation agreement was signed in 2018 by the Port of Koper and the Ningbo Zhoushan Port Group. The aim of the agreement is to increase the number of shipping connections between the two ports and the tonnage of cargo, while also improving the intermodal connections to the hinterland countries of central and eastern Europe. In order for this strategy to be successful, the precondition is the construction of the second railway track between Divača and Koper, which will greatly enhance the capacity of intermodal transport from the port of Koper.

In Rijeka, the main cooperation opportunity for the Belt and Road framework is the so-called “Zagreb shore”, the building project for a new container terminal, which would allow for a great increase in the container shipping capacity of the port of Rijeka. A tender was issued for which seven potential partners applied. Among others, these were the Ningbo Zhoushan Port Group together with the China Road and Bridges Corporation, APM Terminals (part of Maersk and Terminal links, owned by CMA-CGM with partial ownership of China Merchant Ports).<sup>2</sup> Other applicants were the

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<sup>1</sup> “Railways, the Port of Trieste Signs Agreements with China and Austria”, *AdriaPorts*, 23 March 2019, <http://www.adriaports.com/en/railways-port-trieste-signs-agreements-china-and-austria>.

<sup>2</sup> Marinko Glavan, “Veliki igrači u Rijeci. Kinezi bi dogradili Zagrebačku obalu do kapaciteta od milijun TEU-a”, *Novi list*, 21 May 2019, [http://novilist.hr:8090/novilist\\_public/Vijesti/Rijeka/VELIKI-IGRACI-U-RIJECI-](http://novilist.hr:8090/novilist_public/Vijesti/Rijeka/VELIKI-IGRACI-U-RIJECI-)

Philippine ICTSI (already a majority owner of a terminal operator in the port of Rijeka), the Singapore company Potek and the Turkish company Yilport. The results of the tender are still not final, but regardless of the winner, the new container terminal will be given in concession for 30 or 50 years, depending on the intention of the bidder, whether they also pursue the second phase of the building of the terminal or not. With the realisation of the second phase of the planned building, the new terminal could reach a yearly capacity between 800,000 and 1 million TEU.<sup>1</sup>

## **5.2 Northern Adriatic port-related projects influencing the domestic and EU narratives**

Several reports<sup>2</sup> address the presence of the Chinese proactive diplomacy in the Mediterranean region, which includes investments in this area's markets, acquiring stakes in and developing ports and the inclusion of these countries in the Belt and Road Initiative or 16+1 Platform.<sup>3</sup> While we could hardly speak of a particular Chinese 'Mediterranean strategy'<sup>4</sup>, several countries in the Mediterranean saw an increase of Chinese interest in connection to maritime routes; more specifically, port infrastructure and the infrastructure connecting to the hinterlands (railways and roads). Slovenia, Croatia and Italy are three Mediterranean countries connected to the NAPA. While Slovenia and Croatia are a part of the 16+1 Platform,

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Kinezi-bi-dogradili-Zagrebacku-obalu-do-kapaciteta-od-milijun-TEU-a?meta\_refresh=true.

<sup>1</sup> *Ibid.*

<sup>2</sup> Alice Ekman, *China in the Mediterranean: An Emerging Presence*, (Notes de l'Ifri, IFRI, February 2018); Mordechai Chaziza, "The Chinese Maritime Silk Road Initiative: The Role of the Mediterranean", *Mediterranean Quarterly*, 29, no. 2 (June 2018): 54–69.

<sup>3</sup> Currently, Chinese companies have a share in several Mediterranean ports: Valencia (Noatum Container Terminal, 51% share by COSCO), Marseille Fos (Eurofos terminal, 25% share by CMPort), Ambarli (Kumport terminal, 26% share by COSCO, 26% share by CMPort), Marsaxlokk (Malta Freeport Terminal, 25% by CMPort), Piraeus (Piraeus Container Terminal, 100% share by COSCO).

<sup>4</sup> Mordechai Chaziza, "The Chinese Maritime Silk Road Initiative: The Role of the Mediterranean", *Mediterranean Quarterly*, 29, no. 2 (June 2018): 54–69.

Italy recently joined the Belt and Road Initiative by signing the Memorandum of Understanding in March 2019. All three EU Member States recently saw several new developments in connection to their ports and the surrounding infrastructure, the Chinese presumably searching for complementary developments to the already developing port of Piraeus that would increase their presence in the Mediterranean.<sup>1</sup>

While the port of Koper (Slovenia) itself did not see any investment, the construction of the second track of the Divača-Koper railway attracted interest on the part of Chinese companies in 2016, which, however, did not result in any sort of cooperation. The port of Rijeka also did not receive any investment; still, the Chinese shipping giant COSCO has expressed interest in the concession of a deep-water container terminal and Chinese investors also expressed interest in the construction of a railway section that will connect the port of Rijeka to the Hungarian border. There are no signs of the companies winning the construction tenders yet. On the other hand, the Memorandum of Understanding that Italy signed with China in March 2019, also proposed investment in the port of Trieste; e.g., building a new terminal, managing the terminal, and further development of the railway connection around the port. Port Ravenna, the ‘least permanent’ NAPA member port, also received a visit from the Chinese delegation in March 2019, while the port of Venice signed a Memorandum of Understanding with the port of Piraeus toward improving the overall capacities of both ports as hubs in the Belt and Road Initiative in February 2019. The port of Venice was not a part of the general Italian Memorandum of Understanding. With the latter document, the Chinese investors signed twenty-nine separate deals worth around 2.5 billion euros, making Italy the

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<sup>1</sup> “Kaj o kitajskih vlaganjih v tržaško pristanišče menijo v Luki Koper”, *Regional*, 23 March 2019, <https://www.regionalobala.si/novica/kaj-o-kitajskih-vlaganjih-v-trzasko-pristanisce-menijo-v-luki-koper-ni-panike>

first Group of Seven (G7) nation and the largest EU member to officially accept Belt and Road funds.<sup>1</sup>

The following section will focus on studying these developments, taking a look at the reactions of the major actors involved in the NAPA ports projects relating to Chinese investments, synthesising and classifying them with the purpose of understanding the turns in policies on either national or European levels that could influence the cooperation projects in any way. The method used in this chapter is secondary source analysis based on official documents, official statements of governmental actors, media interviews, and a media overview.

### **5.2.1 Domestic narratives: responses to the Chinese presence on the parts of Slovenia, Croatia, and Italy**

For the NAPA ports, national governments are the key decision-makers in regard to the decision whether and to what degree Chinese investments to both the ports and hinterland infrastructure development are welcome and/or necessary for the success of the ports. Their responses to the Chinese investments are therefore crucial indicators of the possibility of further engagements and conditions surrounding them.

Looking at the most recent case of Chinese engagement with the NAPA ports: on 23 March 2019, Italy became the first G7 country to sign a Memorandum of Understanding (MOU) with China and join the Belt and Road Initiative, providing a framework agreement for business deals between Italian and Chinese state-supported companies, leading to a total of 29 deals amounting to 2.5 billion euros. The agreement was signed

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<sup>1</sup> Chatzky, Andrew, “China’s Belt and Road Gets a Win in Italy”, Council on Foreign Relations, 27 March 2019, <https://www.cfr.org/article/chinas-belt-and-road-gets-win-italy>

during the Chinese President Xi's visit to Rome and concerns the development of Italian ports, among those a NAPA port, Port Trieste.<sup>1</sup>

In studying the attitudes of Italian state actors, one has to first identify the main authority of the port of Trieste, which is the Eastern Adriatic Sea Port Authority (*Autorità di Sistema Portuale del Mare Adriatico Orientale*), influencing current and future strategy decisions with regards to Chinese engagement at the port. The key decision maker in the Eastern Adriatic Sea Port Authority is its president Zeno D'Agostino, who signed the agreement on Chinese state-owned company China Communications Construction Company (CCCC), represented by the leader of CCCC Song Hailang, developing the port's infrastructure. The agreement specifies both investing in and managing a terminal in the port of Trieste,<sup>2</sup> envisages investment in the new Servola stations and Aquilinia (as parts of the Trihub project).<sup>3</sup> The second section of the agreement foresees the entry of the Trieste port into the project of a large intermodal terminal planned by the CCCC in Košice in eastern Slovakia, at the border with Ukraine and Hungary, which would be developed into one of the main inland transport hubs on the Silk Road. The third round of the MOU deals with the possible participation of the Trieste port system in investments in China itself. The positions towards investment into this NAPA port vary among Italian state actors:

Zeno D'Agostino, the president of the Eastern Adriatic Sea Port Authority, the person responsible for signing the agreement, expressed a positive outlook towards the CCCC's investment into the port of Trieste: "With this

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<sup>1</sup> Wheeler, Andre, "Commentary: Italy Takes Bite of China Apple with Entry into Belt and Road Initiative", *CNA*, 2019, <https://www.channelnewsasia.com/news/commentary/italy-china-belt-road-initiative-xi-jinping-genoa-trieste-mou-11376350>

<sup>2</sup> Šorl, Mihael, "Italijani na svilni poti, Kitajci vrgli oko na Trst", *Dnevnik*, 21 March 2019, <https://www.dnevnik.si/1042879621>

<sup>3</sup> The Trihub project is an integrated system reinforcement plan railway infrastructure in the area between Cervignano del Friuli, Villa Opicina and Trieste that is being developed in cooperation with the rail network operator RFI.

agreement we are aiming to organize the logistics of the port. Our commitment is to support the exports to China and the Far East of our SMEs, which do not have the appropriate size to deal with this type of investment. The Eastern Adriatic Sea Port Authority will enable Italian companies to develop in Chinese logistics and port platforms that allow the 'Made in Italy' strategy to develop in China."<sup>1</sup>

Moreover, he acknowledged that: "Fundamentally, what's happening is that the port of Trieste is returning to the logistical role for Europe that it had for the old Austro-Hungarian Empire."<sup>2</sup> This statement was supported by Roberto Dipiazza, the mayor of Trieste, who said that Trieste had much to gain from closer ties to China, but that the Chinese had even more to gain from Trieste port's deep harbours, customs benefits and rail yards.<sup>3</sup>

On the other hand, the governor of the Veneto region (close to Trieste), which administers Venice, Luca Zaia, dismissed the Italian-Chinese deal as a new form of colonisation: "The Chinese have already invaded Africa and they are now preparing to do so also with Europe, with our ports. Port security is a significant challenge."<sup>4</sup> As an official figure, D'Agostino responded to this possibility of the Chinese taking control of the whole port in the future: "The port will continue to be publicly owned. The Chinese will only get a concession, but that can always be cancelled. Italian

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<sup>1</sup> Šuligoj, Boris, „Tržaško pristanišče diha Kopru za ovratnik”, *Delo*, 8 June 2018, <https://www.delo.si/gospodarstvo/novice/luka-trst-diha-kopru-za-ovratnik-58531.html>

<sup>2</sup> Horowitz, Jason, "A Forgotten Italian Port Could Become a Chinese Gateway to Europe", *New York Times*, 18 March 2019, <https://www.nytimes.com/2019/03/18/world/europe/italy-trieste-china-belt-road.html>

<sup>3</sup> *Ibid.*

<sup>4</sup> His statement was supported by Giulio Camber, former Trieste senator and a veteran lawmaker pointing out for the media that the Chinese were behind many of the Turkish businesses exporting goods into the port. "Beijing would feast on the Italians just as they did on the Greeks before them." Camber dismissed the local and national assurances about Chinese expansion, saying that Beijing would easily strategically outmanoeuvre governmental officials. "It's like the world champion in chess playing with a couple of guys who play for fun at the Caffè degli Specchi," he said, referring to a café in Piazza Unità d'Italia, Trieste main square. "You cannot imagine what the world's best chess player is up to." Although former senators do not play an official role in policy-making, they still hold significant political and media influence.

legislation does not allow for anything more.” D’Agostino claims that companies from other countries will also receive a concession and that Italy does not intend to sell the port of Trieste to the Chinese, as the Greek and Piraeus did during a period of severe financial and economic crisis.<sup>1</sup>

The Italian Prime Minister, Giuseppe Conte, supported the agreement’s positive outcomes, saying that his government will not ignore European frameworks and principles on commercial transparency and national security, and that the MOU does not put into doubt Italy’s Euro-Atlantic alliance.<sup>2</sup> Minister of Interior Matteo Salvini emphasised that “before allowing anyone to invest in Trieste /.../, we need to deepen our understanding of the matter. If the investors were Americans, this would not be a problem. In the case of Chinese investments, however, it is important to be very careful /.../ especially if the question is one of national security.”<sup>3</sup>

Italian President Sergio Mattarella officially stated that “Italy would play a crucial role in promoting China’s New Silk Road scheme as long as both parties benefit equally in the process”, finding the middle ground between both narratives regarding the Chinese investments into an Italian NAPA port.<sup>4</sup> We are therefore able to present a range of attitudes towards the investments from one and the same actor – the Italian authorities responsible for accepting the investment –, revealing the dynamics within the national and local governments, as well as the port Authorities.

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<sup>1</sup> Šorl, Mihael, “Italijani na svilni poti, Kitajci vrgli oko na Trst”, *Dnevnik*, 21 March 2019, <https://www.dnevnik.si/1042879621>

<sup>2</sup> “Our ports - I am thinking in particular those of Genoa and Trieste - can apply for the role of terminals in Europe for the New Silk Road,” stated Italian Prime Minister Giuseppe Conte.

<sup>3</sup> Mušič, Zoran, “V Luko Reka vstopajo Kitajci?”, *Delo*, 2 October 2019, <https://www.delo.si/gospodarstvo/novice/v-luko-reka-vstopajo-kitajci-98120.html>

<sup>4</sup> Giuffrida, Angela, “Italy Pulls Out Red Carpet for Xi Jinping in Trade Charm Offensive”, *The Guardian*, 22 March 2019, <https://www.theguardian.com/world/2019/mar/22/italy-pulls-out-red-carpet-for-xi-jinping-in-trade-charm-offensive>

Such developments not only pose questions regarding the European perspective of the Italian government, but also invite a discussion about the possible effects of investment into the port Trieste on other NAPA ports, specifically the closest one, Koper in Slovenia, which is only 20 kilometres away from Trieste. What could an increased investment into Trieste mean for the port of Koper? In 2018, Koper surpassed 24 million tons of cargo for the first time, and in comparison to Trieste it maintains an advantage in the transshipment of the extremely important container segment, currently transshipping over 988,000 TEU<sup>1</sup> a year.<sup>2</sup> The Port of Koper authorities explained that the Chinese investment into Trieste does not affect the opportunities for growth of other NAPA ports. Their stance is that they “always emphasized their support for development projects in all ports of the region, if we want to compete with northern European ports”,<sup>3</sup> According to the study commissioned by a prominent international logistics agency, the potential of ports in the region (Ravenna, Venice, Trieste, Koper and Rijeka) is 6 million container units per year, while in 2018 these ports transhipped 2.8 million container units, thus leaving room for further growth, which might suggest the reason for a lack of response on the part of Slovenia to the Chinese investment in March 2019. Port of Koper authorities emphasised further that all NAPA ports suffer from the same problem, lying in the unsatisfactory rail connectivity with the hinterland.<sup>4</sup> Hence, the Port Authority is more concerned with “its own implementation of plans to build a second track of the railway leading from the port of Koper, modernizing the railway network in Slovenia and

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<sup>1</sup> Twenty-Foot Equivalent Unit, used to measure a ship’s cargo carrying capacity. The dimensions of one TEU are equal to that of a standard 20’ shipping container.

<sup>2</sup> Trieste has greatly increased its container traffic since 2016 as well: there were 486,000 TEU moved in 2016, and 730,000 TEU in 2018. However, as mentioned, Koper moved over 900,000 TEU, pointing to the significant potential upside of further development of Trieste.

<sup>3</sup> Interview with the representatives of the Port of Koper, Koper, 29 May 2019.

<sup>4</sup> In Trieste they have a problem with bottlenecks within the port, in Rijeka the railway crosses the city, while Koper lacks a second track to its railway connected with the hinterland.

increasing the capacity of the port<sup>1</sup>, than with what neighbouring ports are up to”.<sup>2</sup>

Meanwhile, the official Slovenian representative of the Maritime Freight Forwarders Association (*Združenje pomorskih špediterjev*) officially confirmed the information that some cargo previously transhipped through the port of Koper ‘left’ for Trieste. However, the Association also claims that “The port of Koper has a great advantage in high efficiency of its services (customs, phytosanitary and veterinary inspection) and also has better equipment present at the terminal, as well as significantly more freight transhipments on trains. Excluding oil, Trieste handled over 18 million tons of goods, which is significantly less than the quantity handled in the port of Koper. However, the port of Trieste is increasingly being marketed /.../ and can be serious competition to the port of Koper due to the Italian subsidizing of rail transport /.../ making it cheaper”.<sup>3</sup>

The Venice Port Authority is not concerned about the port of Trieste investments either. When signing its own memorandum of understanding with Piraeus, they planned to improve the overall capacities of the two seaports as important hubs in the Belt and Road scheme; Pino Musolino, president of the Port Authority of Venice stated: “In regard to the dualism between Venice and Trieste, the two ports actually service different markets. Our facility is the main gateway to industrial clusters in northern

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<sup>1</sup> According to the Dean of the Faculty of Maritime Studies and Transportation, Elen Twrdy, this means especially the need for an extension of the first pier and the purchase of mechanisation. More at: “Kaj o kitajskih vlaganjih v tržaško pristanišče menijo v Luki Koper”, *Regional*, 23 March 2019, <https://www.regionlobala.si/novica/kaj-o-kitajskih-vlaganjih-v-trzasko-pristanisce-menijo-v-luki-koper-ni-panike>

<sup>2</sup> Ibid.

<sup>3</sup> Šuligoj, Boris, „Tržaško pristanišče diha Kopru za ovratnik”, *Delo*, 8 June 2018, <https://www.delo.si/gospodarstvo/novice/luka-trst-diha-kopru-za-ovratnik-58531.html>

Italy, importing raw materials and exporting high-added-value products. For its part, Trieste is focused on central and eastern Europe.”<sup>1</sup>

Port authorities themselves are therefore emphasising mostly that the development of northern Adriatic ports is by no means a question of whether one port will develop better than the rest, but that they can only function through the common approach towards foreign markets, division of labour and retaining mutual competitiveness. The rising prominence of the northern Adriatic ports as a point closest to the markets of southern Germany, Austria, Hungary, Slovakia, the Czech Republic, Serbia, Bosnia and other central European countries is good news for all five ports of the North Adriatic Port Association - Trieste, Koper, Rijeka, Venice and Ravenna. None of these ports by itself is big enough nor has developed enough infrastructure to compete with the largest ports of northern Europe; moreover, they are less connected to the hinterland, hence have lower abilities to transport freight at a given time to end destinations.

The same is acknowledged by the President of the Chamber of Commerce and Industry of Slovenia (SPIRIT), who stated that the issue is not to what degree any one of the five NAPA ports might assume leadership, but rather how the group will compete with major European ports.<sup>2</sup> He also stated that the ports have great potential; however, the investment in infrastructure is crucial and dependent on the transport policies of individual countries, as well as (and not only) on large infrastructure projects.<sup>3</sup>

There was no official statement by the Croatian government in response to the Trieste investment. Croatia’s port of Rijeka, however, can also be seen as representing an alternative to the port of Piraeus under the condition that

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<sup>1</sup> Scimia, Emanuele, “Possible Belt and Road Role for Italian Seaports”, *AsiaNews*, 20 March 2019, <http://www.asianews.it/news-en/Possible-Belt-and-Road-role-for-Italian-seaports-46552.html>

<sup>2</sup> “Koper, Rijeka, Trieste Need to Join Forces Against Leading European Ports”, *PortSEurope*, 8 March 2019, <https://www.portseurope.com/koper-rijeka-trieste-need-to-join-forces-against-leading-european-ports/>

<sup>3</sup> *Ibid.*

it has good railway connections – for which Croatia still has to find funding. Rijeka’s is a steep, single-track (so less reliable) railway. The Croatian government is searching for an alternative in building the lowland railway Rijeka-Zagreb, which would eliminate the issue of the steep grade for a port with high potential – for instance, the port of Rijeka is among the deepest in this part of Europe and would be able to accommodate larger ships. This investment would cost around 3 billion euros and the Prime Minister of Croatia, Plenković, in November 2018 expressed the desire for Chinese investment in this infrastructure project.<sup>1</sup> Croatia is not able to provide the funding by itself, while the EU is already co-financing the Zagreb-Hungarian border railway. The Transport Minister of Croatia, Oleg Butković, stated that Chinese companies are interested in participating in the project for the modernisation of the railway line linking Rijeka to the country’s capital Zagreb and further to the Hungarian border.<sup>2</sup>

The port itself, however, is surrounded by the city of Rijeka. Croatia considered moving a part of the Rijeka port to the island of Krk, in close proximity; however, the inadequate infrastructure would become an even a greater issue as the island is connected to the mainland only by bridge. Rijeka’s port has therefore opened a tender for the concession of a new deep-water container terminal, bids on which were placed by 3 May 2019; the signing of the concession contract is expected to take place in the last quarter of 2019.<sup>3</sup> The goal of the Port of Rijeka Authority is to expand capacity to where it may exceed 600,000 TEU by 2025. Adding to the capacity of the existing Adriatic Gate Container Terminal (currently operated by ICTSI), the Zagreb Deep Sea Container Terminal (ZDCT)

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<sup>1</sup> “China’s COSCO Shows Interest in Container Terminal at Rijeka Port”, *PortSEurope*, 1 February 2019, <https://www.portseurope.com/chinas-cosco-shows-interest-in-container-terminal-at-rijeka-port/>

<sup>2</sup> “Chinese Investors Show Interest in Rijeka Port Rail Project”, *PortSEurope*, 13 April 2019, <https://www.portseurope.com/chinese-investors-show-interest-in-rijeka-port-rail-project/>

<sup>3</sup> “China’s COSCO Shows Interest in Container Terminal at Rijeka Port”, *PortSEurope*, 1 February 2019, <https://www.portseurope.com/chinas-cosco-shows-interest-in-container-terminal-at-rijeka-port/>

project in Rijeka, part of the Rijeka Gateway project, will be implemented in two phases. The first, already underway, involves the construction of a quay of 400 linear metres of docks, and the second phase is for an additional 280 linear metres. It will also be possible to activate a third phase of the project to extend the quay line up to 1,250 linear metres. The new terminal will have a depth of at least 20 metres – meaning it will be able to receive ultra-large container ships.

An investment of €350 million is planned for the implementation of the first two phases of the project. For the first phase, an expenditure of €188.4 million is foreseen, of which €80 million will be invested by the concession holder, which will manage the new terminal for 50 years. For the second phase, the planned investment is €100 million, to be entirely incurred by the concession holder.<sup>1</sup> The Port Authority is also offering to the concessionaire a ten-year exclusivity, meaning no new capacities for container shipment would be built during that period. On 19 May 2019, Director of the Rijeka Port Authority, Denis Vukorepa, said that “seven companies from Europe, the Middle East and the Far East have expressed interest in the construction of the new container terminal in Rijeka.”<sup>2</sup> During the recent visit by the Chinese prime minister to Croatia, it was announced that Chinese companies were interested in the concession, but Vukorepa did not want to comment on this information. The official government authorities did not comment on the Chinese companies’ involvement in the concession competition either, but the media reported (as will be shown more specifically in the next section) that the Chinese consortium Ningbo Port and CRBC (China Road and Bridge Company), the company that is building the Pelješac Bridge, were among the interested

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<sup>1</sup> “Rijeka Port Launches Tender for Container Terminal Construction”, *PortSEurope*, 7 March 2019, <https://www.portseurope.com/rijeka-port-launches-tender-for-container-terminal-construction/>

<sup>2</sup> Pavlic, Vedran, “Chinese Builders of Pelješac Bridge Interested in New Rijeka Container Terminal”, 19 May 2019, <https://www.total-croatia-news.com/business/35986-container-terminal>

companies.<sup>1</sup> In the beginning of June, applicants have been invited to send their final bids for a 50-year concession.

Slovenian Prime Minister Marjan Šarec commented on those developments in the light of the 2019 Dubrovnik 16+1 Summit. Asked whether he was afraid that Slovenia could find itself in isolation if Chinese companies invested funds in both the port of Rijeka's infrastructure and the port of Trieste's infrastructure he replied that it was "understandable that ports compete with each other" and that "Koper is a well-developed harbour with a wide potential and will play its role in further economic development, hence we are not afraid of anything and we look forward to further cooperation."<sup>2</sup>

### *Analysis in brief*

When it comes to the domestic narratives on the Chinese presence in the region, it is therefore worth noting that the NAPA ports themselves and the neighbouring countries' officials do not publicly recognise the competition among themselves on a larger strategic level and see both the need and the capacity of the five ports in terms of further development. This is possibly due to the fact that the NAPA ports have marketed themselves as collectively providing an option for shipping lines to provide a cheaper and environmentally sustainable link between the East and the ports' hinterlands (central Europe, parts of western Europe). This branding is based in particular on the fact that NAPA ports offer a reduction of the maritime distance that a shipping company has to travel to enter European markets (they enable 6 days shorter travel time or a journey reduced by almost 2,000 miles). NAPA ports need to place themselves on the map of global shipping routes, as they are in and of themselves generally too small to compete with the bigger northern European ports; hence they see their

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<sup>1</sup> *Ibid.*

<sup>2</sup> Mušič, Zoran, "V Luko Reka vstopajo Kitajci?", *Delo*, 2 October 2019, <https://www.delo.si/gospodarstvo/novice/v-luko-reka-vstopajo-kitajci-98120.html>

territory as ‘unified’ – especially in the current situation, where they still have a capacity to grow and accept more cargo.

On the other hand, the most important actors influencing the diversity of narratives on port investments in this region are actually emerging from the local-governance level of the invested country; e.g., individual representatives of (opposition) national and local governments in the country where investment is actually taking place. While Slovenian and Croatian media report less on the issue in general, the Italian press responded to the signed Memorandum of Understanding with divergent perspectives on the matter. Their main concern was the state of vulnerability in which Italy could find itself if it allowed China to invest in strategic assets without well-structured governance procedures. Those, however, did not influence the policies accepted by the national government and did not hinder the investments.

### **5.2.2 European narratives: responses of the EU stakeholders on the Chinese presence in NAPA ports**

Reports<sup>1</sup> show that we are witnessing a general decline of Chinese investment in Europe, which could be a consequence of changing attitudes towards Chinese capital; hence, this section will focus on: (1) studying the responses by EU institutions and individual EU Member States towards Chinese investment in the NAPA ports; (2) studying the EU policies in place or in the making that will affect further investments.

Chinese activities in European ports have already unsettled the EU leadership: in September 2017, then President of the European Commission, Jean-Claude Juncker, noted that “it is a political responsibility to know what is going on in our own backyard so we can

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<sup>1</sup> Hanemann, Thilo, Mikko Huotari, Agatha Kratz, “Chinese FDI in Europe: 2018 Trends and Impact of New Screening Policies” (*Rhodium Group and Mercator Institute for China Studies, March 2019*).

protect our collective security”<sup>1</sup> and proposed new investment screening measures for foreign companies that want “to purchase a European harbour, part of our energy infrastructure or a defence technology firm”. Ports are therefore increasingly regarded as critical infrastructure that has national security implications.<sup>2</sup> Calls for an EU-wide response to scrutinize foreign direct investments into such infrastructure projects as that at the port of Trieste have been promoted by France and Germany through the press;<sup>3</sup> Italy responded that France’s and Germany’s trade and investment ties with China dwarf its own.<sup>4</sup>

Nevertheless, Germany and France voiced concerns in the media in regard to China’s poor reputation regarding transparency, unfair Belt and Road Initiative practices of favouring Chinese firms, as well as Chinese protectionism restricting European firms from investing in Chinese projects.<sup>5</sup> After the Chinese delegation’s visit to Italy, the signature of the Memorandum of Understanding, the delegation headed to France. After their meeting, the French President Emmanuel Macron stated that the “time of European naïveté has ended” and that “for many years we had an

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<sup>1</sup> Kakissis, Joanna, “Chinese Firms Now Hold Stakes in over a Dozen European Ports”, *WPRL*, 9 October 2018, <https://www.wprl.org/post/chinese-firms-now-hold-stakes-over-dozen-european-ports>

<sup>2</sup> Chatzky, Andrew, “China’s Belt and Road Gets a Win in Italy”, *Council on Foreign Relations*, 27 March 2019, <https://www.cfr.org/article/chinas-belt-and-road-gets-win-in-italy>

<sup>3</sup> A study released by the German media group Bertelsmann indicated that of 175 firms either partly or completely bought by Chinese investors between 2014 and 2017, 112 were in areas that China was targeting for its Made in China 2025 strategy. More at: Bertelsmann Stiftung, “Kauft China systematisch Schlüsseltechnologien auf?” (*GED Studie*, 2018).

<sup>4</sup> Chatzky, Andrew, “China’s Belt and Road Gets a Win in Italy”, *Council on Foreign Relations*, 27 March 2019; Johnson, Miles, “Italy Endorses China’s Belt and Road Initiative”, *Financial Times*, <https://www.ft.com/content/f0af46b0-4b2d-11e9-8b7f-d49067e0f50d>

<sup>5</sup> King, Winnie, “Italy Joins China’s Belt and Road Initiative – Here’s How It Exposes Cracks in Europe and the G7”, *The Conversation*, 22 March 2019, <https://theconversation.com/italy-joins-chinas-belt-and-road-initiative-heres-how-it-exposes-cracks-in-europe-and-the-g7-114039>

uncoordinated approach and China took advantage of our divisions”.<sup>1</sup> Nevertheless, during Xi’s visit to Paris, Macron and the Chinese president announced a number of deals between their respective countries totalling around €40 billion, including deals to buy 300 Airbus aircraft for a reported €30 billion, while the French energy company EDF signed a contract worth €1 billion with the China Energy Investment Corporation with the aim to develop an offshore wind farm.<sup>2</sup>

Macron’s cautious public position was nevertheless backed up by Germany, whose Foreign Minister, Heiko Maas, stated that “[i]n a world with giants like China... we can only survive if we are united as the EU. And if some countries believe that they can do clever business with the Chinese, then they will be surprised when they wake up and find themselves dependent”.<sup>3</sup> In December 2018, Germany sharply lowered the threshold for screening purchases of stakes in German “security relevant” companies by non-European investors, including Chinese, which will allow the German government to review or block foreign purchases of stakes as low as 10 percent in such companies, down from the current 25 percent.<sup>4</sup> This was received with apprehension in some sectors, such as the cement industry and engineering industry, which responded that such moves restrict free business and cause additional uncertainty for foreign investors.<sup>5</sup>

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<sup>1</sup> Tharoor, Ishaan, “China Lays Down a Marker in Europe”, *The Washington Post*, 25 March 2019, [https://www.washingtonpost.com/world/2019/03/25/china-lays-down-marker-europe/?utm\\_term=.73831ea10916](https://www.washingtonpost.com/world/2019/03/25/china-lays-down-marker-europe/?utm_term=.73831ea10916)

<sup>2</sup> Moreover, energy equipment manufacturer Schneider Electric, banking giant BNP Paribas, and shipbuilder CMA CGM also signed deals with Chinese companies worth some €8 billion collectively.

<sup>3</sup> Lee, Jeong-ho, “Growing European Doubts over China Loom Large Over President Xi Jinping’s Visit to France”, *SCMP*, 25 March 2019, <https://www.scmp.com/news/china/diplomacy/article/3003201/growing-european-doubts-over-china-loom-large-over-president>

<sup>4</sup> Mazumdaru, Srinivas, “Is Angst About China Behind Germany’s Stricter Foreign Investment Rules?”, *DW*, 18 December 2018, <https://www.dw.com/en/is-angst-about-china-behind-germanys-stricter-foreign-investment-rules/a-46790963>

<sup>5</sup> *Ibid.*

EU officials, on the other hand, sporadically supported a cautious position and proposed several suggestions. EU budget commissioner Günther Oettinger suggested that the EU should have the right to veto future Chinese deals.<sup>1</sup> Furthermore, in March 2019, the EU tabled a proposal calling upon all member states to ban Chinese firms from bidding on public procurement projects.<sup>2</sup> In April 2019, the new EU framework for the screening of foreign direct investments officially entered into force. The new framework is based on a proposal tabled by the European Commission in September 2017 and will be overseeing foreign direct investments into the EU. Upon its launch, the President of the European Commission, Jean-Claude Juncker stated:

“This new framework will help Europe defend its strategic interests. We need scrutiny over purchases by foreign companies that target Europe’s strategic assets. I want Europe to remain open for business, but I have said time and again that we are not naïve free traders. The adoption and entry into force of this proposal in an almost record time shows that we mean business and that when it comes to defending Europe’s interests we will always walk the talk.”<sup>3</sup>

On 9 April 2019, Brussels hosted the EU-China Summit, at which the EU Commission published a press release as a suggestion of an official strategy document labelling China simultaneously, in different policy areas, “a cooperation partner with whom the EU has closely aligned objectives, a negotiating partner with whom the EU needs to find a balance of interests, an economic competitor in the pursuit of technological leadership, and a

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<sup>1</sup> Lee, Jeong-ho, “Growing European Doubts Over China Loom Large Over President Xi Jinping’s Visit to France”, *SCMP*, 25 March 2019, <https://www.scmp.com/news/china/diplomacy/article/3003201/growing-european-doubts-over-china-loom-large-over-president>

<sup>2</sup> “China Eyes Trieste and Genoa as Italy joins Belt and Road Initiative”, *Global Construction Review*, 25 March 2019, <http://www.globalconstructionreview.com/news/china-eyes-trieste-and-genoa-italy-joins-chinas-be/>

<sup>3</sup> European Commission, “*EU Foreign Investment Screening Regulation Enters into Force*”, Press Release, 10 April 2019.

systemic rival promoting alternative models of governance”.<sup>1</sup> Targeting the Belt and Road Initiative specifically, it calls upon EU Member States to:

- Deepen the EU’s engagement with China to promote common interests at the global level; however, based on clearly defining these interests, as well as principles.
- Robustly seek more balanced and reciprocal conditions governing the economic relationship.
- Adapt to changing economic realities and strengthen their own domestic policies and industrial base in the framework of the EU, in order to pressure the Chinese for more accountability and greater transparency in the area of infrastructure and investment projects.

Among the rare reported responses from the private sector of other EU Member States were those from central Europe, from companies that can benefit directly from enhanced infrastructure generated for NAPA ports. For example, Eric Regter, a member of the board of directors of the rail company Rail Cargo Austria, stated that Trieste, thanks to the signed Memorandum of Understanding, once again assumed the role that Emperor Charles VI granted to it 300 years ago – that is to become the main reference port for central Europe. He added that the port of Koper was also important for Austria, especially because of its professionalism and comprehensive, as well as time-efficient, service.<sup>2</sup>

This points towards a possible hypothesis that although the ports themselves do not take the competition among them into consideration publicly, the private sector in the field of logistics, transport and related

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<sup>1</sup> European Commission, “*Commission Reviews Relations with China, proposes 10 Actions*”, Press Release, 12 March 2019.

<sup>2</sup> Gregorič, Milan, “Koprsko pristanišče bo s prihodom Kitajcev v Trst potisnjeno v drugorazrednost”, *Časnik*, 8 April 2019, <http://novice.najdi.si/predogled/novica/fa525e546dcb2b667e0865e15b988b48/%C4%8Casniki/Slovenija/Bo-koprsko-pristani%C5%A1%C4%8De-s-prihodom-Kitajcev-v-Trst-potisnjeno-v-drugorazrednost>

fields is very much supportive of the current Chinese presence in the region. Central European countries, including Austria, represent important stakeholders when it comes to northern Adriatic port usage. The port of Trieste's development and, especially, the development of the railway systems in its hinterland, should allow geographically central European regions (Austria, Czech Republic, Slovakia) to connect to a rich commodity pool with twice the speed that railways in Slovenia currently offer: high speed (up to 150 km/h) railway development over the course of the several hundred kilometres along the Canal Valley in Italy and the Klagenfurt-Graz section on the Austrian part would enable at least twice as fast transport as the older Slovenian rail network currently allows (50 km/h), becoming more competitive. As most of these projects have been projected to be developed with national (Italian and Austrian) funds and foreign concessionaires, any additional financial injections of the Chinese companies will most likely accelerate their implementation. Nevertheless, Austria is in this phase still reliant on Koper for both the import and export of their goods, while Hungary and Slovakia rely on Koper for a majority of their container traffic.<sup>1</sup>

### *Analysis in brief*

On the EU level, there have been calls to establish an EU-wide response to scrutinize foreign direct investments into such infrastructure projects as that at the port of Trieste, which have been promoted through the press-narrative and occasionally by openly critical statements by political leaders. Openly cautious statements of state leaders were coming mostly from the side of two Member States, Germany and France, who at the same time received the Chinese business delegation and conducted several business agreements with them. However, Germany has already implemented individual FDI screening measures. An important stakeholder seems to be Austria, which wants its voice heard, as it is dependent on the NAPA ports

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<sup>1</sup> Interview with the representatives of the Port of Koper, Koper, 29 May 2019.

completely both for its export and its import and would benefit greatly if reliable connections to them would be established.

EU bodies, on the other hand, view with great caution the increased Chinese presence in the NAPA ports region. They have already proposed and in some cases produced measures to enforce the protection of the critical infrastructure (including ports). The majority of the EU officials and Member States' concerns regarding NAPA ports are related to the presupposition that with the current level of investment China will obtain almost complete control of the strategic infrastructure; most recently this was visible in the case of the port of Trieste. The EU has raised these security concerns with Italy and has proposed a screening mechanism for security-sensitive industrial sectors. This all-European dialogue would include restrictions to foreign direct investments into even minority shareholdings as well as retaining of security control over key assets. Even though the current agreements governing the port of Trieste are those of 'international free port', an area historically endowed with favourable customs regulations and granted the non-discriminatory right to keep its doors open to all interested parties,<sup>1</sup> there is the newest part of the port, which is not subject to full implementation of the principles of the Paris Peace Treaty.

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<sup>1</sup> The particularity is that Trieste became a free port through the signing of the 16th Resolution of the Security Council of the United Nations (10 January 1947) and the signing of the Treaty of Peace with Italy (10 February 1947, ratified on 15 September 1947), which put the port's territory under the sovereignty of the United Nations itself.

## 6 BIBLIOGRAPHY

- “About NAPA”, “EU projects”, in: *NAPA*, <http://www.portsofnapa.com/eu-projects> (acc. May 2019).
- “Access from the Sea”, “Terminals”, “The Port”, in: *Port of Venice*, <https://www.port.venice.it/en/the-port.html> (acc. May 2019).
- “Adriatic Ports System in the Container Sector”, (ITS Adriatic Multiport Gateway, January 2012), <http://www.assoporti.it/media/1448/mds-napa-cntrs-market-final-report.pdf>.
- Alice Ekman, *China in the Mediterranean: An Emerging Presence*, (Notes de l'Ifri, IFRI, February 2018); Mordechai Chaziza, “The Chinese Maritime Silk Road Initiative: The Role of the Mediterranean”, *Mediterranean Quarterly*, 29, no. 2 (June 2018): 54–69.
- Andrea Augenti and Federica Boschi, “Classe (Ravenna): An Abandoned Town in an Urbanized Landscape”, *CHNT*, Proceedings of the 17th International Conference on Cultural Heritage and New Technologies 2012 (CHNT 17, 2012) [http://www.chnt.at/wp-content/uploads/eBook\\_CHNT17\\_Augenti\\_Boschi.pdf](http://www.chnt.at/wp-content/uploads/eBook_CHNT17_Augenti_Boschi.pdf).
- Bertelsmann Stiftung, “Kauft China systematisch Schlüsseltechnologien auf?” (GED Studie, 2018), [https://www.bertelsmannstiftung.de/fileadmin/files/BSt/Publikationen/GrauePublikationen/MT\\_Made\\_in\\_China\\_2025.pdf](https://www.bertelsmannstiftung.de/fileadmin/files/BSt/Publikationen/GrauePublikationen/MT_Made_in_China_2025.pdf).
- Božičnik, Stane, Presentation at “The Port of Rijeka, Gateway of the Baltic-Adriatic Core Network Corridor” Conference, Opatija, November 2017, available at: [http://www.stl-conference.eu/documents/presentations/day\\_two/KNS\\_Opatija%2020-22%20Nov%202017%20Stane%20Bozicnik.pdf](http://www.stl-conference.eu/documents/presentations/day_two/KNS_Opatija%2020-22%20Nov%202017%20Stane%20Bozicnik.pdf) (acc. 20 April 2019).
- “Caratteristiche del porto”, “Operatori e servizi”, “Storia”, in: *L'Autorità di sistema portuale del Mare Adriatico centro-settentrionale*, <http://www.port.ravenna.it/pagina-porto-2/storia/> (acc. May 2019).

- Chatzky, Andrew, “China’s Belt and Road Gets a Win in Italy”, Council on Foreign Relations, 27 March 2019, <https://www.cfr.org/article/chinas-belt-and-road-gets-win-italy>.
- “China on Port Shopping Spree in Europe and Globally”, *PortSEurope*, 24 January 2019, <https://www.portseurope.com/china-on-port-shopping-spree-in-europe-and-globally/>.
- “China’s COSCO Shows Interest in Container Terminal at Rijeka Port”, *PortSEurope*, 1 February 2019, <https://www.portseurope.com/chinas-cosco-shows-interest-in-container-terminal-at-rijeka-port/>.
- “Chinese Investments in Piraeus Port Facing Local Challenges”, *PortSEurope*, 30 April 2019, <https://www.portseurope.com/chinese-investment-in-piraeus-port-facing-local-challenges/>.
- “Chinese Investors Show Interest in Rijeka Port Rail Project”, *PortSEurope*, 13 April 2019, <https://www.portseurope.com/chinese-investors-show-interest-in-rijeka-port-rail-project/>.
- “Container Terminal”, *Luka Koper*, <https://www.luka-kp.si/eng/terminals/single/container-terminal-244> (15 May 2019).
- Čertalič, Maša, “ITS Adriatic Multi-Port Gateway” Project, 2012, downloaded from: <http://www.up.gov.si/fileadmin/up.gov.si/pageuploads/Predstavitev/ITS-NAPA.pdf>.
- “Description”, “Free Port”, “Terminal Operators”, in: *Autorità di Sistema Portuale del Mare Adriatico Orientale Porti di Trieste e Monfalcone*, <https://www.porto.trieste.it/eng/port/free-port> (13 May 2019).
- European Commission, “Commission Reviews Relations with China, proposes 10 Actions”, Press Release, 12 March 2019.
- European Commission, “EU Foreign Investment Screening Regulation Enters into Force”, Press Release, 10 April 2019.

- “European Union, Trade in Goods with China”, *European Commission*, [https://webgate.ec.europa.eu/isdb\\_results/factsheets/country/detail\\_s\\_china\\_en.pdf](https://webgate.ec.europa.eu/isdb_results/factsheets/country/detail_s_china_en.pdf) (acc. 15 May 2019).
- Fardella, Enrico and Giorgio Prodi, “The Belt and Road Initiative Impact on Europe: An Italian Perspective”, *China & World Economy*, 25, no. 5 (2017): 132  
[http://en.iwep.org.cn/papers/papers\\_papers/201711/W020171109393879132046.pdf](http://en.iwep.org.cn/papers/papers_papers/201711/W020171109393879132046.pdf).
- Filipović, Luka, “Opet svi govore o nizinskoj pruzi, ovih 10 stvari morate znati o njoj”, *tportal.hr*, 12 April 2019, <https://www.tportal.hr/biznis/clanak/opet-svi-govore-o-nizinskoj-pruzi-ovih-10-stvari-morate-znati-o-njoj-foto-20190412>.
- Giuffrida, Angela, “Italy Pulls Out Red Carpet for Xi Jinping in Trade Charm Offensive”, *The Guardian*, 22 March 2019, <https://www.theguardian.com/world/2019/mar/22/italy-pulls-out-red-carpet-for-xi-jinping-in-trade-charm-offensive>.
- Glavan, Marinko, “Veliki igrači u Rijeci. Kinezi bi dogradili Zagrebačku obalu do kapaciteta od milijun TEU-a”, *Novi list*, 21 May 2019, [http://novilist.hr:8090/novilist\\_public/Vijesti/Rijeka/VELIKI-IGRACI-U-RIJECI-Kinezi-bi-dogradili-Zagrebacku-obalu-do-kapaciteta-od-milijun-TEU-a?meta\\_refresh=true](http://novilist.hr:8090/novilist_public/Vijesti/Rijeka/VELIKI-IGRACI-U-RIJECI-Kinezi-bi-dogradili-Zagrebacku-obalu-do-kapaciteta-od-milijun-TEU-a?meta_refresh=true).
- Gregorič, Milan, “Koprsko pristanišče bo s prihodom Kitajcev v Trst potisnjeno v drugorazrednost”, *Časnik*, 8 April 2019, <http://novice.najdi.si/predogled/novica/fa525e546dcb2b667e0865e15b988b48/%C4%8Casnik/Slovenija/Bo-koprsko-pristani%C5%A1%C4%8De-s-prihodom-Kitajcev-v-Trst-potisnjeno-v-drugorazrednost>.
- Hanemann, Thilo, Mikko Huotari, Agatha Kratz, “Chinese FDI in Europe: 2018 Trends and Impact of New Screening Policies” (Rhodium Group and Mercator Institute for China Studies, March 2019).
- Horowitz, Jason, “A Forgotten Italian Port Could Become a Chinese Gateway to Europe”, *New York Times*, 18 March 2019,

<https://www.nytimes.com/2019/03/18/world/europe/italy-trieste-china-belt-road.html>.

<http://www.cmpor.com.hk/EN/>.

<http://www.gruposapir.it/>.

<http://zse.hr/userdocsimages/financ/LKRI-fin2017-1Y-REV-K-HR.pdf>

<https://ec.europa.eu/eurostat/web/international-trade-in-goods/data/database> (acc. 10 May 2019).

<https://www.istat.it/en/>

<https://www.luka-kp.si/>

<https://www.portauthority.hr/>.

<https://www.searates.com> (acc. 3 May 2019).

Interview with the representatives of the Port of Koper, Koper, 29 May 2019.

“Italy Becomes First Western European Nation to Sign Up for China’s Belt and Road Plan”, *South China Morning Post*, 23 March 2019, <https://www.scmp.com/news/china/diplomacy/article/3002986/china-wants-invest-ports-maritime-transport-italy-xi-jinping>.

“Italy Rattles US and EU with Likely Support for China’s Belt and Road”, *The Guardian*, 20 March 2019, <https://www.theguardian.com/world/2019/mar/20/italy-rattles-us-and-eu-with-likely-support-for-chinas-belt-and-road>.

Johnson, Miles, “Italy Endorses China’s Belt and Road Initiative”, *Financial Times*, <https://www.ft.com/content/f0af46b0-4b2d-11e9-8b7f-d49067e0f50d>.

“Kaj o kitajskih vlaganjih v tržaško pristanišče menijo v Luki Koper”, *Regional*, 23 March 2019, <https://www.regionalobala.si/novica/kaj-o-kitajskih-vlaganjih-v-trzasko-pristanisce-menijo-v-luki-koper-ni-panike>.

Kakissis, Joanna, “Chinese Firms Now Hold Stakes in over a Dozen European Ports”, *WPRL*, 9 October 2018, <https://www.wpri.org/post/chinese-firms-now-hold-stakes-over-dozen-european-ports>.

- King, Winnie, “Italy Joins China’s Belt and Road Initiative – Here’s How It Exposes Cracks in Europe and the G7”, *The Conversation*, 22 March 2019, <https://theconversation.com/italy-joins-chinas-belt-and-road-initiative-heres-how-it-exposes-cracks-in-europe-and-the-g7-114039>.
- “Koper Port Still Busiest Container Terminal in the Adriatic”, *Slovenia Times*, 4 March 2017, <http://www.sloveniatimes.com/koper-port-still-busiest-container-terminal-in-the-adriatic>.
- “Koper, Rijeka, Trieste Need to Join Forces against Leading European Ports”, *PortSEurope*, 8 March 2019, <https://www.portseurope.com/koper-rijeka-trieste-need-to-join-forces-against-leading-european-ports/>.
- Lee, Jeong-ho, “Growing European Doubts over China Loom Large over President Xi Jinping’s Visit to France”, *SCMP*, 25 March 2019, <https://www.scmp.com/news/china/diplomacy/article/3003201/growing-european-doubts-over-china-loom-large-over-president>.
- “List of Sea Ports in the Core and Comprehensive Networks”, *European Commission*, [https://ec.europa.eu/transport/sites/transport/files/modes/maritime/ports/doc/2014\\_list\\_of\\_329\\_ports\\_june.pdf](https://ec.europa.eu/transport/sites/transport/files/modes/maritime/ports/doc/2014_list_of_329_ports_june.pdf) (acc. 23 May 2019).
- Mazumdaru, Srinivas, “Is Angst about China Behind Germany’s Stricter Foreign Investment Rules?”, *DW*, 18 December 2018, <https://www.dw.com/en/is-angst-about-china-behind-germanys-stricter-foreign-investment-rules/a-46790963>.
- Mordechai Chaziza, “The Chinese Maritime Silk Road Initiative: The Role of the Mediterranean”, *Mediterranean Quarterly*, 29, no. 2 (June 2018): 54–69.
- Mušič, Zoran, “V Luko Reka vstopajo Kitajci?”, *Delo*, 2 October 2019, <https://www.delo.si/gospodarstvo/novice/v-luko-reka-vstopajo-kitajci-98120.html>.
- “NAPA at the Transport Logistic Exhibition in Munich”, *NAPA*, 8 May 2015, <http://www.portsofnapa.com/index.php?t=news&l=en&id=91>.

- Noorda, Ray, “Co-opetition”, *Electronic Business Buyer*, 8 (12), 1993, 8–12.
- “North Adriatic Port Association Founded in Koper”, *Luka Koper*, 17 November 2009, <https://luka-kp.si/slo/novice/single/north-adriatic-port-association-founded-in-koper-2856>.
- Pavlic, Vedran, “Chinese Builders of Pelješac Bridge Interested in New Rijeka Container Terminal”, 19 May 2019, <https://www.total-croatia-news.com/business/35986-container-terminal>.
- “Port of Venice”, *World Port Source*, [http://www.worldportsource.com/ports/review/ITA\\_Port\\_of\\_Venice\\_1175.php](http://www.worldportsource.com/ports/review/ITA_Port_of_Venice_1175.php) (acc. 10 May 2019).
- “Projekt Rijeka Gateway”, *Grad Rijeka*, <https://www.rijeka.hr/gradska-uprava/gradski-projekti/aktualni-projekti-2/projekt-rijeka-gateway/> (acc. 15 May 2019).
- “Railways, the Port of Trieste Signs Agreements with China and Austria”, *AdriaPorts*, 23 March 2019, <http://www.adriaports.com/en/railways-port-trieste-signs-agreements-china-and-austria>.
- “Ravenna to Re-Join NAPA”, *Ship2Shore*, 20 November 2017, [http://www.ship2shore.it/en/ports/ravenna-to-re-join-napa\\_65927.htm](http://www.ship2shore.it/en/ports/ravenna-to-re-join-napa_65927.htm).
- “Rijeka Gateway Project”, *World Bank*, <http://projects.worldbank.org/P043195/rijeka-gateway-project?lang=en> (acc. 15 May 2019).
- “Rijeka Port Launches Tender for Container Terminal Construction”, *PortSEurope*, 7 March 2019, <https://www.portseurope.com/rijeka-port-launches-tender-for-container-terminal-construction/>.
- Scimia, Emanuele, “Possible Belt and Road Role for Italian Seaports”, *AsiaNews*, 20 March 2019, <http://www.asianews.it/news-en/Possible-Belt-and-Road-role-for-Italian-seaports-46552.html>.
- “Shipping Alliances: What Do They Do and What Does It Mean?”, *Freight Hub*, 9 March 2017, <https://freighthub.com/en/blog/shipping-alliances-mean/>.

- Song, Dong-Wook, “Regional Container Port Competition and Co-operation: The Case of Hong Kong and South China”, *Journal of Transport Geography*, Vol. 10, Iss. 2, June 2002, 99-110.
- “Summary of Luka Koper d.d. and the Luka Koper Group Business Strategy until 2030 and the Company’s and Group’s Strategic Business Plan 2016 – 2020”, *Luka Koper*, (downloaded from: <https://www.luka-kp.si/eng/mission-vision-strategy>”).
- Sperandio, Alessandro, “Porto Ravenna passa il test cinese: è destinato a essere leader nell’oil&gas”, *Energia Oltre*, 22 January 2019, <https://energiaoltre.it/porto-ravenna-passa-il-test-cinese-e-destinato-a-essere-leader-nelloilgas/>.
- Stamatović, Kristijan, and Peter de Langen, Aleš Groznik, “Port Cooperation in the North Adriatic Ports”, *Research in Transportation Business & Management*, Vol. 26 (March 2018), 109-121, [https://www.sipotra.it/old/wp-content/uploads/2018/07/Port-cooperation-in-the-North-Adri\\_2018\\_Research-in-Transportation-Business-.pdf](https://www.sipotra.it/old/wp-content/uploads/2018/07/Port-cooperation-in-the-North-Adri_2018_Research-in-Transportation-Business-.pdf).
- Šorl, Mihael, “Italijani na svilni poti, Kitajci vrgli oko na Trst”, *Dnevnik*, 21 March 2019, <https://www.dnevnik.si/1042879621>.
- Šuligoj, Boris, “Tržaško pristanišče diha Kopru za ovratnik”, *Delo*, 8 June 2018, <https://www.delo.si/gospodarstvo/novice/luka-trst-diha-kopru-za-ovratnik-58531.html>.
- Ten-t NAPA Studies*, <http://www.napa-studies.eu/>.
- “Terminals and Services”, *Luka Rijeka*, <https://lukarijeka.hr/en/terminals-and-services/> (acc. 15 May 2019).
- Tharoor, Ishaan, “China Lays Down a Marker in Europe”, *The Washington Post*, 25 March 2019, [https://www.washingtonpost.com/world/2019/03/25/china-lays-down-marker-europe/?utm\\_term=.73831ea10916](https://www.washingtonpost.com/world/2019/03/25/china-lays-down-marker-europe/?utm_term=.73831ea10916).
- “THE Alliance”, *iContainers*, <https://www.icontainers.com/us/2017/01/12/the-alliance/> (acc. 20 May 2019).

- “Trieste Marine Terminal Increase Container Volumes in July 2018”, *PortSEurope*, 15 August 2018, <https://www.portseurope.com/trieste-marine-terminal-increase-container-volumes-in-july-2018/>; “V pristanišču na Reki nov kontejnerski terminal”, *Delo*, 25 May 2019, <https://www.delo.si/gospodarstvo/novice/v-pristaniscu-na-reki-nov-kontejnerski-terminal-188190.html>.
- “Trieste”, *The Maritime Heritage Project*, <https://www.maritimeheritage.org/ports/Italy-Trieste.html> (acc. 13 May 2019).
- “Veliki dan: izgrađen Zagreb Deep Sea kontejnerski terminal”, *Lučka uprava Rijeka*, 24 May 2019, <https://www.portauthority.hr/going-deep/veliki-dan-izgraden-zagreb-dsct/>.
- Wang, Brian, “China-Italy BRI Deal Could Be as Historic as Marco Polo”, *nextBIGfuture*, 20 March 2019, <https://www.nextbigfuture.com/2019/03/china-italy-bri-deal-could-be-as-historic-as-marco-polo.html>; Jason Lee, “Sino-Italian consortium to design Venice Offshore Port”, *Belt and Road Portal*, 24 February 2017, <https://eng.yidaiyilu.gov.cn/wtfz/ssl/8468.htm>.
- Wheeler, Andre, “Commentary: Italy Takes Bite of China Apple with Entry into Belt and Road Initiative”, CAN, 2019, <https://www.channelnewsasia.com/news/commentary/italy-china-belt-road-initiative-xi-jinping-geoa-trieste-mou-11376350>.
- Xugang, Yu, Rizzi Cristiano, and Tettamanti Mario. *China’s Belt and Road: The Initiative and Its Financial Focus*. Vol. 2. World Scientific, 2018.

