



WHERE DOES TEN-T CORRIDOR VIII STAND?

Version n.1

ITS FUTURE 02/2021













WHERE DOES TEN-T CORRIDOR VIII STAND? ITS FUTURE.

February 2021 Bari, Italy

Prepared by

Angela Stefania Bergantino

Scientific advisor and author

With the collaboration of Ada Spiru

University of Bari Aldo Moro, Italy

This document has been produced with the financial assistance of the Interreg IPA CBC Italy-Albania-Montenegro Programme.

Disclaimer: The opinions expressed in the Study may include a transformative remix of publicly available materials, as provided by applicable laws. The published version of the opinions, conclusions and recommendations are responsibility of the Author, and do not reflect the views of any other party.



Contents

1. Introduction	5
1.1. First stage: 1992-1997	6
1.2. Second Stage: 2002 and MoU	6
1.3. The present and the future	7
2. MoU (Memorandum of Understanding, 2002)	8
Countries involved in Corridor VIII: Overview of socio-economic features, CVIII infra and missing links.	
3.1. Albania	9
3.1.1. Sectorial Strategy of Transport & Action Plan 2016-2020 (Minist Infrastructure and Energy)	•
3.1.1.1. Road Network	10
3.1.1.2. Rail Network	11
3.1.1.3. Maritime Transport	11
3.1.2. Current situation of the Albanian Corridor 8	12
3.2. North Macedonia	13
3.2.1. Sector Operational Programme for Transport 2014-2020	14
3.2.2. Rail Network	15
3.2.3. Road Network	15
3.2.2.1. Priority Action 1 – Rail Transport Infrastructure	15
3.2.2.2. Priority Action 2 – Road Transport Infrastructure	16
3.3. Bulgaria	17
3.4. Italy and its role in Corridor VIII project	20
4. INITIATIVE 8	21
5. BERLIN PROCESS and Corridor VIII	22
6. The future of the Trans European Network (TEN-T): toward safety, security and su	•
7. Economic benefits expected from corridor VIII implementation	24
8. SEZs and Corridor VIII	26
9. The Apulia Region and commercial relations	28
9.1. International commercial relations	28



9.2. The role of Apulian SEZs	30
10. Final remarks	32
Acknowledgements	



Abbreviations and acronyms

AdSP MAM - Authority of Port System of Meridional Adriatic Sea

ALB - Albania

C5 - Corridor V

C8 - Corridor VIII

CNC - Cost of Not-Completing

CO2 - Carbone Dioxide

EU - European Commission

ESIA - Environmental and Social Impact Assessment

FDI – Foreign direct investments

FEZ - Free Economic Zone

GHG - Greenhouse Gas

GR - Greece

ICE - Italian Trade Agency

ILP - Industrial Logistic Park

ITF – International Transport Forum

MEI – Ministry of Energy and Infrastructures (Albania)

MIT – Ministry of Infrastructure and Transport (Italy)

MoU - Memorandum of Understanding

SEETO - South-east Europe Transport Observatory

SEZ - Special Economic Zone

TEN-T - Transport European Network

WBIF -Western Balkans Investments Fund





1. Introduction¹

Corridor VIII is one of the ten Pan-European Corridors identified and defined in the Pan-European Conferences on Transportation held in Prague (1991), Crete (1994) and Helsinki (1997).

During the "Fiera del Levante" (Bari, Italy in 2002), the representatives of Italy and South-Balkan countries (Albania, Bulgaria, Greece, Macedonia and Turkey) have signed a **Memorandum of Understanding** (MoU) on the development of the Pan-European Transport Corridor VIII.

The route of Corridor VIII runs through the Countries of Albania, North Macedonia and Bulgaria, successively connecting the following main cities: Bari/Brindisi - Durrës/Vlore (Adriatic Sea) - Tiranë – Skopje - Sofia - Plovdiv - Burgas - Varna (Black Sea).

The Corridor VIII also includes three other road connections, as:

- **Burgas-Svilengrad-Ormenion**, which connects it to Corridor IV, IX and Trans-European Network;
- Sofia-Pleven-Byala/Gorna Oriahovica (Bulgaria), which connect it to Corridors IV and IX;
- QafëThanë-Kapshticë (ALB)/Kristallopigi (GR), which connect it to the Trans-European Network.

Despite Corridor VIII, the other corridors that interest the Balkan regions are Corridor IV, Corridor IX and Corridor X. The Corridor IV links **Sofia to Instanbul**, Corridor IX links **Russia to Greece** and Corridor X links **Serbia to Greece** via Bulgaria and Macedonia.

¹ Ministero delle infrastrutture e dei trasporti (2005) – "Corridoio VIII – Analisi del tracciato Ferroviario". Studio commissionato da Segretariato Corridoio VIII.



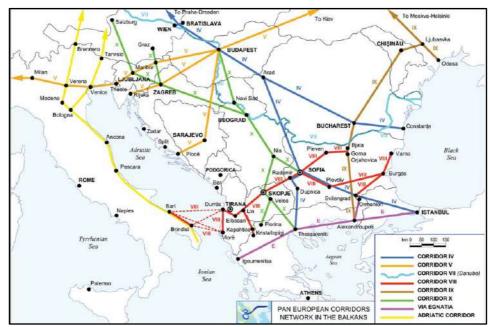


Figure 1. Pan – European Corridors in the Balkan Region.

Source: Corridor VIII Secretariat.

In the long and troubled history of the Pan European Corridor VIII some fundamental stages can be identified.

1.1. First stage: 1992-1997

As a succession of political changes that took place in Eastern Europe, which began with the collapse of the Berlin Wall and culminated in the Federal Republic of Yugoslavia, in 1992 the Republics of Albania, North Macedonia and Bulgaria agreed on a new transport corridor. The corridor in question would have connected the cities of Durres-Tirana-Gostivar-Skopje-Kumanovo-Gueshevo-Sofia-Burgas. To sanction this corridor, the states have signed a Memorandum of Understanding (South Balkan Development Initiative, Bechtel Report on "East-West Transport Corridor Feasibility Study, 1997). This is officially the precursor of Corridor VIII2.

However, numerous financial and political difficulties slowed the development of the process, although the international community began to analyse and discuss the development opportunities linked to the creation of this pan-European axis, capable of stabilizing this part of the South–East region and improving East–Westbound freight traffic.

The concept of Pan–European Corridors, linking Europe to neighbouring countries, first surfaced in 1991 during the Pan–European Conference of Prague. Successively, at a second conference in Crete held in 1994, long–distance transports Corridors were defined

² Pan-European Corridor VIII Secretariat – "Pre-feasibility study on the development of railways Axis" (2007).



as priorities for infrastructure development. A tenth Corridor and the Pan–European Transport Areas for maritime basins were added at the third conference in Helsinki, held in 1997³.

1.2. Second Stage: 2002 and MoU

A proof of renewed interest in Corridor VIII came on September 2002, when Italy, Albania, North Macedonia, Bulgaria, Greece and Turkey signed in Bari (Italy) a Memorandum of Understanding, aimed at reinforcing the necessary political will between Member Countries for this long-term infrastructure-building project4.

The main alignment of Corridor VIII, as defined in the MoU, runs from the southern Italian ports of Bari and Brindisi, the Albanian ports of Durres and Vlora, the cities of Tirana, Skopje, Sofia, Plovdiv, to the Bulgarian ports of Burgas and Varna (Black Sea), thus connecting the Italian Adriatic Transport Corridor, the Adriatic branch of Motorway of the Sea and the Mediterranean Transport Area to the Black Sea Pan-European Transport Area.

A major change took place with the EU enlargement to 25 countries, which caused the inclusion into EU territory of many Pan–European Corridors. These were often overlapping the Trans–European Transport Network (TEN–T), which was reviewed in the same year in order to extend the network to the new Member States in Central and Eastern Europe.

The Report by the High-Level Group chaired by Ms. Loyola de Palacio, "Networks for peace and development - Extension of the major trans- European transport axes to the neighbouring countries and regions" (November 2005) provides a new strategic scenario for European Transport Policies in the Balkan Region.

The Corridor VIII main alignment has been included as an integral part of the South Eastern Transnational Axis and the port of Durres is identified as one of the three ports of the Motorways of the Sea along the Eastern Adriatic coast.

The following sections, included in the Corridor VIII Memorandum of Understanding, that were not included in the South Eastern Axis:

- The section Lin-Kapshtice/Kristallopigi (cross border Albania-Greece)
- The section Durres-Vlora
- The section Skopje-Pleven-Byala/Gorna Orjahovica (connection between Corridor VIII and IX).
- The road connection Burgas-Svilengrad-Ormenion

_

³ High Level Group Report (1997), Karel Van Miert.

⁴ MoU (2002) - Annex n.1.



1.3. The present and the future

The analysis of the current situation shows that Corridor VIII is still incomplete. There are many missing links with respect to the original project and many were the causes of the numerous delays – lack of financial resources, political and social causes –.

However, the importance of the corridor for the states concerned still remains very strong. And it is in this perspective that, at the beginning of 2021, the Macedonian Foreign Minister sent a letter to the Prime Minister of Bulgaria and Albania in which he extended a proposal for a new multidisciplinary initiative, a political platform which would intensify and deepen mutual cooperation as strategic interest for the three countries.

The Pan European Corridors were designed to provide physical continuity between the TEN-T Trans-European Networks and the Eastbound axis on which transport demand has built up in the course of history and will potentially grow in the future.

The recent enlargement of the EU has brought in the necessity of revising the Trans-European Networks, with the objective of achieving increasing involvement of the geographic regions that presently border on the EU.

It is within this framework that the specific role of Corridor VIII gains further importance, given that it represents the main East-West axis connecting the South part of the Mediterranean basin to the South-eastern Balkans, as well as to the regions of the Caucasus.

Initiatives focus on the development of the Corridor VIII axis have been undertaken by single member States, with the aim of improving the core features of the local transport infrastructures, in the perspective of a likely growth in the level of national and international trade. Mutual interest in promoting multilateral development programs has been expressed not only in single Member States' governmental statements, but it has also been ratified by international agreements.

This requires deeper interaction of the transport politic frameworks among countries involved in Corridor VIII, but also a coordination of priorities, investments, and politics in the transport sector.

2. Memorandum of Understanding (MoU)

The Memorandum of Understanding on Pan-European Corridor VIII (Annex. n.1) includes in its objectives the study and harmonization of the technical parameters and the scheduling of the projects to be carried out along the axis of the Corridor, along with the exchange of information, the formulation of regulations for investments, prerequisites for a more efficient use of funds, and technical assistance from both public and private entities.



The role of Italy in coordinating and promoting initiatives for the implementation of the Corridor was identified by leading the Steering Committee of Representatives of the participating Countries.

Between 2002 and 2005 there were three meetings of the steering committee as shown below:

- The 1st Steering Committee, held in Rome in June 2003, decided the establishment of a Standing Secretariat5. Specific tasks of the Secretariat include supporting the Steering Committee, as well as the Member Countries, in the formulation and development of coordinated projects/programs for the implementation of Corridor VIII. The Secretariat, financed by Italian funds (Law n. 84 / 2001), has been established in October 2004 as a Project, administratively managed by FdL Servizi, financed by the Ministry of Economic Development and operationally supervised by the Ministry of Infrastructure.
- The 2nd Steering Committee, held in Bari in December 2004, approved the Plan of Action proposed by the Secretariat.
- The 3rd Steering Committee, held in Tirana, Albania, on 27th May 2005, approved the Secretariat's Plan of Studies (2005-2006).

Priority sectors for studies and projects were defined as follows:

- Railroads: Cross-border areas, missing links, rehabilitation and upgrading of existing alignment.
- Roads: Cross-border areas, bottlenecks, maintenance and upgrading of the existing alignment.
- Ports, Intermodal and Logistics: ports infrastructures, transport intermodal and logistic organization.

3. Countries involved in Corridor VIII: Overview of socio-economic features, CVIII infrastructures and missing links.

In this section is represented an overview of the economic dimension and social indicators of countries involved in Corridor VIII. It is relevant in order to better understand the potential impact that this strategic transport infrastructure project could generate and how it is integrated in the strategic framework of different action plans.

3.1. Albania

⁵ The Secretariat of Corridor VIII is based in Bari, Italy, at the Headquarters of Fiera del Levante. The Secretariat's Staff includes 4 experts: Project Manager-Coordinator, Economist, PR Officer, and Administrative Assistant.



Albania is a country with a population of 54% rural, spread over 12 districts, 65 municipalities, 308 communes and 2982 villages⁶. Albania has undergone rapid urban and cultural transformation over the past three decades. This variation depended on the impact of European post-communist policies and on the development programs of this area. Three factors can be identified that have influenced this transformation so much⁷ (*Prato G. P.. 2017*).

2015 2016 2017 2018 2019 2020⁸ 10,30 10.70 11,50 12.80 13,60 12.20 GDP (mld €) **GDP** growth rate 2,20 3,30 3,80 4,10 2,20 -6 3.940 4.104 4.521 5.259 5.305 4.772 Pro-capite GDP (US \$) 13,30 6,30 5,90 7,80 Unemployment rates. 10,30 7,60 2,90 2,90 2,90 2,90 2,90 2,90 Population (ml) 27,30 31,60 31,50 31,50 26,40 29 Export (% on GDP) 44,50 45.80 46,60 45,30 45,20 15.60 Import (% on GDP) Market shares on world exports 0,01 0,01 0,01 0,02 0,01 0,01

Table 1. Social and economic indicators

First, ordinary people's access to the city's public space and to areas previously restricted to the Party's leadership (such as the Blloku in Tirana). Second, the impact of internal and external demographic movement – which includes internal rural – urban migration and foreigners who reside in the country (more or less permanently). Third, the role of the international community who, since the collapse of the communist regime, has supported (financially and politically) the creation of the infrastructure necessary for the accomplishment of EU programmes, such as the construction of Corridor VIII (one of the major European Ten–T Corridors) and, more recently, the accomplishment of urban planning towards green, sustainable cities.

The near-term outlook for the Albanian economy remains challenging, reflecting the significant impacts of the November 2019 earthquake and the ongoing COVID-19 pandemic⁹. As in other parts of the world and reflecting Albania's reliance on tourism and remittances, the economy is expected to contract sharply in 2020 and improve in 2021. But uncertainty is high. The National Bank of Albania has confirmed that the crisis will focus more on export-oriented manufacturing sectors and on companies in the service sector, i.e., those most directly affected by social distancing measures (and also those most connected with the Italy). According to the Governor of the Central Bank, the increase in public and private debt and the blow suffered by the real economy will be a test for the sustainability of the country's economic equilibrium and for the banking sector itself.

⁶ Ibrahimi K., "Albanian Port Sector and the corridor VIII" (2009) – Maritime Transport & Navigation Journal, Vol. 1

⁷ Prato G. P. – "Changing Urban Landscape in Albania" (2017) – Diversity and Local Contexts_pp 17-37 8 Estimated data for 2020

https://www.infomercatiesteri.it/paese.php?id paesi=57



In a recent report on the regional economic outlook, the EBRD estimated the decline in Albanian GDP for 2020 at -9%, far more pessimistic than those of the International Monetary Fund and the World Bank (-5%) with the values worse than the Western Balkan Region due to the high dependence on tourism and the integration / dependence of the textile-footwear manufacturing sector with Italy¹⁰. Alarm bells also on the expected decrease in the value of remittances from abroad (quantifiable in about 10% of GDP). Particularly worrying are the unemployment figures, with over 70,000 unemployed, returning to the values of 2012, and the growth of the public debt, after years of containment policies in line with the programs agreed with the IMF.

The Albanian ports of Durrës and Vlorë are foreseen to play a major role in the framework of this important Pan-European Corridor, which role cannot be assumed as it should be if the financing for new facilities (freight and passenger terminals, warehouses, equipment for cargo handling, etc.) does not correspond to the real needs of both ports. A linkage from Durres relates to the capital, Tirana. Later, the railway line extends to Lin, a village in Pogradec. There is a distance of 2.8 km railway line missing which could enables Albania to connect with Macedonia, a member of CEFTA, passes in Sofia and ends in Plovdiv, branching out to the ports of Burgas and Varnas¹¹.

3.1.1. Sectorial Strategy of Transport & Action Plan 2016-2020 (Ministry of Infrastructure and Energy)

Government of Albania adopted the **Sectorial Strategy of Transport and Action Plan 2016-2020** through the Decision of the Council of Ministers, No 811, date 16th November 2016 "For the approval of the Transport Strategy and Action Plan 2016-2020". The main goal of the strategy is to have an efficient transport system, integrated in the region and in the EU network, which promotes economic development and upgrades the citizens' quality of life.

The development and modernization of Albania's transport infrastructure has been and remains one of the top priorities of the Albanian's Government. The aim is:

- i) to create the preconditions for the development of other sectors of the economy,
- ii) to increase the accessibility of freight and passengers in trade and service delivery, and
- iii) to significantly contribute to overall economic growth and development of the economy.

3.1.1.1. Road Network

All the investments in roads sector (Foreign Financing and Albanian Budget), during the period 2016-2018, are mainly concentrated on the Albanian Core Network:

¹⁰ Rapporto situazione Albania, Ministero degli Esteri Italia https://www.infomercatiesteri.it/paese.php?id_paesi=57

¹¹ Bramo F., Llaci S. (2012) – "The Impact of railway (Corridor VIII and the line Albania-Montenegro) on the agribusiness development in Albania – Albanian j. Agricolture – ISSN 2218-2020



Adriatic – Ionian Highway/Expressway (Route 2b/Corridor VIII/ Route 2c) 305 km – Feasibility Study to be completed within May 2019. Some of the projects in this Corridor include:

- Construction of Lezha by pass, 4 km, estimated cost EUR 24.6 million. Currently, the ToR for the Feasibility study for the construction of the Lezha Bypass in Albania and Environmental and Social Impact Assessment (ESIA), funded under WBIF, with a grant of EUR 350,000, are approved:
- Construction of Tirana by pass, 22 km, estimated cost EUR 109 million. Currently, the Preliminary Design has been completed and the Detail Design is foreseen to be completed within 2018;
- Upgrade of Thumane Kashar; Length 20,4 km; FS and Concept Design completed, estimated cost EUR 169.3 million;
- Construction of Tepelena by pass, estimated cost EUR 38 million; Length 3.5 km,
 Technical status preparatory;
- Construction of Gjirokastra by pass, estimated cost EUR 14 million; Length 8.7 km;
 Technical status Feasibility Study, Detail Design, Environment Impact Assessment are completed.

Corridor VIII: 236 km of motorway connecting the Adriatic to the Black Sea:

- Construction of Tirana Elbasan road (completed in 2019);
- Construction of "Qukës Qafë-Plloçe" Road Segment (ongoing);
- Construction of Fieri By-Pass (completed in June 2020);
- Construction of Vlora By-Pass (ongoing).

3.1.1.2. Rail network

Rail Corridor VIII forms a network with Rail Corridors X, IV and IX. The interconnection nodes are in Skopje, with Corridor X; in Sofia, with Corridor IV; and in Gorna Oriahovica, with Corridor IX. Along this alignment there are *five missing links*¹²:

- Lin station (Albania) North Macedonia border
- Pogradec station (Albania) Greek border
- Kicevo station (North Macedonia) Albanian border
- Kumanovo station (North Macedonia) Bulgarian border
- Gueshevo station (Bulgaria) North Macedonia border.

The railway section of Corridor 8 is composed as follows:

- Section 1 Tirana-Duress
- Section 2 Durres-Rrogozhine-Elbasan
- Section 3 Elbasan-Librazhd;
- Section 4 Librazhd Lin.

¹² MIT – "Corridor VIII - Pre-feasibility study on the Development of the Railway Axis" (September 2007)



Figure 2. Albanian rail section of Corridor VIII: Durres – Elbasan – Lin – North Macedonia



Source: MIT, 2007.

Regarding the Reform of the rail system and as it is foreseen in the Connectivity Reform Measures Management Plan 2017, good progress is reach in particular about Corridor VIII. Based on its principle of open market and transparent and non-discriminatory access, it aims to open the railway market on pilot basis in TEN-N MED corridor in Albania, which for, Albania is including both the Route 2 and CVIII.

3.1.1.3. Maritime infrastructures

In the maritime sector the main strategic objectives are:

- 1. Improvement of technical capacities of maritime administration and the institutions involved.
- 2. The development of maritime legislation to achieve EU standards.
- 3. Development of port infrastructure.

Regarding the priority infrastructure projects, along with the projects mentioned above several other improvements were achieved in the Albanian Road Network. In addition, the rehabilitation and expansion of port infrastructure and superstructure (the ports of Durrësi and Vlora) is being carried out in order to increase capacity and standards of operation, service effectiveness and tourism development.

Development of port infrastructure is one of the priorities of the Government. Up to now Rehabilitation of Port of Vlora with the financing from Italian Cooperation has started, and has been completed almost 80% of constructional works, currently the construction work is



paused from Italian Cooperation side and planned to start again soon. Reconstruction of Passenger Terminal (berths 7 & 8) and Processing square in Durres Port Authority – This project is already finished. Dredging of Durres Port basin feasibility study is finished. DPA and MIE is looking for possible investors for financing the implementation of the project. The expanding of Passengers' Terminal in Port of Vlora has already started and planned to be operable in 2018.

3.1.2. Current situation of the Albanian Corridor 8

The Sectorial Strategy on Transport & action Plan 2016-2020 report, published in June 2020 by the Ministry of Infrastructure and Energy, shows the progress of the planned works. The total cost for the implementation of the Action Plan of the strategy 2016-2020 is 1,001.06 million Euro. The cost for the infrastructure investment for the implementation of the Action Plan proposed 2016-2020, foreseen by budget funds is 793.34 million EUR. Details are provided in Table 2.

The railway in Albania was built between 1947 and 1950 with little or no maintenance undertaken over the last 25 years, with the numerous existing crossings being unmanaged. Trains travel at low speeds due to the bad condition of the infrastructure and safety concerns.

In addition to being part of Corridor VIII, this section also constitutes the sole rail link between the West and East parts of Albania linking Durres with the provincial capitals Elbasan and Pogradec. A branch line provides link to southern cities of Fier and Vlora. The length of the section considered for this assignment is approximately 33.5km and lies along relatively flat terrain at the base of a low mountain range¹³.

Table 2. Distribution of resources across the Priority Actions (road, rail and maritime

Transport mode	Base Scenario Investment	2016	2017	2018	2019	2020 indicative	Total Expenditure
Roads	750.35	103.24	173.82	182.61	189.93	182.37	831.96
Railways	123.18	3.62	3.22	3.6	5.08	4.77	16.37
Maritime-Ports	74.33	7.34	0.99	1.26	1.14	0.37	15.02
Civil aviation	9.90	0.11	0.12	0.03	0.08	10.15	10.49
Intermodal-Combined Transport	43.30	0	0	0	0	0	0
Total investment 2016-2020	1,001.06	114.31	178.15	187.49	196.23	197.66	873.84

Start of the EU-funded Technical Assistance for the Rehabilitation of the Durres – Rrogozhina Railway Section in Albania - https://wbif.eu/news-details/start-eu-funded-technical-assistance-rehabilitation-durres-rrogozhina-railway-section-albania

[&]quot;Sectorial Strategy of Transport & Action Plan 2016-2020 - Monitoring 2019" - Ministry of Infrastructure and energy Albania - Priority Action.



sector) 14

EUR* million. Source: Directorate of Budget, MIE.

3.2. North Macedonia

In general terms the physical infrastructure consists of about 14.159 km. of public roads, of which 236, 5 km are motorways, 911 km are national roads, 3771, 5 km are regional, and 9240 km are local roads; 2. 925 km railways, and 2 international airports.

These objectives shall be achieved by: Modernisation and extension of the infrastructures on Corridors X and VIII to enable transport service delivery to be improved both in qualitative and quantitative terms.

Social and economic indicators of North Macedonia are provided in Table 3.

Table 3. Social and economic indicators (North Macedonia)

	2015	2016	2017	2018	2019	2020 ¹⁵
GDP (mld €)	9,10	9,60	10	10,70	11,30	10,90
GDP growth rate	3,90	2,80	1,10	2,70	3,60	-5,50
Pro-capite GDP (US \$)	4.840	5.129	5.431	6.063	6.093	5.912
Unemployment rates	26,10	23,70	22,40	20,70	17,30	18
Population (ml)	2,10	2,10	2,10	2,10	2,10	2,10
Export (% on GDP)	48,70	50,70	55,10	60,60	61,70	56,40
Import (% on GDP)	65 69	65,50	73,20	75,60	70	78,70
Market shares on world exports	0,03	0,03	0,03	0,04	0,04	0,04

3.2.1. Railway network

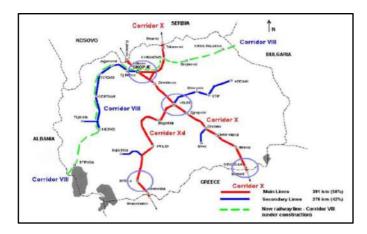
Whilst there are no significant geographic constraints to complete the implementation of the planned rail network along the Corridors, the prime impediment to completion arises from lack of funds availability and in turn, the inability to attract funds from international financing institutions. The current level of funding remains insufficient for maintenance or for upgrading those sections identified for higher line speed.

Figure 3. Railway network in North Macedonia.

¹⁴ Source: "Sectorial Strategy of Transport & Action Plan 2016-2020 - Monitoring 2019" - Ministry of Infrastructure and energy Albania

¹⁵ Estimated data for 2020



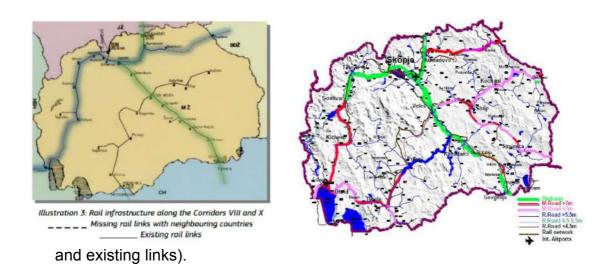


The total length of the network is 925 km, of which:

- Open line 699 km
- Terminal tracks 226 km
- Industrial tracks 102 km

The railway line along the Corridor VIII is in total length of 315km, whereas only 50% of the railway line has been constructed so far. At the moment, the former Yugoslav Republic of Macedonia does not have railway links with the two neighbouring countries, namely Republic of Albania and Republic of Bulgaria. The Eastern part of the Corridor VIII towards Republic of Bulgaria requires another 89 km to be built (29 % of the total), while in its Western section towards Republic of Albania another 70km is needed (21 % of the total). Railway line along the Corridor VIII is in total 156 km existing link.

Figure 4. Rail infrastructure along the Corridors VIII and X - North Macedonia (missing



Currently there is an ongoing the process for development of Rail Corridor VIII. The missing links towards Bulgaria are planned for construction and to be operational by 2022.



3.2.2. Road Network

The road in accordance with Corridor 8 in the A-2. Corridor VIII is passing through the national territory from East to West with a total length of 304 km. concerning the road infrastructure along the Corridor only 37% are on motorway standards.

3.2.2.1. Priority Action 1 – Rail Transport Infrastructure

The purpose of the priority action is to improve the rail transport infrastructure for better cohesion with the EU member states and regional neighbours, supported by varied investments in the rail transport infrastructure network of the country. For the programming period 2014-2020 the priority will be given to the railway infrastructure along the along the SEETO comprehensive network (Corridors VIII, X and Branch Xd)

The national territory is a crossing point of the two Trans National Axes (Corridors VIII and X) which is an opportunity for development of the transport network in order to make the most of the geo-strategic advantage and thus to contribute to the functioning of the Common European Market by providing effective transport links and facilitating the transport of people and goods and access to the other countries and markets.

This priority action will contribute to better cohesion with the EU member states, by providing rail links with the neighbouring countries, reducing travel times, supporting improved safety and quality of transport delivery both within the Country, to neighbouring countries and onward to other countries in the EU and the region. It will be achieved through activities aimed at development of railway infrastructure. In this manner, improvements will also accrue in the quality, efficiency and speed of transport services, increases in freight and passenger traffic.

Specific objectives:

- to construct the remaining railway links according to the EU technical standards;
- to reconstruct, rehabilitate, upgrade and modernize the rail links along the international Corridors VIII, X and Branch X d according to the EU technical standards;
- to improve the safety and security;
- to reduce travel time for passengers and freight railway transport;
- to increase the capacity of the connections with neighbouring countries along the Corridors;
- to promote sustainable development especially through minimizing the adverse effects of transport on the environment and through improving transport safety;
- to develop design studies, Environment Impact Assessments (EIA), project preparation studies as feasibility studies, cost-benefit analyses, design



documentation and tender documentation of the projects where pre-feasibility studies already.

Currently, on the rail Corridor VIII as part of the SEETO Comprehensive rail network, eastern section (Kumanovo – Beljakovce - Kriva Palanka - Deve Bair (border with Bulgaria) there are several ongoing and planned investments of EUR 500 million to be realized until 2022.

Concerning the western section of the rail Corridor VIII, Skopje- Kicevo- Border with Albania (section Skopje –Kicevo L=62.6km), in 2015 an application was submitted to the WBIF. The application was approved and in March 2017 the IPF consultant started the preparation of the terms of reference. WBIF approved 300.000 euro for this project.

For the second section, Kicevo - Lin, Border with Republic of Albania L= 63km, from 2009 to 2011 a Feasibility Study with preliminary design and EIA Study were completed. The consultancy contract was signed in September 2014. The contract is expected to be completed in the third quarter of 2017. The project documentation will serve as a basis for further implementation of the project.

3.2.2.2. Priority Action 2 – Road Transport Infrastructure

The purpose of the priority action is to improve road transport infrastructure for a better cohesion with the EU member states and regional neighbours, supported by varied investments in the transport infrastructure network of the country. For the programming period 2014-2020 the priority will be given to the road infrastructure along the SEETO comprehensive network (Corridors VIII, X and Branch Xd).

Specific objectives:

- to construct, reconstruct, rehabilitate, upgrade and modernize the motorway sections on the Corridor VIII, X and Branch X d that are currently below standard;
- to eliminate dangers and delays that currently occurs in this sub-standard stretch;
- to improve road safety, reduce accidents and ensure safer travelling environment;
- to limit the harmful impact of road traffic on the environmental to an optimal level;
- to increase the capacity of the connections with neighbouring countries along the Corridor VIII;
- to develop design studies, Environment Impact Assessments (EIA), project preparation studies as feasibility studies, cost-benefit analyses, design documentation and tender documentation of the projects where pre-feasibility studies already exist.

Corridor VIII develops a system of transportation that clearly would foster improved trade within the region. It would bring economic development benefits to the sub-regions and municipalities along its route and better connect inland localities to ports on both the Adriatic and Black Seas, allowing better access to raw materials and markets. In view of



future planning for the extension of the TEN-T network it is of common interest of all the countries of the region to consider Corridor VIII the Motorway of the Sea connecting Varna/Burgas, Sofia, Skopje, Tirana, Durres to Bari/Brindizi in Italy (the Black Sea with the Adriatic Sea)

In the former Yugoslav Republic of Macedonia, road Corridor VIII extends from the East to the West part of the national territory and in total length of around 304 km. From the aspect of the road infrastructure along the Corridor, approximately 37% of the total length is on a level of standard modern motorway, among which are the following sections: Skopje-Tetovo-Gostivar, Skopje by-pass and Tetovo as well as Kumanovo-Skopje.

In November 2009, the Government of the former Yugoslav Republic of Macedonia published the Public Announcement for submission of requests for participation in the procedure for awarding concession for activities for construction, reconstruction, maintenance, pay-toll and usage of part of the state roads in in the country for Package 1 and Package 2 for Corridor VIII, which was not successful due to the fact that there were no bids from the 5 pregualified consortia and the procedure was stopped in October 2011.

Road Corridor VIII passes through Struga, Gostivar, Tetovo, Skopje and Kriva Palanka and it can be divided in following main sections: 1. Ohrid – Kicevo with length of 57 km will be constructed to motorway standards until 2018. The construction works began in March 2014 and the funds in an amount of EUR 374 million are secured from the China EXIM Bank.

- For Kicevo Gostivar section in length of 42 km, designing and construction works are foreseen to be performed in three stages, i.e. the section Kicevo - Gostivar shall be divided in three sub-sections: Kicevo - Bukojcani, Bukojcani - Gorna Gjonovica and Gorna Gjonovica - Gostivar. Preparation of the Detailed Design for the first subsection is in progress.
- Section Gostivar Tetovo was completed to motorway standards in 1995 and construction works for section Tetovo Skopje was completed to motorway standards in 2002 with construction works in an amount of EUR 57 million 4. Skopje by-pass (26.7 km) was completed to motorway standards in 2009. The construction works were in an amount of EUR 150 million 5. Section Skopje Kumanovo (33 km) is completed to motorway standards.
- Section Kumanovo border with R. Bulgaria from point Rankovce to Kriva Palanka in length of 26 km are planned to be upgraded to the expressway standards until 2020 with funds from the World Bank in an amount of EUR 78million.

The total length of Rail Corridor VIII is approximately 1270 km. Its continuity is interrupted by two missing links at the borders between Albania and the Republic of Macedonia, and between the Republic of Macedonia and Bulgaria. The ports connected to Corridor VIII are Bari/Brindisi in Italy, Durres/Vlore in Albania and Burgas/Varna in Bulgaria. In recent years, the completion of Corridor VIII has shown a great development potential as a strong factor



contributing to economic integration for the bordering Countries crossed by the Corridor VIII, thus contributing to the regional stabilization process. (*Temjanovski*, 2013).

3.3. Bulgaria

Social and economic indicators of Bulgaria are provided in Table 4.

2020¹⁶ 2015 2016 2017 2018 2019 46 49 52 56 GDP (mld €) 61 60 GDP growth rate 3,90 3,80 3,50 3,20 3,40 -4 Pro-capite GDP (US \$) 6.357 6.814 7.368 7.962 8.681 8.571 9,20 7,70 6,20 6,20 5,60 8,20 Unemployment rate Population (ml) 7,20 7,10 7,10 6.90 67,30 65,90 63,60 Export (% on GDP) 64 64,10 55,40 Import (% on GDP) 63 59,10 63 63,30 60,10 51,10 Market shares on world exports 0,20 0,20 0,20 0,20 0,20 0,20

Table 4. Social and economic indicators (Bulgaria)

Bulgaria's meridional transport infrastructure does not stand well: only three railway lines cross state northern border and two - the southern (with Greece). Despite the status of Bulgaria as a crossroads and strategic location, its territory is already detoured south, west and north of new highways. The main cargo freight and passenger traffic flows around the Bulgarian territory due to the fact that the Bulgarian transport infrastructure is not completed, it is being built slowly and with lagging pace and there is not built a whole highway along the Euro-corridors passing through the country.

Euro-corridor 8¹⁷, this is the route that should connect the Adriatic coast with the Black Sea coast in the direction: Durres – Tirana – Skopje – Sofia – Burgas – Varna – Constanta. As far as the Bulgarian national interest is concerned, this corridor should not end but should begin from the northeast. The Constanta – Varna – Bourgas section of Corridor No. 8 is the most important for Bulgaria both internally and externally. Internally, its construction will achieve the effect of economic unification of the North with the South Black Sea coast.

Bulgaria would have much greater economic benefits than the construction of the Black Sea Motorway, which is a priority for construction due to a proven need (especially for Bulgarian tourism) already in the 70 s of the last century. Internationally, the Constanta -Varna – Bourgas section will become part of a much larger route starting from Constanta and continuing northwards to Vilnius – Riga – Tallinn. This route has already been agreed by Romania and the countries north of it with the EU in March 2000. It will be the strategically important transport highway linking the countries of the eastern flank of the Trimorie/Intermarium project, an extremely important link for Bulgaria as a member of this

¹⁶ Estimated data for 2020.

¹⁷ Staykov D.D. – "Euro-corridors concerning Bulgaria" – European Journal of law and politica sciences (2018).



initiative. For the construction of the highway along Corridor No. 8 through Albania and Macedonia is spoken of as a variant of the distant future.

However, construction of individual railway sections is foreseen. In Bulgaria, the vast part of this corridor, between Sofia and Burgas, is already built – Thrace Motorway, as well as an electrified railway line, which in some as well as an electrified railway line, which in some sections is double. The construction of a railway line between Sofia and Skopje has over 100 years of history. At the moment, the Bulgarian side has refrained from real construction activities, as there is no EU funding.

However, Bulgaria is actively seeking funding and has not given up on this corridor. Geotechnical and geodetic surveying and design were carried out. This proves that the Bulgarian side is ready and expects real action from Macedonia to build its section. There is reason to wait due to the accumulated negative experience. At present, there is a good desire on both sides, but there is no resource. With the availability of financial resources, the construction of the railway section on Bulgarian territory could start in 2020, the Bulgarian transport minister estimates.

The main alignment of Corridor VIII in Bulgaria runs from Gyueshevo, at the former Yugoslav Republic of Macedonia border, to the ports of Burgas and Varna, on the Black Sea, serving Sofia and Plovdiv. Its total length is 664 km.

In Bulgaria, the Corridor VIII can be split into six different Main Sections:

- Gyueshevo-Sofia (102 km): Main Rural road with a standard cross section (type "E") and, locally, a type "B" section (2+2 lanes divided carriageway). Road conditions vary from good to poor and problems are experienced especially in passing through several urban centres (including 4-5 km through the outskirts of Sofia).
- Sofia Beltway Northern Arch (41 km): Main Rural Road, sections D (90%) and A (10%). Very high traffic volumes from local traffic have been noted. Road conditions are generally good. The new Northern Arch of the Sofia Beltway is under construction.
- **Sofia-Plodovitovo Stara Zagora** (210 km): new modern motorway in excellent conditions. The Chirpan- Stara Zagora section has been completed and opened to traffic in 2008:
- Stara Zagora Karnobat (126 km): the Corridor runs on a Main Rural Road, with a half-motorway section in good condition. No particular problems were reported, with the exception of the crossing of some village or town.
- Karnobat-Burgas (47 km) new modern motorway in excellent conditions
- Burgas Varna (138 km): a Main Rural Road with a "half motorway type C section" in generally good condition having been recently modernised. The road follows the coastline and is strongly aimed at tourist traffic. A new motorway connection has been planned.



Totalase

Totala

Figure 5. Sections of Corridor VIII in Bulgaria.

Source: Corridor VIII Secretariat.

The total length of the Pan-European Transport Corridor 8 is between 1220 and 1350 km, depending on the specifics of its road and rail routes. 631 km roads pass through Bulgaria and ready-to-use railways are 747 km. 52% of road infrastructure and more than 55% of the rail infrastructure of the corridor are on Bulgarian territory. All of them have been built and are in operation. The only undeveloped Bulgarian section along the corridor is from railway station Gueshevo to the Bulgarian-Macedonian border with a length of about 2.5 km¹⁸.

As underlined by Minister of Transport and Communications Ivaylo Maskovski and Minister of Transport and Communications of Macedonia Goran Sugareski, during a meeting in 2018, "The transport link between the South-Western Balkans and the Eastern Mediterranean Corridor is essential for both countries as regards the free movement of passengers and goods".

The implementation of the project depends on the provision of funding for the construction of the line on the Macedonian territory, the modernization of the existing Sofia-Gyueshevo section and the construction of the missing 2.5 km section from the Gyueshevo railway station on the Macedonian border. If financial resources are available, the construction of the railway section could start in 2020, added Minister Moskovski.

3.4. Italy and its role in Corridor VIII project

Italy's interest in promoting Corridor 8 goes in the direction of consolidation of the integration process with the Balkan countries and promotion of exchange commercial with



the latter as well as with the countries of Eastern Europe and the Far East. Another important geostrategic interest for Italy is its potential role that the latter it would take place if the pipeline and oil pipeline networks were built. This would allow Italy to strengthen its role in the European energy market, because it would be one of the possible alternatives for supplying Europe with oil and gas.¹⁹

Italy has taken a leading role in the Corridor VIII project. It is configured as a geopolitical area that is nerve center for national interests and whose development involves important Italian public enterprises and, more generally, the economy of the South. The construction of the Corridor has a significant strategic value:

- as a real transport axis that connects the ports of the Southern Adriatic (Bari, Brindisi and Taranto) with the Balkan area and therefore the Southern Regions;
- as an instrument of economic integration between these geographical areas favouring the development of the economic-commercial and productive activities of the countries concerned.

The Corridor could also play a strategic role not only at the regional level as an internal communication route between the markets of the Balkan countries.

Italy plays a preponderant role in the Albanian economic reality, with interesting prospects for small and medium-sized enterprises²⁰.

In 2018, Italy holds a 34.1% ²¹ share of the total commercial exchange of Albania which last year amounted to about 2.6 billion euros. Italy is clearly the first customer with a 48.2% share of the volume of exports; it is also the leading supplier of Albania with 27.3% of imports. According to data from 2018, after Italy, by far the largest trading partner, are Greece (6.9%), Germany (6.6%) and China (6.3%). The presence is ensured by about 1000 small and medium enterprises, the large banking group Intesa San Paolo, and certain medium-large industrial groups which have established themselves mainly in the cement, agri-food and energy sectors. Of the total number of companies with foreign and mixed capital by country of origin, Italy absorbed the largest share of employment (49.6%) and turnover (25.2%). However, the presence of Italian operators in some large strategic sectors of the country (for example telecommunications and insurance) is still reduced, also due to some business climate problems such as uncertainty about property rights, widespread corruption and the lack of the system judicial.

In itself makes it definitely worthwhile for a transport company working between Bulgaria or the former Yugoslav Republic of Macedonia and Italy, to use the alternative route through Greece (Sofia/Skopje, Greece, Igoumenitsa, Bari) that, in terms of km is far longer (approx. + 300 km).

¹⁹ Source: Corridoio 8 (esteri.it)

²⁰ Osservatorio Economico – Ministero degli Affari Esteri e della cooperazione Internazionale (2021)

²¹ https://www.infomercatiesteri.it/public/osservatorio/schede-sintesi/albania 57.pdf



4. INITIATIVE 8²²

At the end of 2020 the theme "Corridor 8", in relation to its importance not only economic but also and above all socio-cultural, has a new political impulse.

Foreign Minister Bujar Osmani, at the very start of the new year, addressed a letter to the Foreign Ministers of Bulgaria and Albania, Ekaterina Zaharieva and Olta Xhaçka, in which he extended a *proposal for a new multidisciplinary initiative*, a political platform which would intensify and deepen mutual cooperation as strategic interest for the three countries.

Osmani stressed that this initiative is not related at all to the talks on overcoming the disputed issues with Bulgaria and unlocking the European integration process for the country. He adds that the emphasis here will be on removing the obstacles due to which the work of Corridor 8 is stagnating. The minister of Macedonia, with his statements, emphasized the economic, social and cultural importance of completing corridor 8.

"I believe that we have an obligation to bridge the geographical, historical and political barriers that complicate the connection and burden the deeper cooperation," Osmani said in a letter to Bulgarian counterpart Ekaterina Zaharieva and Albanian Foreign Minister Olta Xhacka²³.

Diplomat Gjorgji Filipov says that: *This initiative will be a positive step in the further course of diplomatic activities to start negotiations with the European Union.* Asked what would be different from those initiatives, in which the three countries are already members, such as the Berlin Process, he said that *it is good that such a proposal this time comes from Skopje. Northern Macedonia shows proactivity and porosity in finding adequate approaches to resolving the newly emerged issues on the road to the EU²⁴.*

The primary aim of "Initiative 8" and its foundation will be trilateral coordination and cooperation for support of investment projects along Corridor VIII. The removal of reasons for the constant delay of these projects will be a positive impulse for further political, economic, security, cultural, and social cooperation between the three countries. It will also contribute to the promotion of the overall cooperation and strengthening of security in the region, and it will have special impact on the common goal of European perspectives for the whole region.

5. BERLIN PROCESS and Corridor VIII

²² Republic of North Macedonia – Ministry of Foreign Affairs (January 2021) https://www.mfa.gov.mk/en/page/13/post/2462/%E2%80%9Cinitiative-8%E2%80%9D-draftplatform-for-trilateral-cooperation-between-north-macedonia-bulgaria-and-albania

https://www.slobodenpecat.mk/en/osmani-so-nov-obid-da-gi-povrze-sofija-i-tirana/

²⁴ https://www.slobodenpecat.mk/en/osmani-so-nov-obid-da-gi-povrze-sofija-i-tirana/



The "Berlin Process" is a new political initiative that aims to enhance regional cooperation by laying the foundations for sustainable economic growth of the Western Balkans. It has a proper agenda - known as the "Connectivity Agenda". It uses existing financing programmes such as Western Balkans Investments Fund (WBIF)²⁵.

The projects related to Corridor VIII, funded by WBIF, are summarized in the Connectivity Agenda 2018-2019²⁶. In particular, it is possible to note the following investment regarding Corridor VIII:

- Extension of TEN-T Core Network: Reconstruction of Durres Port (Albania 62.5 € million)
- Road interconnection Kriva Palanka Deve Bair section (Macedonia 13.6 € million)
- Road Interconnection, Bukojčani Kičevo subsection (Macedonia Albania 105.2 € million)

Table 5. Connectivity Agenda, investment projects Co-financed in the WB countries (Albania and Macedonia focus).²⁷

Country	Project	Status	Costs
Albania	Comprehensive Network: Rehabilitation of Durrës - Pogradec - Lin Railway Line and Construction of Lin - Border with North Macedonia Line on Corridor VIII	Preparation	€ 291,020,000
Albania	Mediterranean Corridor (Rail CVIII): Rehabilitation of Tirana - Durrës Railway Line and Construction of New Line to Rinas Branch	Tendering	€ 92,075,000
N. Macedonia	Orient/East-Med Corridor: North Macedonia – Bulgaria CVIII Road Interconnection, Kriva Palanka – Deve Bair Section	Implementation	€ 13,670,000
N. Macedonia	Orient/East-Med Corridor: North Macedonia – Albania CVIII Road Interconnection, Bukojcani – Kicevo Subsection	Preparation	€ 105,050,000
N. Macedonia	Orient/East-Med Corridor: Construction of Rail Corridor VIII in North Macedonia, Sections Kumanovo - Deve Bair	Implementation	€ 283,476,316
N. Macedonia	Core Network (Road Corridor VIII): Construction of Motorway A2, Section Gostivar - Kicevo, Subsection Gostivar - Gorna Gjonovica	Preparation	€ 105,000,000

_

²⁵ Hackaj K., Madhi G. (2016) – "How Berlin Process will affect Albania's economic position?" – Working Paper

²⁶ WBIF - Connectivity Agenda "Co-financing of Investment Project in the Western Balkans"

²⁷ Source: Connectivity Agenda 2018 – p. 5



N. Macedonia

Comprehensive Network: Modernisation of Skopje - Kicevo Railway Line on Corridor VIII

Preparation

€ 300,000

Source: WBIF.

6. The future of the Trans European Network (TEN-T): toward safety, security and sustainability

Europe is connected through a network of roads, railway lines, inland waterways, inland and maritime ports, airports and rail-road terminals. Not counting secondary roads and railway lines, the trans-European transport network (TEN-T) alone consists of more than 138,000 km of railway lines, 136 700 km of roads and 23,506 km of inland waterways. More than 1 billion passengers travelled by air in the European Union in 2019, of whom 76 million used Paris Charles De Gaulle airport alone. Finally, close to 3.5 billion tonnes of goods were handled in EU ports in 2019.

Road transport largely accommodated almost half of EU freight transported to a lesser extend of sea and rail transport. However, road transport emits considerably more carbon dioxide (CO2) per kilometre than other modes, such as rail and inland waterways. According to forecasts (*ITF*, 2017) it is suggested that the total freight transport demand will likely triple from 112,000 to 329,000 billion t-km from 2015 to 2050.

The EU has set itself several targets to reduce GHG emissions from transport. In its *White Paper* published in 2011, the European Commission set a target of a 60 % reduction from 1990 levels by 2050. This means that current levels need to be reduced by almost two thirds.

Transport accounts for a quarter of the EU's greenhouse gas (GHG) emissions and is the main cause of air pollution in cities or ports. Thus, transport in Europe is facing unprecedented challenges, namely with regard to sustainability, user-driven mobility and technological progress, as well as following the coronavirus outbreak. The inadequate adaptation of the TEN-T Regulation to the digital transition and other new technological developments contributes to this shortcoming. These challenges call for new solutions. TEN-T policy must keep up with and even second-guess developments to ensure a future-oriented, sustainable transport system, which is why it is currently being reviewed.

The TEN-T Regulation reviews are built on the *Strategy on Sustainable and Smart Mobility* which is driven by the *European Green Deal* and the transport sector's contribution to climate neutrality (aiming at a 90% reduction of CO2 emissions by 2050) and of reducing the overall environmental footprint of transport activities to help the EU become the first climate neutral continent.

Not least, TEN-T infrastructure lacks resilience also to security challenges, unforeseen events such as pandemics and natural or human-made disasters.



From the early 1990s, European countries have changed the structure of the road network, expanding the overall length of the highway by more than 30%. This choice has increased the volumes of traffic of people and goods but has also multiplied the problems of road safety, despite the environmental impact. Related to road safety problem, in Europe the deaths caused by road accidents have exceeded one hundred thousand units per year with more than 2 million bruises, whose average age does not exceed 25 years.

The actual situation has confirmed an insufficient resilience of the TEN-T infrastructure in the light of increasingly frequent and extreme weather events, new safety and security as well as of public order risks, growing needs related to civil protection requirements (such as in case of pandemics) and of deteriorating infrastructure assets.

The EU Commission have realized and learned from COVID pandemic that the Trans-European transport system need to be improved with more needed reforms, policies and actions to support the sector.

7. Economic benefits expected from corridor VIII implementation

The main benefits related to the implementation of the various projects up to now presented related to Corridor 8 are summarized afterwards:

- Increase in cargo and traffic capacity
- Increase in employment rate
- Increase in flow trade within the region and tourism boost
- Increase in regional connection
- Greater contribution to regional and interregional economic growth
- Decrease in time travelled
- Decrease in road traffic and accidents
- Grater social integration
- Better accessibility to grater centers and so to hospital and educational facilities

In addition, according to a study of MIT²⁸ on the implementation of Corridor VIII, it could be 25% more convenient to use Durrës rather than Igoumenitsa to reach Skopje from Bari in terms of costs – evaluated with reference to the overall length of the trip and time required to drive along the route – and this route could potentially save 10 hours of travel time as well.

Table 6. Comparative analysis of costs and transit times between Bari and Skopje

Transport mode	Route	km	Cost €/truck	Travelling time hours
Sea + land	Bari-Igoumenitsa-Skopje	635	1,600	64
Sea + land	Bari-Durrës-Skopje	330	1,200	54



Source: Bramo and Llaci (2012).

In line with comparative analysis reported in Table 6, *Bramo and Llaci* (2012) indicated that, according to some estimation, the timing of the transport of goods from the Adriatic Sea Black Sea lasts 4-5 days and it will be reduced to 1-2 days (with corridor VIII implementation). Thus, the rail network is very suitable for the development of agricultural trade relations.

The value of time saving is a crucial factor in determining the importance of a transport infrastructure implementation. According to *Bickel et al.* (2006), the average value of time saving for road and rail transport in Hungary (the closest nation in the database to Corridor VIII Balkan countries) was respectively 1.99 and 0.82 2002USD per freight ton per hour.

Bramo (2013)²⁹ states that relationship between countries of Corridor VIII has numerous benefits not only for the countries directly involved but for the whole region in terms of economic and social development. Construction of Corridor VIII rail carries political and economic values for several different reasons.

At first, this corridor is part of the Pan European Corridors network aiming to connect all countries and stimulate economic development of the trade and passthrough them. On the other hand, is a good opportunity to establish a bridge between West and East to the fact that it aims to connect a European country such as Italy in the Adriatic Sea with a country like Bulgaria in in the Black Sea and then to other countries of origin.

Countries of east all come from totalitarian regimes and have developed a system of free trade only these last two decades. Their economic and trade level is lower in comparison with Italy which has a consolidated capitalist economy. In this context, economic values are added, even those geopolitical, when it is known Balkans, and especially Albania, is an integral part in the Eastern Europe.

Second, from an economic perspective the construction of a railway infrastructure with lower cost and reduce travel time adding comfort and safety conditions enables the development of free markets between the countries. Balkan region is in within the EU integration (Bulgaria is a member with rights full and Greece) while Albania, Macedonia and Turkey aspire to join the great European family.

To speak of the benefits generated by the connection of the railway infrastructure means primarily economic improvement. Countries related with this Corridor would be given the opportunity to have facilities and a trade with all countries of the Europe. In a way, there will be a drop of virtual borders that will give push to the development of trade.

The construction of the Corridor VIII aims to shorten the distance Durres-Sofia to 500 km that will give equal opportunity of developing countries and regions affected by this

WHERE DOES TEN-T CORRIDOR VIII STAND?

30

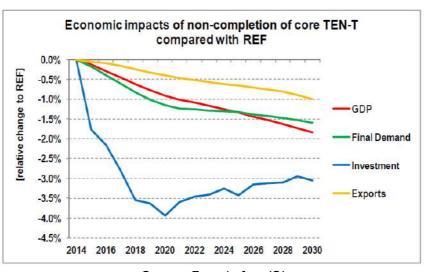
²⁹ Bramo (2013). Railway Connection between the Countries of Corridor VIII and the opportunities of Trade Development. Mediterranean Journal of Social Sciences.



corridor. Furthermore, we will present a list of expectations this corridor: Reducing the distance from Durres to the Bulgarian capital, Sofia. The distance to be provided by railway is expected to compete the distance that actually offers the road transport. The estimates provided a distance in about 5 hours. With the construction of this corridor Macedonia is expected to be only 200 kilometres away from the Black Sea and about 150 kilometres from Istanbul. If refer to the Corridor VIII survey, the average speed of trains that will travel to the Corridor will be over the whole length equal to 100 km/h.

Considering all the benefits identified, the non-implementation of the Corridor 8 (to do nothing scenario) would correspond to the loss of these expected benefits. Increase in GDP, social inclusion and integration cost-opportunities would reasonably arise. These cost-opportunities would also represent a major step-back to Albanian and North-Macedonian path to EU integration and access, being transport infrastructures network integration, social inclusion and improvement in wealth crucial factors according to EU policies and priorities (*White Paper, 2011*)³⁰. The political proactivity from North-Macedonian government side in spurring dialogue and cooperation between Albania, North Macedonia and Bulgaria for the corridor XIII progress ("Initiative 8") and its statements are in line with such priorities and could represent an evidence of North-Macedonia's consciousness of Corridor VIII strategic importance in supporting EU integration process.

Figure 12. Relative change of major economic indicators as compared with REF in EU27.



Source: Fraunhofer - ISI

The costs of non-completing a transport core-network have already been analysed and, in line with the cost-opportunities previously identified, are expected to have a major impact on nations GDP and investments attractiveness. A scenario analysis performed by *Schade*

3

³⁰ https://ec.europa.eu/transport/themes/european-strategies/white-paper-2011_en



et al. in 2015³¹ shows what would be cost at a European level of not implementing the Ten-T core network and the findings are the following:

The resulting wider economic impacts for the No CNC scenario for EU27 between 2015 and 2030 are highlighted in Figure 12 in terms of relative change compared with the Reference Scenario (REF) development (see chapter 5.2). The set of avoided CNC infrastructure investments not realized travel time and cost improvements creates negative impulses on GDP of -1.8% as compared with REF in the year 2030. The pathway of investments changes by direct reduction of investments and second round effects and leads to a decrease of -3.1% in the year 2030 as compared with the Reference Scenario. Due to the timing of avoided investments, the highest impact on investments is assumed to take place around 2020.

8. SEZs and Corridor VIII

Over the last three decades, Special Economic Zones (SEZs) have given new impetus to the ever-growing export-oriented industrialization in developing countries. Where various economies have benefited from SEZs, many zones have ended up becoming enclaves with trifling advantage. The SEZs have to contribute to exports, employment, and creating linkages with the domestic economy.

Industrial Logistics Parks (ILPs) are playing an essential role in boosting industrialization and growth across the globe. Today, there are around 2,200 Industrial Logistics Parks in the world with an important socio-economic impact, where more than 50% of ILPs are located in Asia and around 70 million jobs are associated to them (40 million are in Asia).

Also, in developing countries the Special Economic Zones (SEZs) function to solve problems of the national economy at the governmental level, such as improving the trade balance, bringing high-tech technology into production, and advanced management technologies deployment.

Mainly, Free Economic Zones (FEZs) and Special Economic Zones (SEZs) act as global platforms interacting with other international entities. Usually, these types of ILPs are located in the surroundings of transport infrastructure (ports, airports, railway).

Countries involved in Corridor VIII, like North Macedonia, have faced positive experiences on creating Free Economic Zones (FEZs). To this purpose, Macedonia's free zones play a key role in the newly renamed country's economic growth plan.

³¹ Wolfgang Schade, Michael Krail, Johannes Hartwig, Christoph Walther, Daniel Sutter, Maura Killer, Markus Maibach, Juan Gomez-Sanchez, Karin Hitscherich (2015). Cost of non-completion of the TEN-T, Final Report. Fraunhofer Institut für System und Innovationsforschung (ISI)



The North Macedonia Free Zones Authority, the governmental managing body responsible for developing FEZs throughout the country, currently supervises fourteen zones in various stages of development in a 900 ha area (Figure 14).



Free Zone Rankovce

Aces Sizes 20 has

Serbia Assignment of the Aces Sizes 20 has sizes 30 has s

Figure 14. FEZs in North Macedonia.

Source: Free Zones Authority of North Macedonia.

These are centers in which highly productive clean manufacturing activities are concentrated and new technologies are developed. North Macedonia offers additional incentives for development in the TIDZs, in addition to those normally associated with free economic zones.

Investors in FEZs are entitled to personal and corporate income tax exemption for the first 10 years. Investors are exempt from payment of value added tax and customs duties for goods, raw materials, equipment and machines. Moreover, up to €500.000 can be granted as incentive towards building costs depending on the value of the investment and the number of employees. Land in a FEZ in North Macedonia is available under long-term lease for a period of up to 99 years at 0.1€/m².

North Macedonia have been able to attract over 300 million USD foreign direct investments (FDI) and more than 10.000 new jobs were created. The commercial balance has also benefitted where around 40% of exports arrive from these FEZs.

Both domestic and international transport play a key role in the diversification and modernisation of the economy. The authorities are aiming to make the country a regional and international logistics centre.

While, in Albania, there are 3 non-operative SEZs. It requires an improvement in legislation with real economic incentives to attract more foreign direct investments and generate a greater socio-economic impact. Also, the transport infrastructures, in this context, should be better integrated at national and European level highlighting that the multimodal transportation is a long-standing problem, since specific features, characteristics and the existing level of each transport mode influence their interaction.



9. The Apulia Region and commercial relations

The Apulia Region's geographic position acts as a European gateway for other Mediterranean countries, Western Balkans and Black Sea countries. Apulia, with its 865 km of coastline and its logistic system – two core ports Bari and Taranto and one comprehensive port of Brindisi connected to the Pan European Corridors through Scandinavian-Mediterranean Corridor (C5) – represents a strategic network of connections by developing cultural and commercial exchanges over time.

9.1. International commercial relations

Apulia Region represents over 1.8% (8,855 million euro) of the Italian total exports and over 2.3% (9,833 million euro) of Italian total imports, also it represents 18% of international commercial flows of South Italy showing a substantial contribution of the Region to the Italian foreign trade³².

More than half of international commercial flows occur with EU countries, while almost 20% with European non-EU countries.

The first and most important of the derivative advantages of regional integration rises in the creation of a market which is the sum of single countries' markets.

All countries in the Balkans, also the countries involved in Corridor VIII project has the characteristics of the "small country": modest internal market, strong dependence on imports from the west, limited ability to rule and influence prices, with limited possibilities of significant reactions. For this area, regional integration building transport infrastructures becomes essential as a solidarity tool of development and strengthening, both in terms of commercial flows.

Corridor VIII will give access countries like Italy, but also other EU countries that benefits from Corridor V to achieve ports of Bari and Brindisi and through the Black Sea, reaching Russia and other Caucasus countries up to Caspian Sea.

Table 7. Market dimension of C8 countries, other Mediterranean and Black Sea countries.

_

³² ICE, 2020 (year data 2019).



	GDP (mln \$)	Pop. (mil)	Exp. (% GDP)
Countries directly involved in C8			
Albania	15,1	2,90	31,5
North Macedonia	12,4	2,10	61,7
Bulgaria	63,7	7,00	63,6
Other countries			
Italy	2.086,9	60,36	31,5
Greece	218,1	10,72	37,2
Turkey	713,5	82,00	32,7
Ukraine	126,4	44,39	41,2
Russia	1.576,5	144,40	28,3

Source: Our elaboration.

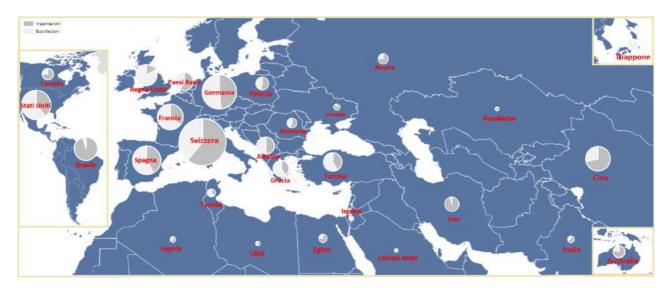
The market does not grow only because it is the sum of smaller markets, it becomes larger because the lower prices due to economies of scale contribute to widening the number of consumers for all the products concerned. The creation of a larger market, therefore, means greater competitiveness with regard to imported products, but also greater competitiveness on the internal markets and not only that, also lower costs lead to greater competitiveness also on third markets. This will bring to a more attractive capacity for foreign direct investments (FDI).

There is strong evidence that direct investments from abroad are attracted, in more than proportional quantities, to countries that are well integrated in the European transport network and have created free trade areas. After having represented the North Macedonia SEZs case, here after some feature and of Apulian SEZs are discussed.

An integrated transport network can play a very important role in attracting a series of foreign direct investments (FDI) linked to the relocation of production by more heavily industrialized countries and to take advantage of the country's competitive advantages.

Figure 15. Main international trade partners of Apulia Region, 2017.





Source: COEWEB - ISTAT data (2018) elaborated by AdSP MAM.

Transport infrastructure projects should be seen as the instrument supporting the development of complementary efficient logistics chains in the Mediterranean, Black Sea and Eastern neighbouring countries. They have a role to play in the context of macroregional and EU strategies and seek synergies with transport initiatives developed by the Union.

The ports in the Eastern Mediterranean and Black Sea area are the European Union's door to the neighbouring countries in the South East where the connections are predominantly short-sea ones, as most ports have no direct deep-sea services at all. Thus, further developing the transport network among this area by reducing the distances becomes crucial for increasing trade relations and benefits from countries' competitive advantages.

9.2. The role of Apulian SEZs

The Italian Government, in order to "favour the creation of favourable conditions in economic, financial and administrative terms, which allow the development, in some areas of the country, of companies already operating, as well as the establishment of new businesses in these areas…"³³ has assigned the Regions the task of defining proposals for the establishment of SEZs in their territory, with a path participated by local stakeholders.

According to the aforementioned decree, SEZ means a "geographically delimited and clearly identified area, located within the borders of the State, also consisting of non-territorially adjacent areas as long as they present a functional economic link, and which includes at least a port area with the established characteristics by regulation (EU) no. 1315 of 11 December 2013 of the European Parliament and of the Council, on Union guidelines for the development of the trans-European transport network (TEN-T)".

³³ Decree Law of 20 June 2017, no. 91, converted into law on 3rd August 2017, no. 123.



The process of establishing the SEZ is based on a more comprehensive plan that the country is carrying out to recover ground in the port and logistic system which ranges from the adoption of the National Strategic Plan for Ports and Logistics, to the unification of the ports up to planning for "integrated logistic areas" for the port system, rear-port areas, interports and logistic platforms, in a logic of interconnection to the multimodal corridors of the TEN-T network.

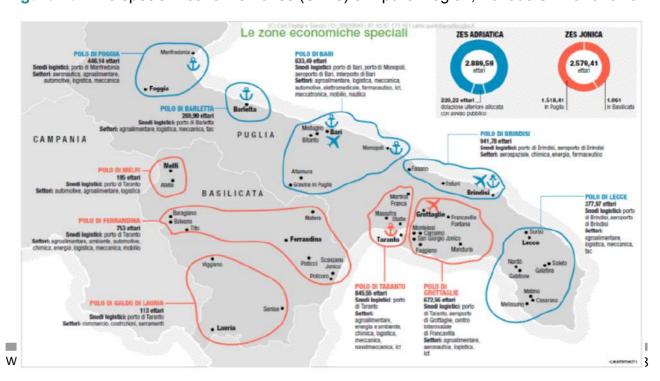
Apulia Region has decided to seize the opportunity of the SEZs by promoting the creation of two different Special Economic Zones, one of an inter-regional nature near the port of Taranto and another focused on the port system of the Adriatic Sea.

In SEZ areas different economic legislation is applied to that applied to the rest of the country. They also offer incentives for companies, through fiscal/financial benefits and administrative simplifications. The main consequence of the establishment of a SEZ is the possibility for companies to take advantage of important tax breaks and to benefit from significant administrative and bureaucratic simplifications.

The 2021 Budget Law facilitates investments in the SEZs. The new initiatives in the SEZ areas are rewarded by the Government with a 50% reduction in income tax. Furthermore, with the Decree Law no. 91/2017 (the so-called "southern decree"), the application of a tax credit proportional to the cost of the goods purchased was envisaged, by 31 December 2020, within the maximum limit, for each investment project, of 50 million euros.

To obtain these benefits, however, companies must keep their activities in the SEZ for at least seven years following the completion of the investment subject to the subsidies, under penalty of revocation of the benefits granted and enjoyed, and they must not be in liquidation or in the process of winding up.

Figure 16. Two special Economic Zones (SEZs) of Apulia Region, Adriatic SEZ and Ionian





SEZ.

The interconnection to the multimodal corridors of the TEN-T network seems to be one of the focal points of the new constituted SEZs which aim to promote the integration of value chains at regional and inter-regional level, through the enhancement and relaunch of the role and functions of logistical and productive integration of port systems and regional logistics platforms and hubs.

Some other incentives and benefits offer in SEZs areas are summarized as follow:

- The single SEZ authorization
- A single access point for businesses: The Single Administrative Desk (SUA) at the Port System Authority, supported by a SEZ Office
- Reduced procedure completion times
- Access to tax credit for investments in the SEZ area
- Restructuring of the IRAP tax for companies investing in the SEZ area
- Exemption of preliminary investigation costs due to ASI Consortia for companies in the SEZ area

At strategic level of transport sector, also through SEZs promotion, the Apulia Region aims to give more attention to the south-north traffic flows and to the connections with the countries opposite to the Adriatic shore and to the Balkan area whose economy is growing. Furthermore, by strengthening the role of ports as an interconnection point between maritime transport and other transport modes to restore the role of Adriatic ports as natural access points to the east and west.

10. Final remarks

The implementation of Corridor VIII has been going through various financial and political phases that have affected its completion. The significant socio-economic and network infrastructure density imbalance between the non-EU countries involved – expecially Albania and North Macedonia – and the other EU partners, remains relevant.

Despite the weak coordination of planning and actions in the transport sector among the interested countries, some reasonable questions are raised about setting up the Corridor VIII.

The analysis of socio-economic features highlights that the countries involved have shown growth patterns in the recent years compatible with a reasonable demand pull for the infrastructure and a potential for being integrated in the international value chains by attracting foreign direct investment and improving their business climate.

The interest in Corridor VIII still remains very strong. To make this interest even more credible a real political will and concrete actions should be shown. A first step in this



direction is the Corridor 8 multidisciplinary initiative, carried forward this year by the three Governments involved on the Eastern side of Corridor VIII, aiming to create a political platform to deepen the cooperation and the strategic interest for the three countries.

First, it requires removing existing obstacles at transport policy level. Till now, initiatives on developing the Corridor VIII are undertaken by single member States, mainly to improve their local transport infrastructures in a perspective of a growth in national and international trade level. In order to assure that the mutual interest in promoting multilateral development programs becomes vital it requires a deeper interaction of the transport policy framework, but also a coordination of priorities, investments and policies in the transport sector.

The latter is related, at the same time, on how to proceed in the context of a still incomplete Corridor VIII. It means that the further development must take place according to the priorities of the axis. Also, aspects related to safety and security, to the multimodal dimension and to smart transportation, should be taken in consideration in constructing future-oriented transport infrastructures solutions, so that the Corridor may answer to the future needs at EU and regional level.

In a revision process prospect of the TEN-T policy occurring this year, the geo-political development of expected EU enlargements should address reflection on a stronger integration of all Western Balkans countries and a prioritization of investments in transport infrastructure of Corridor VIII completion based on duly justified needs.

Much needed reforms, policies and actions to support the sector are needed with the objective of achieving increasing involvement of the geographic regions that border EU member states.

It is within this framework that the specific role of Corridor VIII gains further importance, as it represents the main East-West axis connecting the South part of the Mediterranean basin (ports of Bari and Brindisi) to the South-eastern Balkans up to the Black Sea, as well as to the regions of the Caucasus. These are strategic and geopolitically relevant connections that should be inserted in the EU priorities and all the EU countries involved should work together with the non-EU countries in order to set priorities, accompany and support an integrated governance of the infrastructures, capable of defining medium-term priorities, projects and funding coherent with the need of creating an interconnected network of railways' infrastructures and sevices, roads and logistic centers, connecting ports and airports on the two sides of Europe.



Acknowledgments:

Useful support in data gathering by Alessandro Gardelli and Gianluca Frizzale is acknowledged. The authors wish to thank participants to the Adriatic Connectivity Forum











This project is co-financed by the European Union under the instrument for Pre-Accession Assistance (IPA II)

This document has been produced with the financial assistance of the Interreg IPA CBC Italy-Albania-Montenegro Programme. The contents of this document are the sole responsibility of Puglia Region and can under no circumstances be regarded as reflecting the position of the European Union and of the Interreg IPA CBC Italy-Albania-Montenegro Programme Authorities.