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The One Belt One Road (OBOR) initiative and seaport business in Europe – perspective of the Port of Rijeka

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ABSTRACT

The OBOR-One Belt One Road initiative has potential to enable further development of the Port of Rijeka. The European seaports are important for China in the development of the OBOR initiative, especially the ports on the Maritime Silk Road (MSR) corridor of the OBOR. Chinese investors i.e. terminal operators in the past two decades have strategically invested in the European seaports to strengthen their position and obtain the OBOR goals. European seaports got the opportunity to improve their business through Chinese infrastructure investments and through China's trade dominance which can bring more cargo to the European seaports. Thus, the OBOR i.e. Maritime Silk Road-MSR provide new possibilities for further development of the Port of Rijeka. The Chinese investors expressed their interest to invest in the Port of Rijeka, but concrete investments and collaboration regarding OBOR have not been realized. In this paper, the OBOR goals in Europe and the current status of OBOR in Europe will be identified. Strategic activities of China in the European seaports will be analyzed. The perspective the Port of Rijeka in the OBOR initiative i.e. MSR corridor will be elaborated according to the analyzed Chinese strategic activities in the European seaports and relevant aspects of the Port of Rijeka business: geo-traffic position, position on the OBOR corridors i.e. MSR corridor, membership in the NAPA – North Adriatic Port Association, shipping services and railway services, port infrastructure and investments.

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1 Introduction

Since its beginning in 2013, the OBOR (One Belt One Road) initiative has been considered in Europe as a threat (mostly for the official EU institutions) or opportunity (for seaports and other industries). The OBOR consists of two parts – an overland “belt” connecting China with central Asia, Russia, south Asia, and Europe and a maritime “road” linking Chinese ports with those in southeast Asia, south Asia, Africa, the Middle East and Europe. The OBOR includes a network of railways, highways, ports, pipelines, and communication infrastructure [4]. The OBOR goals are: infrastructure development, economic globalization, political coordination, cultural diversification and advanced IT adoption for achieving policy coordination, improving facilities, enhancing connectivity, stimulating financial integration and better relationship among people [8].

Despite the counteraction of the EU, the OBOR initiative is slowly conquering in the European space and obtaining its goals. European seaports are the main “entry points” for the OBOR initiative especially regarding the Maritime Silk Road corridor (MSR). Thus, China has already conducted a comprehensive strategy of investments in European seaports and railway connections before the official beginning of the OBOR through which was prepared the basis for the OBOR development. The European seaport recognized the opportunity in the OBOR initiative owing to China's investment potential and dominance in trade.

China continuously seeks the potential investments in order to develop the OBOR initiative and thus new investments in seaports are always present. Thus, the Port of Rijeka has potential to gain from the OBOR considering

the Chinese investors i.e. terminal operators showing their interest in the last few years.

As China does not have same goals for all European countries, in this paper is provided the analyzes of the goals of OBOR in Europe. The OBOR strategic activities in European seaports are analyzed from the aspect of acquisition of European seaports and realized investments.

The focus of this paper is to analyze the perspective of the Port of Rijeka in the OBOR initiative i.e. MSR. The analysis is provided according to aspects which authors consider as relevant based on the conducted research of the relevant literature about OBOR initiative, the goals of the OBOR initiative in Europe, Chinese investments in the European seaports and according to the relevant aspects of the Port of Rijeka business. Thus, the perspective of the Port of Rijeka in the OBOR initiative is analyzed according to the following aspects: geo-traffic position, position on the OBOR corridors i.e. MSR corridor, membership in the NAPA – North Adriatic Port Association, shipping services and railway services, port infrastructure and investments.

2 Literature review

In this chapter, the authors provide a brief review of the recent relevant literature and researches regarding the subject of this paper.

Sarker I.N. et al. [8] (2018) analyzed implication of the One Belt One Road Initiative (OBOR) initiative for the future of global trade. Authors also identified the context, vision, scope and geographical aspects of the OBOR initiative, as well as its challenges.

Löchel and Nawaz [7] (2018) made a feasibility analysis of the OBOR initiative, including the analysis of its benefits and risks, comparing in that sense each corridor of the OBOR initiative.

Góralczyk, B. [1] (2017) conducted a research of Chinese interests and impact of the OBOR initiative in the central and eastern Europe. Wang, L. et al. [12] (2019) have analyzed the investment strategy of Chinese terminal operators on the Maritime Silk Road-MSR corridor.

Liu and Ke [6] (2018) made a case study about the impact of the OBOR initiative on logistics route competition based on the example of the China-Germany trade. The study showed the advantages of the Mediterranean and North Sea port for the development of the OBOR initiative i.e. MSR corridor, as well as their potential of becoming more competitive compared to the seaports in the north-western Europe.

Van der Putten, F.P., et al. [11] (2016) have analyzed the status of selected European countries in respect to the Chinese attitude towards each country and possibilities of inclusion in the OBOR initiative i.e. MSR. Authors analyzed, among the other aspect, the Chinese activities and strategies in the European seaports.

The consultant company “Steer Davies Gleave” [10] (2018) made a study for the European Parliament’s

Committee on Transport and Tourism (TRAN) about the potential opportunities and challenges of the New Silk Route i.e. OBOR for transport in the European Union. The study analyzed the following aspects: Chinese investments in the European transport sector, projects considered in the EU-China Connectivity Platform, potential changes in routes and freight transport, etc.

Wang, Ruet and Richet [13] (2017) conducted a research on the ways the OBOR initiative could reshape China-EU relations. The authors briefly analyzed trade relations between China and Europe. Furthermore, authors considered the potential of the OBOR initiative in the different European regions, as well as the provided investments in the European seaports.

Koboević, Kurtela and Vujčić [4] (2018) have analyzed the Maritime Silk Road (MSR) corridor. Authors conducted that the Port of Pireaus and the North Adriatic seaports could be the destinations for the OBOR initiative i.e. MSR corridor. The authors also made brief analysis of capacities and investment activities of the NAPA seaports, including the Port of Rijeka.

The reviewed researches show that the current status, the potential and the perspective of the Port of Rijeka in the OBOR initiative i.e. MSR corridor has not been thoroughly studied.

3 The goals of the OBOR initiative in the Europe

While analyzing the OBOR initiative goals for Europe, the response of Europe towards the OBOR initiative and Chinese activities to promote OBOR initiative around Europe, there are factors which should be taken into consideration:

- Trade relations between Europe and China,
- Strategic goals of OBOR initiative for Europe,
- European attitude towards the OBOR initiative.

The European Union and China are two biggest traders in the world. China is currently the EU’s second-biggest trading partner behind the United States and the EU is China’s biggest trading partner [23]. Furthermore, China is the EU’s biggest import market and the second-biggest export market [23]. China and Europe trade on average over €1 billion a day and foreign direct investment (FDI) between Asia and Europe reaches close to \$90 billion annually (2015-2017) [43]. Over half of the European investment in Asia comes from the UK and Germany, in the amount of \$32 billion. Furthermore, China and Japan are the main Asian investors in Europe, collectively amounting to \$12 billion [43]. The 21st century, in terms of transport, is considered as the century of Eurasia. Eurasian infrastructure investment plans amount to 8 trillion dollars [3].

Regarding the strategic goals in Europe, the OBOR initiative strategy and the response to the OBOR vary in the European countries i.e. regions. The following Table 1 shows the data about the current status of selected

European Union member countries in the OBOR initiative according to the signed agreement or Memorandum of Understanding (MoU) and membership in the Central and Eastern European Countries (CEEC) and China association.

Table 1 Status of selected European Union member countries in the OBOR initiative

Country	Agreement or MoU on OBOR initiative	CEEC Membership 17+1
Germany	X	n/a*
Netherland	X	n/a*
Spain	X	n/a*
Italy	✓	n/a*
Hungary	✓	✓
Poland	✓	✓
Greece	✓	✓
Slovenia	X	✓
Croatia	X	✓

*n/a -refers to countries which are not part of territory included in the CEEC

Source: Adapted from [11]

For example, Greece, because of the Port of Piraeus and railway connection: Greece (Piraeus)-Serbia (Belgrade)-Hungary (Budapest), is a strategic port for China on the MSR corridor and route to the central and northern Europe [18]. Also, Hungary has an important role in the development of the OBOR initiative since, along with Greece, opens the route for central, western and northern Europe. Hungary was the first European Country that signed the MoU with China [11]. Italy is deemed by China as vital in the implementation of the OBOR and strengthening the southern route of the MSR corridor. Italy has recently focused more on the port and rail connections to the central, eastern and northern Europe and China has recognized also the opportunity for logistics and infrastructure sector of the OBOR i.e. MSR corridor. The Netherlands and the largest European seaport – Rotterdam, are the connecting point between MSR and Silk Road Belt. Poland strives to become the Silk Road hub, at least in the central Europe. The China has responded to Poland by several Silk Road-related MoUs which include the potential projects: central international airport in Poland, high-speed rail, container terminals and the establishment of industrial parks [11]. China is continuously trying to approach Germany in order to implement the OBOR. Germany mostly considers the OBOR initiative from the geopolitical aspect and from the aspect of OBOR impact on EU investment rules. Thus, the concrete collaboration of Germany and China in OBOR still does not exist [11]. Spain is interested in the OBOR initiative and China is trying to promote the initiative in Spain, but without a signing formal MoU. For the time being, the only important issue of China-Spain cooperation is the Yixinou railway line from Yiwu to Madrid [11]. Slovenia

has signed the MoU on cooperation in transport and infrastructure while the Port of Koper signed the agreement with Ningbo Zhousan Port Group to strengthen the trade [32]. Croatia did not sign the MoU on the OBOR with China but has signed several trade agreements [42]. The China i.e. Chinese investors have shown interest in Croatia in recent years particularly for seaports which could be the key factor for Croatia to find position in the OBOR initiative, regarding the fact that the Adriatic and Mediterranean area are the most important on the MSR corridor [9].

Before the official beginning of the OBOR initiative, China has engaged in providing sub regional initiatives and promoting cooperation between China and Europe. Thus, China has gathered 16 central and eastern European countries through Central and Eastern European Countries (CEECs) cooperation platform, including 11 EU Member States and five Western Balkan countries (Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Macedonia, Montenegro, Poland, Romania, Serbia, Slovakia, Slovenia) in the 16+1 cooperation format, which it has been portrayed as an innovative approach to regional cooperation [2]. The Republic of Croatia is also the member of the cooperation platform which now has grown into the 17+1 cooperation format since Greece joined [29].

The highest Chinese economic involvement in southern Europe is through direct lending for infrastructure purposes: roads, railroads, ports and power plants. Transportation projects have been imperative because they will not only create regional infrastructure but will also shorten trade routes and consequently reduce costs in China – EU trade. The railway route from Greece to Hungary, and road infrastructure in Bosnia and Herzegovina, North Macedonia and Albania linking the Adriatic ports of Split, Bar, and Durres are financed by China [5]. In Table 2, transport project values and share in GDP for transport infrastructure financed by Chinese loans are presented.

Table 2 Transport infrastructure in the southern Europe supported by Chinese loans

Country	Transport projects value (mil €)	Share in GDP (%)
Bosnia and Herzegovina	600	16 %
Hungary	1500	1 %
Montenegro	909	27 %
North Macedonia	580	7 %
Serbia	1870	8 %
Romania	n/a	4 %

Source: Adapted from [5]

In order to respond to the OBOR initiative, at the end of 2018, the EU presented “Europe-Asia connectivity strategy (CS)” which applies to transport, energy, digital networks, and includes a human dimension [22]. The important part

of development includes the trans-European Transport Network (TEN-T), which links eastern European countries to economic networks in Asia. The CS emphasizes that cooperation should be conducted in a sustainable, comprehensive and rules-based way [15]. Although Europe still resists, the OBOR initiative slowly gains the aims: economic effects, bilateral political relations and strategic implications [11].

4 The OBOR initiative strategic activities in the European seaports

The European seaports have great geostrategic potential and significance for Chinese goals to raise their maritime and mercantile power via the OBOR initiative, especially via the MSR corridor [25]. As important strategic nodes of the MSR corridor and nodes of global trade circulation, the European seaports also have a prominent role in the economic development of the countries along the MSR corridor [12].

The port infrastructure and terminal facilities differ along the MSR corridor, which provides great opportunities for China i.e. Chinese terminal operators to invest, manage and operate terminals in Europe. While analyzing the relation of the OBOR and the European seaports it's important to notice that China started strategic investments in the European seaports sector before the official initiation of the OBOR initiative. This has spurred competition among the EU ports keen on using their geostrategic position to attract Chinese investment and cargo. The following Table 3 shows the Chinese acquisitions of EU port infrastructure according to the year of acquisition, asset, acquiring firm, share and value in EUR.

One of the most relevant examples of Chinese acquisition is the Port of Pireaus, the fastest growing port in the world. First, in the 2008 COSCO got a 35-year lease to operate two piers, then in 2016 COSCO got a share of 51 % in Pireaus and finally it will have a major share in the Port of Pireaus by 2021 when COSCO will acquire 16 % more share [25]. The transshipment of goods has more than tripled since China has bought a stake in Piraeus and invested in reconstruction or construction of terminals. In 2017, there were 3.7 million containers (TEUs), which increased by 6.4 % in relation to 2016 [41].

COSCO has a share of 35 % in the Port of Rotterdam, the largest European seaport which is located at the junction of the Silk Road Belt and MSR and also on the European side of new the Eurasia economic corridor, and thus is very important in the OBOR initiative [11]. Furthermore, the Port of Rotterdam, which currently serves as a gateway for Europe for distribution of incoming cargo across the European hinterland, could transform from a gateway to a considerable final destination by the land rail route [37]. The Port of Rotterdam Authority and Bank of China have signed the MoU on the strategic alliance in identifying, attracting and developing business opportunities in logistics, shipping and rail infrastructure [38].

In 2004, COSCO acquired the 25 % stake in a joint-venture terminal project in the Belgian port of Antwerp with EUR 133.9 million of investment obligation. In 2017, COSCO Shipping Ports Development (CSPD) has signed a memorandum of understanding (MOU) to acquire APM Terminals Zeebrugge (APMTZ) in Belgium which has expanded its share to 76 % and thus the Zeebrugge terminal has become the first terminal in northwestern Europe in which COSCO company holds a controlling stake [40].

Table 3 Chinese acquisitions of the EU port infrastructure

Port	Year	Asset	Acquiring Firm	Share	Value in EUR
Rotterdam	2016	CT	COSCO Shipping	35 %	143.3 million
Antwerp	2004	CT	COSCO Pacific	25 %	133.9 million
Zeebrugge	2014	CT	China Shipping (in 2016 merged with COSCO)	24 %	n/a
	2017	CT	COSCO Shipping	76 %	35 million
Bilbao	2017	CT	COSCO Shipping	51 % of Noatum Port Holding	203 million
Valencia		CT			
Madrid		Rail port			
Zaragoza		Rail port			
Marseilles	2013	CT	China Merchants Group International	49 % of Terminal Link	400 million
Vado Ligure	2016	CT	COSCO/Qingdao Port International	40 % and 9,9 %	53 and 15.5. million
Piraeus	2008	CT	COSCO Pacific	35-year lease to operate two piers	4.3 billion-plus upgrading investment
	2016	CT		51 %	280.5 million
	2021	CT		16 %	88 million

CT = container terminal

Furthermore, in 2017, COSCO Shipping acquired 51 % shares of Noatum Port Holdings (ports: Bilbao, Valencia, Madrid, Zaragoza) [20]. The China Merchants Holdings (International) Company Limited ("CMHI") and CMA CGM in 2013 acquired 49 % equity stake in the Port of Marseilles i.e. Terminal Link [19].

In 2016, COSCO and Qingdao Port International had a total of 49 % of the Italian seaport Vado Ligure. Italy, in spite of the great opposition from the EU, has signed the Memorandum of Understanding (MoU) as a step forward to the integration of Italy into the OBOR initiative. Furthermore, the Port of Genoa and the Port of Trieste, both signed commercial agreements with state-owned China Communication Construction Company (CCCC) with the aim of cooperating in improvement and development of the port's infrastructure [31].

China puts efforts in providing the inter-modal connectivity between EU ports and the Eurasian cargo rail network along its Silk Road Economic Belt in order to reshape trade patterns and transport routes to its own benefit. For example, the new inter-modal connections between Italy and Switzerland, provided by the new Gotthard rail tunnel, may increase the competitive edge of northern Adriatic seaports over northern European seaports in terms of shorter shipping times to and from China.

Although Europe still resists the OBOR initiative, the European seaports are setting new development strategies under the influence of China which holds the cargo coming to Europe and is the most important European trading partner. According to the recent study "The new Silk Route – opportunities and challenges for EU transport", prepared by the Committee on Transport and Tourism of the European Parliament, it is estimated that by 2040, EU-Far East maritime freight will be 40 million TEUs, up from 16 million TEUs in 2016. Furthermore, in the Study was analyzed if about 2.5 million TEUs were transferred from maritime transport and 0.5 million from air transport to rail transport, this would create 50 to 60 additional trains per day (two to three trains per hour) in each direction between China and Europe [25].

5 The perspective of the Port of Rijeka in the OBOR initiative

According to the analyzed Chinese strategic activities in European seaports it is possible to identify two types of seaports in which China invests. First, China invests in seaports which are lacking quality of port and transport infrastructure but have the potential to become an important point for China's trade like the Port of Piraeus. Furthermore, China invests in large seaports which are strategically important for trade in Europe according to their geographic/geo-traffic position and which have quality infrastructure like the Port of Rotterdam. Thus, the perspective of the Port of Rijeka in the OBOR initiative will be analyzed according to the following aspects:

- The Port of Rijeka geo-traffic position,
- Position of the Port of Rijeka on the OBOR corridors i.e. MSR corridor,
- Membership in the NAPA – North Adriatic Port Association,
- Shipping services and railway services of the Port of Rijeka,
- Port infrastructure and investments in the Port of Rijeka.

The Port of Rijeka with its position in the North Adriatic area has the potential to become an important point within the OBOR initiative since the Adriatic Sea area along with the Mediterranean Sea area is the most important for the development of the MSR corridor. For example, the vessels sailing through the Suez reach Europe via North Adriatic area 6 days sooner than those coming through Gibraltar headed North Sea area. The Port of Rijeka provides the shortest connection both for inland or sea way between central and eastern Europe to overseas destinations [24]. Furthermore, the Port of Rijeka aims to become a competitive link for European countries on the sea route from the Far East ports to the central and south-east European markets. Thus, the Port of Rijeka aims to be the most convenient transit hub to Hungary, Austria, Czech Republic, Slovakia, Ukraine, southern Poland and Germany, countries in which China continuously strives to expand the OBOR initiative, and this could be essential for further inclusion in the OBOR initiative. Furthermore, the Port of Rijeka is listed in the Core TEN-T network due to its geo-traffic position.

The MSR corridor passes through the Port of Piraeus and its western part ends in the Port of Venice, and thus, passes along the Croatian coast and the Port of Rijeka, which is connected with both seaports by current shipping services. The Port of Piraeus was the part of the Chinese strategy to enter Europe even before the OBOR initiative and is given a prominent role on the MSR corridor. Furthermore, the Port of Rijeka is a member of the NAPA – North Adriatic Port Association (Port of Ravenna, Port of Venice, Port of Koper, Port of Trieste and Port of Rijeka). The NAPA seaports – Port of Venice and Port of Trieste are marked by China as important points for the OBOR initiative i.e. MSR corridor [9]. Schinas and von Westrap [9] provided the analysis of potential new routes, which include the Port of Trieste, to see the difference in regards to the North Sea route. The new route has been taken as follows: Trieste-Tanjung Pelepas-Hong Kong-Ningbo-Shanghai-Nansha-Shekou-Tanjung Pelepas-Port Kelang-Colombo-Piraeus-Trieste. Analysis has proved that a new route has the following benefits: shorter distance, fewer vessels are needed to arrange a weekly Far East-Mediterranean service, less bunker and time charter costs, significant reduction in the slot fee (assuming that the same size of vessel can be used), reduced transit times, less emission and external costs. The Adriatic Sea maritime connections are much closer to the majority of the central European final

destinations compared to seaports in the northwestern Europe, e.g. Rotterdam, Hamburg, etc. Even the distance ashore from the Piraeus and the Trieste to some hinterland destinations – for example, Munich – are shorter than from the northern area. The Port of Rijeka should engage in more collaboration with other NAPA seaports and promote its position in the North Adriatic Sea to become more attractive for Chinese investors on the MSR corridor.

The Port of Rijeka has the following shipping and railway services [14], [21]:

- **Busan** → **Shanghai** → **Ningbo** → Chiwan → Singapore → Port Said → Haifa → **Koper** → **Trieste** → Rijeka → Gioia Tauro → Port Said → King Abdullah → Salalah → Tanjung Pelepas → VungTao → Yantian → **Ningbo** → **Shanghai** (2M – direct weekly service from the Far East to Rijeka; MSC, Maersk)
- **Shanghai** → **Ningbo** → **Busan** → Shekou → Singapore → Port Said → Malta → **Koper** → **Trieste** → **Rijeka** → **Venice** → **Koper** → Malta → Damietta → Jeddah → Port Kelang → Shekou → **Shanghai** (Ocean Alliance – direct-weekly service from the Far East to Rijeka; vessel CMA CGM, COSCO, Evergreen, OOCL, APL)
- Damietta → **Piraeus** → Ancona → **Koper** → **Rijeka** → **Venice** → **Piraeus** → Damietta (Hapag Lloyd feeder weekly service to Rijeka via Damietta)
- Gioia Tauro → **Koper** → **Rijeka** → Ploče → Gioia Tauro (MSC feeder weekly service to Rijeka via Gioia Tauro)
- **Piraeus** → Bar → Ploče → Split → Bari → Piraeus → Durres → **Rijeka** → Koper → Trieste → Durres → **Piraeus** (Maersk feeder weekly service to Rijeka via Piraeus)
- **Koper** → **Venice** → **Rijeka** → Bar → Malta → Skikda → Malta → Catania → Ancona → **Koper** (CMA CGM feeder weekly INTRA MED service to Algeria and Malta)
- **Rijeka** → **Piraeus** → **Rijeka** (COSCO feeder weekly intermodal service Rijeka – Piraeus)
- Rijeka–Budapest Mahart – up to 5x weekly (Maersk) – railway service
- Rijeka–Budapest Bilk – 2x weekly (COSCO) – railway service
- Rijeka–Budapest Bilk – 1x weekly (CMA-CGM) – railway service
- Rijeka–Serbia regular weekly service: Belgrade Nelt-1x weekly (COSCO) – railway service
- Rijeka–Belgrade Žit (Makiš) – 3x weekly (Adria Rail) – railway service
- Rijeka–Sremska Mitrovica – 5x weekly (SMCT/HŽ Cargo) – railway service
- Rijeka–Banja Luka – 1 – 2 x weekly (PPD) – railway service
- Rijeka–Zagreb Vrapče – 2x weekly (HŽ Cargo) – railway service

The shipping and railway services of the Port of Rijeka include the Port of Piraeus, NAPA seaports and Chinese

seaports. Services are provided, among other, by leading Chinese shipping companies e.g. COSCO. Shipping services including the Port of Piraeus, could be one of the decisive factors for the Port of Rijeka to become more prominent on the MSR corridor. For example, the new intermodal service “Rijeka Land Sea Express” is operated by COSCO Shipping Lines, China’s largest and one of the world’s largest container shipping companies, and Ocean Rail Logistics – a rail freight company within the COSCO Group. The new intermodal service consists of a regular weekly shipping line linking the Port of Piraeus – the main hub of COSCO for the Mediterranean, with Rijeka, and coordinated rail services – block trains for container transport on the lines between Rijeka and Budapest, as well as Rijeka and Belgrade [39]. By interlinking overseas and rail services, COSCO offers its clients overall transit time: 32 days from eastern China and 28 days from southern China to Budapest, using Piraeus and Rijeka as ports. Thus, this direct line guarantees a stable and reliable service where delays are reduced to a minimum if compared to a feeder service with several ports. The Port of Rijeka in its nearest surrounding has the other NAPA member, the Port of Koper, which is the greatest competitor of the Port of Rijeka. The Port of Koper already has well developed railway connections with Hungary, Slovenia, Austria, Slovakia, Czech Republic, Poland, Germany, Bulgaria, Romania, Italy, Serbia and also Croatia. The Port of Rijeka has railway services only for Hungary, Serbia and Bosnia and Herzegovina.

According to the previously analyzed aspects, the Port of Rijeka should seek the opportunity in the OBOR initiative i.e. MSR as follows:

- Value its geo-traffic position and position on the OBOR’s MSR corridor. Thus, the Port of Rijeka should be promoted as the shortest connection both inland or sea way between central and eastern Europe to overseas destinations.
- Value the importance of the Port of Piraeus and position itself as an important port for cargo traffic from and to the Port of Piraeus. Thus, the Port of Rijeka should increase the number of shipping services with the Port of Piraeus.
- Value the new intermodal service “Rijeka Land Sea Express” with the Port of Piraeus and seek more opportunities for cooperation with Chinese shipping companies e.g. COSCO.
- Increase number of railway services.
- Strengthen the collaboration with NAPA seaports and value the importance of the Port of Venice and the Port of Trieste on the MSR corridor and increase the number of shipping services.

In the recent years the Chinese investors i.e., terminal operators, e.g. COSCO, continuously show interest to invest in the Port of Rijeka [4]. Although Croatia or the Port of Rijeka did not sign the MoU on the OBOR with China, Croatia signed various commercial and trade agreements

with China. Furthermore, the Port of Rijeka Authority has invested in the improvement and modernization of the port and transport infrastructure to raise the attractiveness and increase cargo throughput.

One of the first investments was the construction of the Brajdica Container Terminal. In 2013, after the implementation of the Rijeka Gateway project at the Adriatic Gate Container Terminal, the second stage of terminal construction was completed. Construction included the extension of the dock for another berth and the corresponding increase of storage areas and the construction of the entry-exit point. The sea depth was increased up to 14.2 meters and enabled the servicing of container vessels up to 370 meters long, with a maximum capacity of 600,000 TEU [33]. Furthermore, Port of Rijeka multimodal platform development and interconnection to Adriatic Gate container terminal (POR2CORE-AGCT) is a joint project of the Port of Rijeka Authority and HŽ Infrastruktura d.o.o. which goal is the reconstruction and expansion of the Rijeka Brajdica freight terminal capacity [28].

Recently completed construction of the Zagreb Deep Sea Container Terminal marked the end of the comprehensive project of modernization of Rijeka traffic direction, known as the Rijeka Gateway project. The new Zagreb Deep Sea Terminal is 400 meters long and 20 meters deep. The concession of the Zagreb Pier is very interesting to Chinese shipping companies and important for the Port of Rijeka, showing the potential in the OBOR initiative i.e. MSR. Thus, at the last public tender for the concession of the Zagreb Deep Sea Container Terminal, among others, the Chinese shipping operator Ningbo Zhoushan Port in the cooperation with CRBC-China Road and Bridges Cooperation, submitted the bid. The CRBC is the constructor of Pelješac bridge and shows that China already made one step further to enter the Europe and to intensify the activities regarding the OBOR. The COSCO has also shown the interest for the concession of the Zagreb Deep Sea Container Terminal [17]. The duration of the concession will be 30 years if future concessioners refuse to invest in the construction of a new 280 meters of the pier, while in the case they do invest the concession will last 50 years [30].

To exploit the full potential of the Zagreb Deep Sea Container Terminal, Port of Rijeka Authority and HŽ Infrastruktura started the project "Upgrade of the Rijeka Port infrastructure – Zagreb Pier container terminal (POR2CORE-ZCT)". The project aims to contribute to the growth of the Port of Rijeka as one of the core ports on the Mediterranean Corridor by ensuring the efficiency, sustainability, and multimodality of the freight transport. A specific goal is to eliminate the existing bottleneck and to adapt the Rijeka station railway infrastructure to meet the increase in transport demand in the Port of Rijeka [27]. The investment in the construction of the D-403 road from the Škurinje junction to the Port of Rijeka will certainly improve the connectivity to road network, improve road safety, shorten travel time, increase the regional mobility

and decrease pollutants emissions. The construction of the Zagreb Deep Sea Container Terminal and the construction of the D-403 project will directly affect the high functionality of the terminal and will remove the existing traffic bottlenecks and maintain faster removal of the cargo. Also, the Port of Rijeka will be better connected with the TEN-T network [35]. This infrastructure investments could be also one of the decisive factors to increase the potential of the Port of Rijeka in the OBOR initiative i.e. MSR corridor. Furthermore, future concessionaire is expected to invest in further construction of the terminal up to length of 680 meters, and equipment that will have a major impact on the competitiveness of the Port of Rijeka in the shipment of containers in the entire North Adriatic region [34]. This could be also interesting to the Chinese investors i.e. terminal operators according to the aforementioned and analyzed investments in European seaports and could raise the potential of the Port of Rijeka in the OBOR i.e. MSR.

China has shown for several years interest to invest in the construction of Rijeka–Zagreb–Budapest fast railway. In the Transport Development Strategy of the Republic of Croatia railway connection to Hungary is marked as a crucial project for the further development of the Port of Rijeka. The Chinese investors offered construction of Rijeka-Zagreb rail and long-term concession. The Port of Rijeka could gain significantly from this investment since Hungary is considered by China as one of the strategic countries for the OBOR development in the central Europe [16].

By 2030, Port of Rijeka has a vision to consider new opportunities for expansion and construction of the container terminal on the island of Krk, as well as preservation and development of the projects implemented to improve the existing port infrastructure and the extension of port facilities to build a new infrastructure for the reception of large cruise ships [36]. COSCO expressed interest to build the infrastructure for Krk Bridge and Krk port [26]. Thus, the possible expansion on the Island of Krk and involvement of Chinese investors could increase the attractiveness of the Port of Rijeka in the OBOR initiative i.e. MSR corridor.

It is estimated in the new Master Plan that container traffic of the Port of Rijeka will exceed 600.000 by 2025 [24]. In the vision for 2030 the Port of Rijeka aims to preserve the role of the most important intermodal center and the main entry/exit port for central and eastern Europe in Republic of Croatia [36].

According to the analyzed infrastructure and investment aspects, the Port of Rijeka should seek the opportunity in the OBOR i.e. MSR as follows:

- Value the provided investments in the promotion of the port as capable to provide fast and reliable service for the biggest ships.
- Identify unsolved deficiencies in infrastructure and superstructure which are not included in provided investments and thus find the investment opportunity which include Chinese investors.

- Engage in the realization of the proposals of Chinese investors (e.g. construction of Rijeka-Zagreb-Budapest railway) in active coordination with government and other institutions.
- Position as a seaport with great intermodal connectivity (sea+ land connections) which is capable of handling all cargo traffic from and to China.

There analyzed aspects are showing that Port of Rijeka has a potential to become important seaport in the OBOR initiative i.e. MSR corridor. Thus, the Port of Rijeka should perceive all aspects of its business and put efforts towards more active engagement in the OBOR initiative.

6 Conclusion

The Chinese investors i.e. terminal operators are focused on the European seaports in terms of investment, management and operation. The OBOR initiative has brought more acquisitions in the European seaports as a strategy for active development of the OBOR initiative in Europe. Along with the acquisitions of the European seaports referring to the MSR corridor, China develops the land corridors of the OBOR, by rail connections in order to provide intermodal and comprehensive trading and logistic network. European seaports thus recognize the opportunities from the OBOR initiative, especially in infrastructure investments and trading opportunities since China is a leader in trade. The Port of Rijeka has the potential to become an important seaport in the OBOR initiative i.e. MSR corridor because of various aspects. Through valorization of its geo-traffic position and position in the North Adriatic Sea between two main points of MSR corridor-the Port of Piraeus and the Port of Venice, the Port of Rijeka could be promoted as an important seaport on the MSR corridor. Membership in the NAPA association and shipping lines with the Port of Piraeus and the NAPA seaports provide an opportunity for the Port of Rijeka to become the OBOR's transit hub to central Europe (Austria, Hungary, Czech Republic, Slovakia, Poland), eastern (Ukraine) and western Europe (Germany). Furthermore, the Port of Rijeka through various own projects has improved the infrastructure and is capable of receiving the large ships. Container terminal Brajdica throughput is expected to increase while the Zagreb Deep Sea Container Terminal becomes a new strategic asset of the Port of Rijeka, in which Chinese terminal operators are interested to operate on a concession basis. Railway connections are also interesting to the Chinese investors for the development of the OBOR initiative, especially the railway connection Rijeka-Zagreb Budapest which could be great opportunity for more concrete involvement of the Port of Rijeka in the OBOR initiative i.e. MSR. Further investment plans of the Port of Rijeka like the container port on the Island of Krk, in which Chinese investor have showed the interest, could be also one more factor for the Port of Rijeka to become important seaport on the MSR corridor. The analyzed aspects show the justified potential of the Port of Rijeka to become an important seaport for China in

the OBOR initiative i.e. MSR route. Furthermore, inclusion of the Port of Rijeka in the OBOR initiative could be decisive for the further development of the Port of Rijeka since Chinese investors i.e. terminal operators have necessary financial ability to invest in the Port of Rijeka, especially in the railway connections, and are able to bring more cargo to the Port of Rijeka. The Port of Rijeka should take a strategic approach, according to its potentials and advantages of the collaboration with China, and put efforts in the formalization of the collaboration with Chinese investors i.e. terminal operators under MoU, as well as in the realization of concrete projects regarding the OBOR initiative i.e. MSR corridor.

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