

Economic Analysis Report on Freight Potentials for the Danube from Third Neighbouring Countries – Focus on Bosnia & Herzegovina

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1 The focus and scope of the Report

Work Package 2 - Facilitate Inland Waterway Transport (IWT) and Modal Shift, of the Grant Agreement¹ concluded between the European Commission/DG MOVE and the Danube Commission in May 2023 incorporates Task 2.3.2 - Facilitate freight flows EU - Neighbouring third countries in Rhine-Danube corridor. This task covers the period from 01/01/2023 till 30/06/2026 and foresees the following activities:

- Identifying freight potentials in non-EU countries connected via the Danube and via the 'Short-sea shipping' in the Black Sea with a special focus on Serbia, Moldova, Ukraine, Western Balkans, Georgia, and Turkey; provision of an economic analysis report
- Identification of the infrastructure investment needs in the Danube ports fostering cargo flows from these countries as part of the economic analysis report
- Facilitation of the development of EU-funded projects which lead to higher volumes on the Danube and in Danube ports.
- Participate in events promoting the use of the Danube River waterway organized by partner organizations in the framework of EUSDR PA1A and EU-funded projects
- Organise a yearly workshop promoting the Danube as a logistics solution with stakeholders from a selected neighbouring third country in cooperation with national or transnational business organisations active in the promotion of Danube transportation.

The work program of the task foresees two deliverables:

- D2.3.2.1 Economic analysis report on freight potentials for the Danube from third neighbouring countries (Georgia, Moldova, Serbia, Türkiye, Western Balkan), including related infrastructure investment needs in Danube ports, and
- D2.3.2.2 (Co-)organizing a yearly workshop promoting the Danube waterway with stakeholders from a selected neighbouring third country in the year 2024, 2025 and 2026.

There is a close thematic and organisational link between Deliverable D2.3.2.1, the economic analysis of freight transport potential for the Danube from EU neighboring third countries, and Deliverable D2.3.2.2, the annual workshop to promote transport with EU neighboring third countries.

On the one hand, the economic analysis is intended to support the preparation and realization of the workshops by providing economic facts and figures; on the other hand, the results of the workshops are intended to supplement and expand the analysis report gradually.

The yearly workshop is intended to form a starting point for close cooperation between public and private stakeholders of EU states and the neighboring third country and thus

¹ Project ref. 101127323 – 22 – HU – TG – GRANT 3 – Danube

shall lead to follow-up activities as part of the implementation of Task 2.3.2 in subsequent years. However, Task 2.3.2 also aims to ensure that the yearly workshop initiated by DC triggers further promotional activities carried out by organizations pursuing the same goal, namely, to stimulate cargo flows on the Danube waterway and thus support the EU's transport and climate goals by shifting cargo to the ecologically sustainable Danube waterway.

The analysis report is intended to become a living document issued in releases that are expanded through the workshops and at the same time is continuously updated for the workshops taking into consideration the findings of the workshops such as transport services infrastructure investments or infrastructure needs.

The Russian Federation's war of aggression against Ukraine has not only changed the geopolitical situation in Europe but has also led to significant changes in the flow of goods. The closure of the Ukrainian Black Sea ports and the ports on the Sea of Azov as a result of Russian aggression in February 2022 led to the establishment of the EU-UA Solidarity Lanes, which are being implemented along the lines of the EU Action Plan² adopted in May 2022. The Danube Commission supports the European Commission in the implementation of the EU-UA Solidarity Lanes as part of Grant III/Task 2.3.1.

The Ukrainian Danube ports and the Romanian Black Sea port of Constanta have become essential logistics hubs for the export of Ukrainian grain and the import of important economic goods. From February 2022 to October 2024, almost 46 million tonnes of grain and edible oils were exported via the Danube Solidarity Lane, making an important contribution to global food security. The role of the EU-UA Solidarity Corridors (Solidarity Lanes) has changed due to the growing importance of the Ukrainian Black Sea Corridor (ports of Greater Odessa), which became operational in autumn 2023. Currently, the Solidarity Lanes (note: all, not just the Danube) are extremely important for Ukraine's imports (approx. 90%), essential for the export of non-agricultural goods (approx. 60%) and complementary for Ukraine's grain exports (approx. 25%). In the third quarter of 2024, approx. 75% of UA grain exports travelled via the ports of Greater Odessa (Yuzhny, Chernomorsk, Odessa), 10% via the UA Danube ports, 10% via the railways and 5% by truck (of which approx. 100 trucks per day in both directions via the Orlivka-Isaccea Danube ferry connection). On average in July-September 2024, approx. 500,000 tonnes of grain were exported per month via the UA Danube ports, and approx. 3,500,000 tonnes via Greater Odessa. The greatly increased importance of imports via the UA Danube ports is reflected in the fact that more than half of the approx. 40,000 tonnes of goods handled in the UA Danube ports per day are other goods, such as iron ore and metal goods (exports) and fuels (imports).

On 23 June 2023, the European Council granted Ukraine, together with Moldova, the status of candidate country at a European Council summit in Brussels. On 8 November 2023, the European Commission recommended to the European Council that Georgia be granted candidate country status, which it did on 14 December 2023. With Serbia which was granted candidate country status at the EU summit on 1 March 2012 (accession negotiations began on 21 January 2014) all 10 Danube states are either EU member

² COM(2022) 217 final

states (7 states) or have the status of an EU candidate (3 states). On 21 March 2024, the heads of state and government of the European Union agreed at the EU summit in Brussels to open accession negotiations with Bosnia & Herzegovina.

Bosnia & Herzegovina (BiH) borders the Sava River which is a major tributary of the Danube River and forms part of the Rhine-Danube TEN-T core corridor. Before the war which led to the break-up of Ex-Yugoslavia, the Sava River counted several million tons of cargo transported by inland barges.

The Republic of Türkiye (hereinafter ‘Türkiye’) is a key economic partner of the EU and a candidate country. An EU-Turkey Custom Union entered into force in 1995. EU accession negotiations started in 2005 but have been at a standstill since 2018 in line with the decision of the European Council as a reaction to the deterioration in the key areas of the rule of law, fundamental rights, and democracy. The EU remains engaged with Türkiye, cooperating in areas of common interest, such as trade, migration, counterterrorism, public health, climate, energy, transport, and regional issues.

Bearing in mind the geopolitical situation and the economic interaction of the European Union and thus also the Danube states with neighboring third countries, the Secretariat of the Danube Commission proposed to carry out two activities in 2024 under Task 2.3.2 Grant III:

- A Workshop promoting cargo flows on the Danube Waterway and Danube River- and seaports from and to Türkiye, organised with the help of the Turkish Embassy in Budapest as well as with actors from the Hungarian – Turkish business community. This event took place on 6 June 2024 and an economic analysis report as a deliverable has already been submitted in September 2024.
- A workshop in the Port of Brčko (Bosnia & Hercegovina) promoting cargo flows from the Danube region to and from Brčko as well as into its economic hinterland of Bosnia & Hercegovina. This event is planned to take place on 18-19 September 2024 in Brčko.

The second release of this report focuses on the trade and cargo flows between BiH and the Danube states with special attention to the Port of Brčko which holds strategic importance due to its location on the Sava River, which connects Bosnia & Herzegovina to the broader Danube River network, offering access to Central and Eastern European markets. It is the most important river port in Bosnia & Herzegovina, making it a critical hub for the country’s inland waterway transport (IWT). Its revitalization and development are essential for enhancing connectivity and boosting economic activity, in the region.

After the event, the analysis report was supplemented with specific results of the discussions between the event participants.

With the workshops planned for 2025 and 2026, the analysis report will be expanded in terms of content and updated in case of a follow-up workshop in the same country.

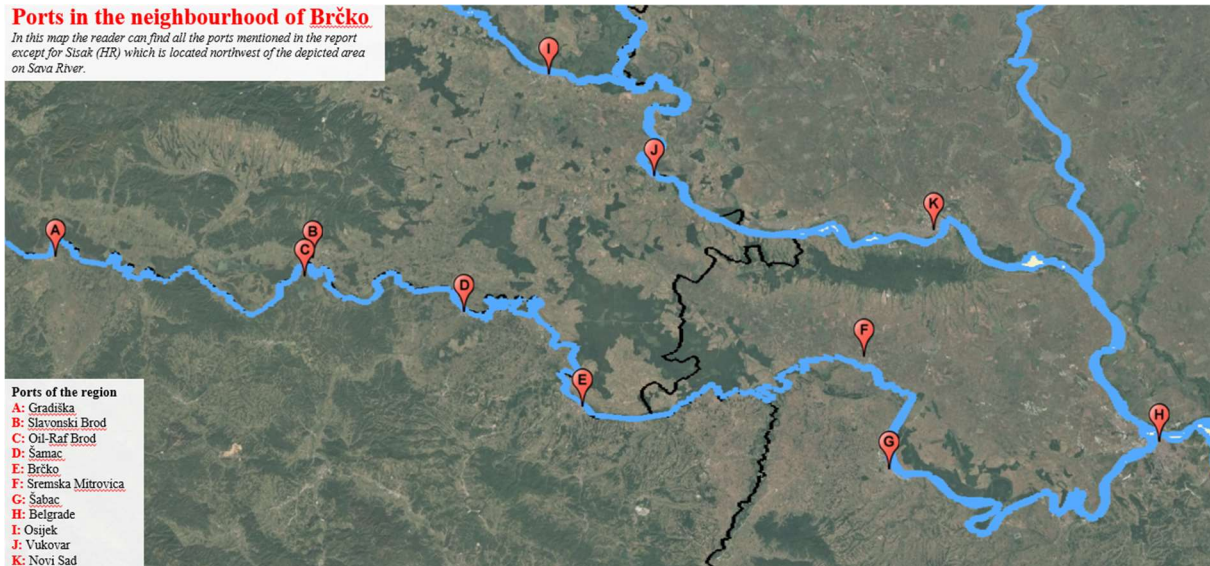
The freight analysis is broken down into two parts:

1. Trade statistics: trade (export/import) values (all modes of transport) between Danube/non-Danube countries and BiH filtered by year, destination and type of goods.

2. Freight statistics: general and Inland Waterway Transport volumes in the Sava River basin with a special focus on the port of Brcko filtered by year, and type of goods.

For an easier understanding of the geographical aspects of the discussed topic, a map was created that shows the locations of the ports and settlements mentioned in the report.

Figure 1. Locations of ports on analyzed transport routes



Source: the map was edited by the Secretariat with the help of software Google Earth Pro

The DC has again defined two years as subjects of analysis and comparison: 2019 – as a reference year before COVID-19 and 2023 as the last year with 100% comprehensive accessible quantitative data within the subject. The three main sources of the text were the statistical office of BiH (BHAS), the International Sava River Basin Commission (ISRBC) and the administration of the Port of Brcko.

Note:

The aim of the report is to collect basic information on the flow of goods between BiH and the Danube region. These flows should help in understanding the current economic interaction of BiH with Danube countries. The analysis will help to identify business sectors and stakeholders that could be targeted for participation in facilitation workshops. Given the purely supportive nature of the report for the workshops and the planned limited resource allocation for its preparation, the report does not aim to provide a methodologically correct freight potential analysis. Such an analysis would need to include a more detailed collection of data on volumes, frequencies, routes, costs, infrastructure details, regulatory aspects, a trend analysis to assess future development, an assessment of the competitive elements of routes for different market segments, the definition of development scenarios, a freight flow simulation based on the infrastructure network, etc. The DC Secretariat does not have the necessary software tools for such an economic analysis and calculation of the freight potential, nor does it have the necessary budget under the Grant 3 Agreement.

2 General economic facts on Bosnia & Herzegovina

Bosnia & Herzegovina has one of the lowest GDP per capita among European countries according to the World Bank. As of 2023, its GDP is estimated to be around \$27 billion, placing it among the smaller economies in Europe. Bosnia & Herzegovina is a member of

the Central European Free Trade Agreement (CEFTA) and has been a potential candidate for European Union membership since 2003.

In October 2022, the Commission recommended Bosnia & Herzegovina for candidate status, on the understanding that a number of steps are taken. In December 2022, the European Council granted Bosnia & Herzegovina the status of candidate country. In December 2023, the European Council decided it will open accession negotiations with Bosnia & Herzegovina, once the necessary degree of compliance with the membership criteria is achieved. It also invited the Commission to report to the Council on progress at the latest in March 2024, with a view to making a decision.

Building on the Commission’s recommendation of 12 March 2024, the European Council decided in March 2024 to open accession negotiations with Bosnia & Herzegovina.

Table 1. General information
(BiH, 2023)

Metric	2023
Population, million	3.2
GDP, current US\$ billion	27.1
GDP per capita, current US\$	8 426
Life Expectancy at Birth, years	75

Source: <https://data.worldbank.org/>

In 2023, Bosnia & Herzegovina’s real GDP grew by a modest 1.9%, largely supported by a slight increase in private consumption (2.0%) and a strong boost in government consumption (4.1%). Investments, measured as gross fixed capital formation, saw a minor increase of 1.6%. Exports experienced a sharp decline of -6.0%, while imports also decreased by -3.0%, contributing to a mixed trade environment.

By sector, agriculture grew by 3.1%, industry contracted significantly at -3.4%, and the services sector expanded moderately by 3.8%, playing a key role in the economy. Inflation was notably high at 6.1%, adding pressure on consumers and businesses.

The current account balance in 2023 stood at a deficit of -4.7% of GDP, reflecting significant external imbalances. Net foreign direct investment remained steady at around 3.2% of GDP. Despite the economic pressures, the fiscal balance remained in slight deficit at -0.9% of GDP, while public debt stood at 36.2% of GDP, marking a stable fiscal outlook for the country.

This overall performance reflects Bosnia & Herzegovina’s continued efforts at economic recovery amidst both internal and external challenges.

Table 2. Economic outlook (BiH, 2021-2026)

	2021	2022	2023e*	2024f**	2025f	2026f
Real GDP growth, at constant market prices	7.3	3.8	1.9	2.6	3.3	4.0
Private Consumption	4.0	3.0	2.0	2.3	2.8	3.2
Government Consumption	6.1	2.7	4.1	4.6	1.5	3.7
Gross Fixed Capital Formation	33.9	18.1	1.6	7.6	5.8	1.7
Exports	5.0	9.9	-6.0	4.0	5.0	6.0
Imports	8.0	12.0	-3.0	6.0	4.0	3.0
Real GDP Growth, at constant factor prices	7.4	4.2	1.9	2.6	3.3	4.0
Agriculture	3.4	3.5	3.1	3.0	3.2	3.2
Industry	10	1.4	-3.4	2.8	3.2	3.2
Services	6.8	5.5	3.8	2.5	3.3	4.4
Inflation (CPI), avg.	2.0	14.0	6.1	2.7	1.0	0.5
Current Account balance (% of GDP)	-2.5	-4.5	-4.7	-4.8	-5.4	-5.2
Net Foreign Direct Investment (% of GDP)	3.3	3.0	3.2	3.4	3.9	3.9
Fiscal Balance (% of GDP)	-0.3	0.4	-0.9	-1.7	-0.2	-0.4
Debt (% of GDP)	37.8	35.8	36.2	36.2	35.9	35.3

Source: <https://data.worldbank.org/>

*e=estimation, **f=forecast

3 Key macroeconomic indicators of the examined countries

In this first subchapter, the Secretariat would like to portray the change in some key macroeconomic indicators of BiH and the Danube countries in the past years. In some cases, the Secretariat could only find economic information/metrics which use dollars and not euros as units of measurement.

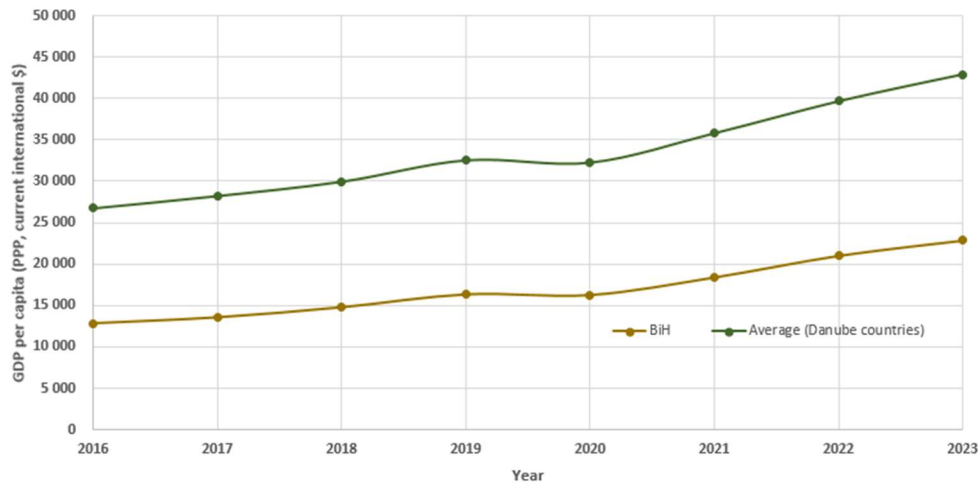
The average GDP per capita (PPP) of the Danube countries was 32 548 dollars/cap in 2019 and 42 898 dollars/cap in 2023. BiH's GDP per capita (PPP) was significantly below average in the two highlighted years (16 354 dollars/cap in 2019 and 22 846 dollars/cap in 2023). In both years, only two of the Danube countries – Moldova and Ukraine - had lower results.

Table 3. GDP per capita
(PPP in current int. dollars, Danube countries and BiH, 2016-2023)

Country	2016	2017	2018	2019	2020	2021	2022	2023
Austria	52 684	54 173	56 938	60 575	58 611	63 421	70 976	73 751
Bulgaria	20 066	21 458	23 006	25 527	25 736	29 407	35 470	38 690
Germany	50 580	53 071	55 196	58 252	57 905	61 940	66 616	69 338
Croatia	25 319	27 267	28 980	32 124	30 447	36 954	42 171	45 910
Hungary	27 942	29 496	31 909	35 153	35 016	38 644	43 659	45 942
Moldova	10 488	11 464	12 435	13 319	12 513	15 122	15 719	17 384
Romania	23 905	26 943	29 568	33 551	34 295	37 971	43 240	47 903
Serbia	15 858	16 611	17 718	19 689	20 066	22 575	25 062	27 402
Slovakia	29 738	30 142	31 370	33 943	35 000	37 795	41 013	44 650
Ukraine	11 148	11 861	12 634	13 348	13 103	14 289	12 675	18 007
Avg.								
Danube	26 773	28 249	29 975	32 548	32 269	35 812	39 660	42 898
BiH	12 869	13 581	14 800	16 354	16 275	18 396	20 999	22 846

Source: <https://data.worldbank.org/indicator/NY.GDP.PCAP.PP.CD>

Figure 2. GDP per capita (PPP in current int. dollars, Danube countries and BiH, 2016-2023)



Source: <https://data.worldbank.org/indicator/NY.GDP.PCAP.PP.CD>

From 2019 to 2023, the average annual inflation rate of the Danube countries increased from 6.6% to 10.6%, while BiH's increased from 2.5% to 5.5%, with both values peaking in 2022 before decreasing in 2023.

Also, from 2019 to 2022 the average unemployment rate of the Danube countries has increased from 5.2 to 6.5% which has decreased in 2023 to 4.9%. This latter value is even smaller than the pre-Covid 5.2 percent from 2019. Meanwhile, during these years the unemployment rate in BiH was in a constant decrease from 15.7% to 10.4%.

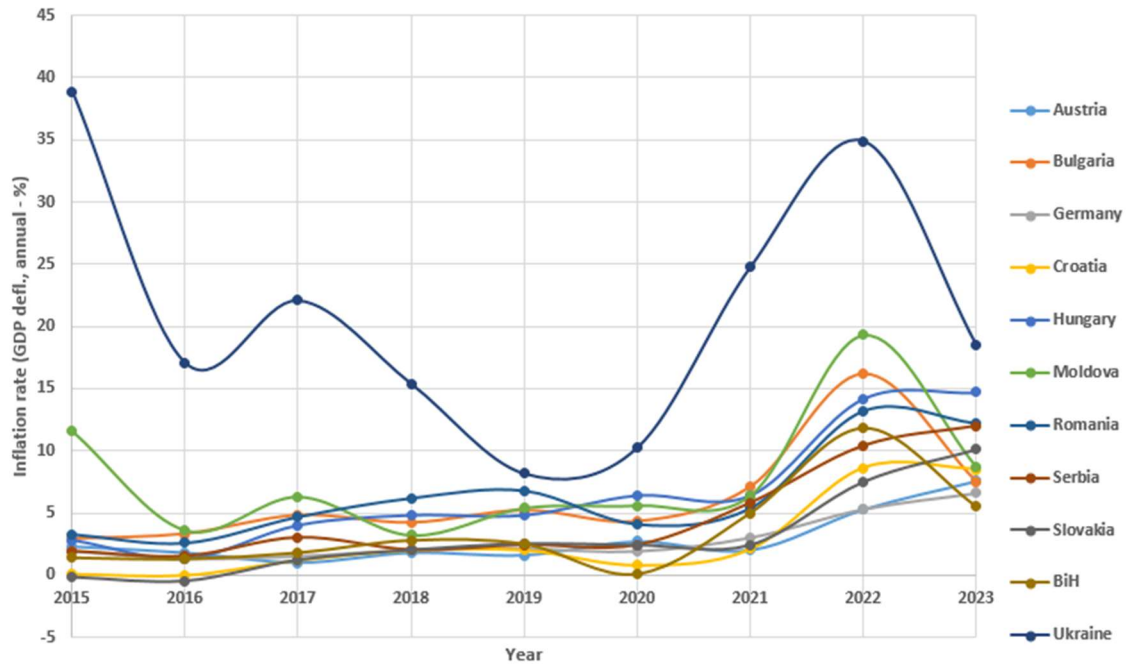
It is also visible from the data presented that in the past few years BiH experienced an unemployment rate much higher than the EU average, but they have recently managed to reduce it successfully. However, the country – partially owing to its high joblessness – was facing a lower-than-EU-average inflation rate, which Covid-19 temporarily increased, though not to the same extent as in Danube countries like Bulgaria or Hungary.

Table 4. Annual inflation rate
(GDP deflator in percentage, Danube countries and BiH, 2015-2023)

Country	2015	2016	2017	2018	2019	2020	2021	2022	2023
Austria	2.3	1.8	1.0	1.8	1.6	2.7	2.0	5.3	7.6
Bulgaria	2.9	3.3	4.8	4.2	5.2	4.3	7.1	16.2	7.5
Germany	1.9	1.3	1.5	2.0	2.1	1.9	3.0	5.3	6.6
Croatia	0.1	0	1.2	2.0	2.0	0.8	2.1	8.6	8.5
Hungary	2.8	1.3	4.0	4.8	4.8	6.4	6.4	14.2	14.7
Moldova	11.6	3.6	6.3	3.2	5.4	5.6	6.4	19.3	8.7
Romania	3.3	2.6	4.7	6.2	6.8	4.1	5.4	13.2	12.2
Serbia	1.9	1.5	3.0	2.0	2.4	2.4	5.8	10.4	12.0
Slovakia	-0.2	-0.5	1.2	2.0	2.5	2.4	2.4	7.5	10.1
Ukraine	38.9	17.1	22.1	15.4	8.2	10.3	24.8	34.9	18.5
Avg. Danube	6.6	3.2	5.0	4.4	4.1	4.1	6.5	13.5	10.6
BiH	1.4	1.3	1.8	2.8	2.5	0.1	5.0	11.8	5.5

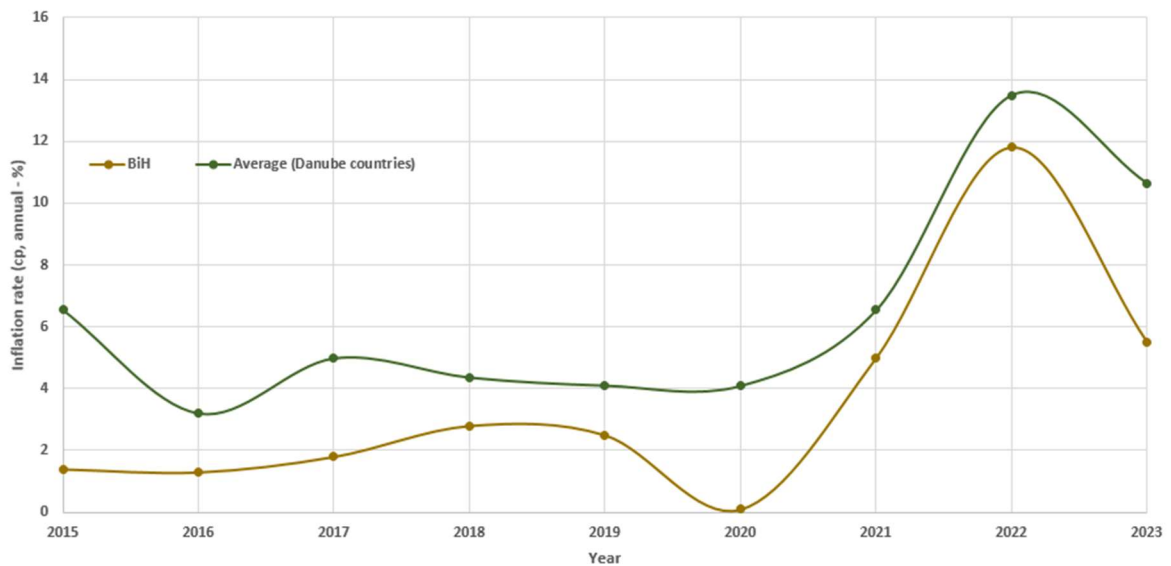
Source: <https://data.worldbank.org/indicator/FP.CPI.TOTL.ZG?end=2022&start=2013>

Figure 3. Annual inflation rate (GDP deflator in percentage, Danube countries and BiH, 2015-2023)



Source: <https://data.worldbank.org/indicator/FP.CPI.TOTL.ZG?end=2022&start=2013>

Figure 4. Annual inflation rate (GDP deflator in percentage, the average of the Danube countries' and BiH, 2015-2023)



Source: <https://data.worldbank.org/indicator/FP.CPI.TOTL.ZG?end=2022&start=2013>

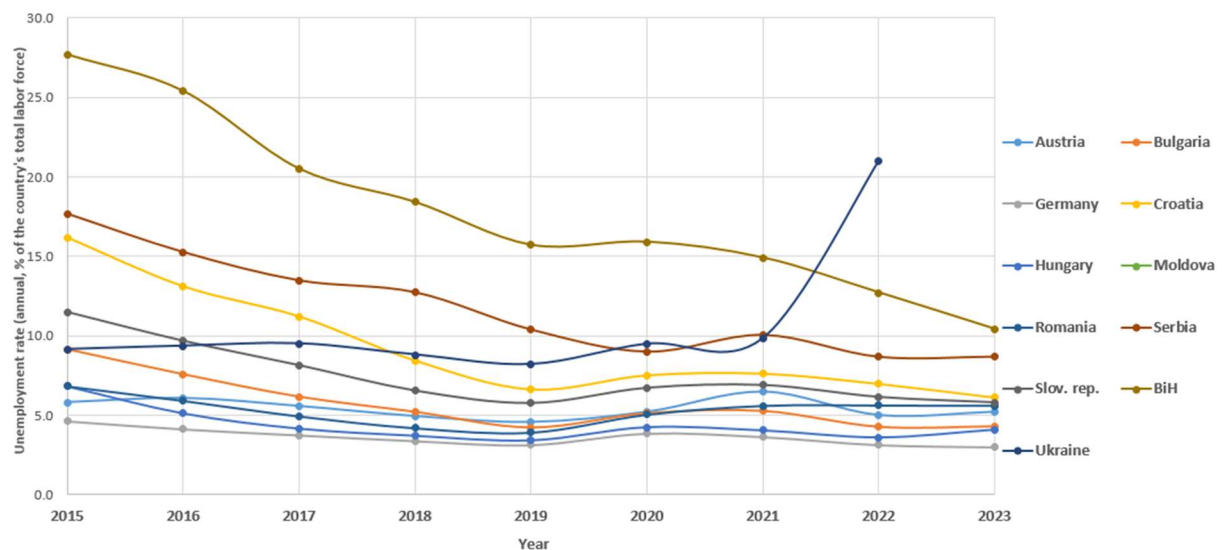
Table 5. Annual unemployment rate
(% of the country's total labor force,
Danube countries and BiH, 2015-2023)

Country	2015	2016	2017	2018	2019	2020	2021	2022	2023
Austria	5.8	6.1	5.6	4.9	4.6	5.2	6.5	5.0	5.2
Bulgaria	9.1	7.6	6.2	5.2	4.2	5.1	5.3	4.3	4.3
Germany	4.6	4.1	3.7	3.4	3.1	3.9	3.6	3.1	3.0
Croatia	16.2	13.1	11.2	8.4	6.6	7.5	7.6	7.0	6.1
Hungary	6.8	5.1	4.2	3.7	3.4	4.3	4.0	3.6	4.1
Moldova	1.8	1.6	1.6	1.2	1.5	1.2	0.8	0.9	1.6
Romania	6.8	5.9	4.9	4.2	3.9	5.0	5.6	5.6	5.6
Serbia	17.7	15.3	13.5	12.7	10.4	9.0	10.1	8.7	8.7
Slovakia	11.5	9.7	8.1	6.5	5.8	6.7	6.9	6.1	5.8
Ukraine	9.1	9.4	9.5	8.8	8.2	9.5	9.8	21.0*	NA
Avg. Danube	8.9	7.8	6.9	5.9	5.2	5.7	6.0	6.5	4.9
BiH	27.7	25.4	20.5	18.4	15.7	15.9	14.9	12.7	10.4

Source(s): <https://data.worldbank.org/indicator/SL.UEM.TOTL.NE.ZS>, <https://www.ilo.org>

*The unemployment rate for Ukraine in 2022 is an estimation made by the International Labor Organization.

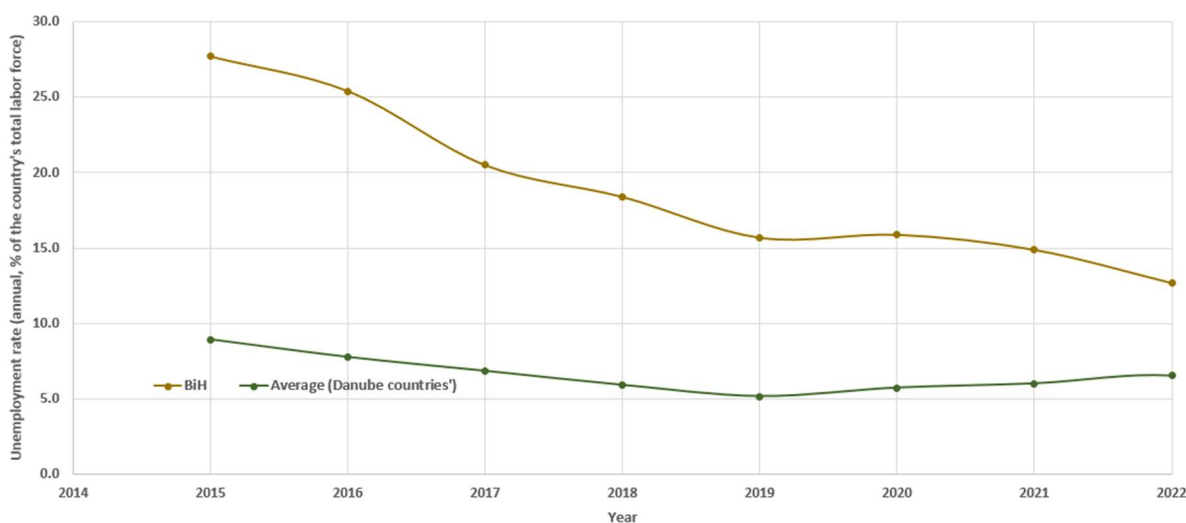
Figure 5. Annual unemployment rate
(% of the country's total labor force,
Danube countries and BiH, 2015-2023)



Source(s): <https://data.worldbank.org/indicator/SL.UEM.TOTL.NE.ZS>; <https://www.ilo.org>

*The unemployment rate for Ukraine 2022 is an estimation made by the International Labor Organization.

Figure 6. Annual unemployment rate (% of the country's total labor force, the average of the Danube countries' and BiH, 2015-2023)



Source(s): <https://data.worldbank.org/indicator/SL.UEM.TOTL.NE.ZS>
<https://www.ilo.org>

*The unemployment rate for Ukraine 2022 is an estimation made by the International Labor Organization.

4 Trade Statistics of BiH

For this chapter, the Secretariat has deeply examined the databases of the Agency for Statistics of Bosnia and Herzegovina (BHAS) and of Eurostat. However, it has only used the values as a source of the former as BHAS provided more detailed Statistics on BiH than Eurostat. Also, it is important to note that in many cases BHAS was not using USD or EUR as units of measurement but their national currency BAM (Bosnia & Herzegovina convertible mark). However, the Secretariat could easily convert the mentioned values to euros as the exchange rate of BAM has been fixed to Euro since 2002. When listing Danube countries, DC has opted to list them in 'downstream' order.

In both 2019 and 2023, the four largest export partners of BiH from the Danube countries were Germany, Croatia, Serbia and Austria. The results are not surprising, as Germany and Austria are the strongest Danube economies, while Serbia and Croatia are neighbouring countries of BiH. Also, it is interesting to note that in both years almost half the export values were coming from Non-Danube countries from which the most significant were Italy, Slovenia, Montenegro and the Netherlands.

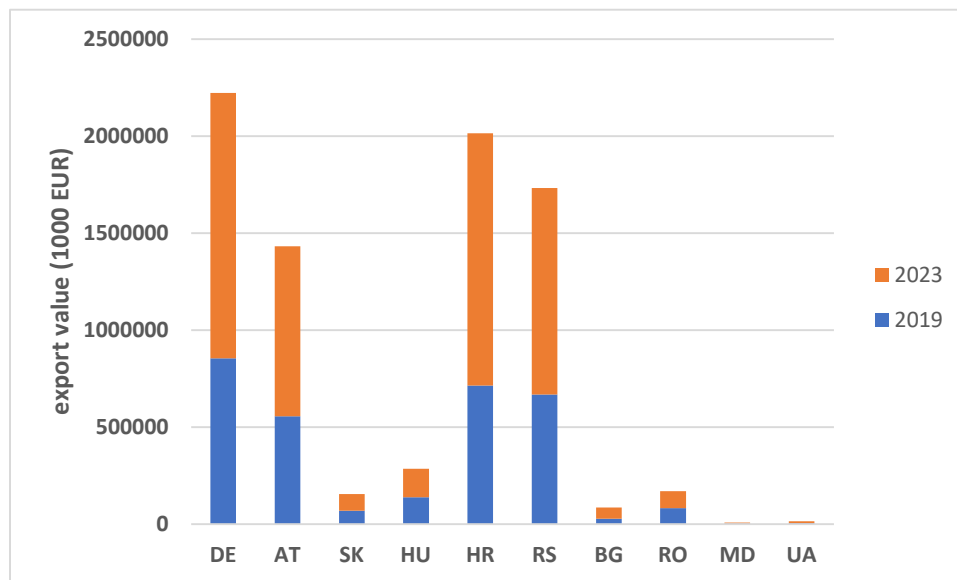
Though the ranking did not change from 2019 to 2023, it is important to note that the export values to Croatia increased the most among the four countries mentioned.

Table 6. Export by Danube countries
(thousand EUR, from BiH to Danube countries,
all modes of transport, 2019 and 2023)

Export destination	2019	2023	2019=100
Germany	854 954	1 367 547	160
Austria	556 062	875 161	157
Slovakia	69 497	85 745	123
Hungary	137 552	147 082	107
Croatia	714 246	1 300 325	182
Serbia	667 798	1 064 862	159
Bulgaria	26 620	58 955	221
Romania	81 150	88 433	109
Moldova	2 368	4 524	191
Ukraine	4 816	8 717	181
Non-Danube countries	2 748 491	3 518 918	128
From which			
Italy	663 272	739 323	111
Slovenia	513 175	691 171	134
Montenegro	207 724	351 783	169
Netherlands	123 899	212 196	172
Total	5 863 553	8 520 267	145

Source: <https://bhas.gov.ba/>

Figure 7. Export by Danube countries
(thousand EUR, from BiH to Danube countries,
all modes of transport, 2019 and 2023)



Source: <https://bhas.gov.ba/>

The ranking among Danube countries is almost the same when it comes to their import significance with BiH being on the receiving side. The only difference is that while at the export side Croatia was the second and Serbia was the third largest partner, here the situation is the opposite, making Serbia the second, and Croatia the third largest Danube country importer of BiH.

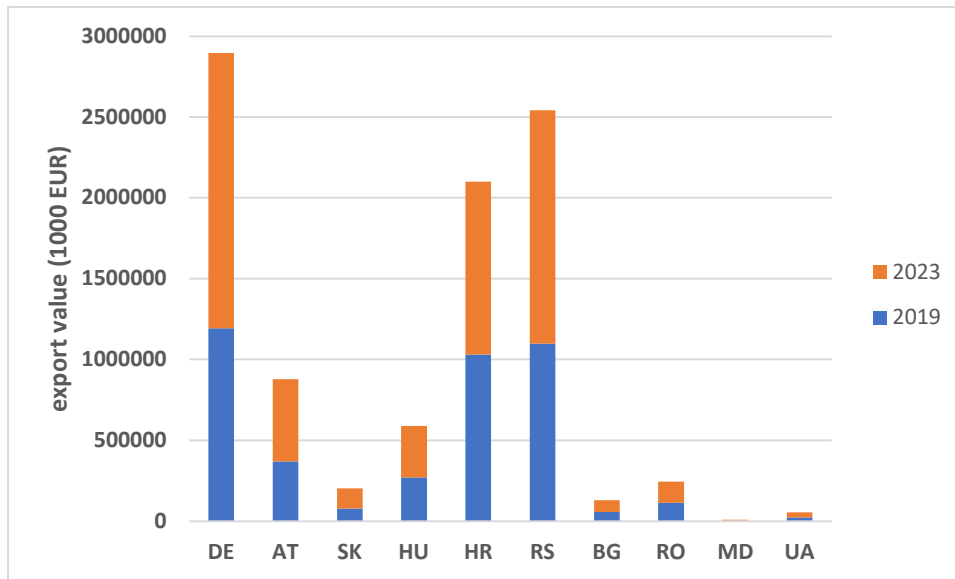
Also, it is also worth mentioning that on both the export and the import sides Danube countries are responsible for around roughly 50% of the international trade movements of BiH while the total international imports of BiH being 1.75-2 times higher than the total international exports of the country during the examined period. Also, it is interesting to note that in both years more than half the import values were coming from Non-Danube countries from which the most significant were Italy, China, Türkiye, Slovenia, the United States, Poland and Russia.

Table 7. Import by Danube countries
(thousand EUR, from Danube countries to BiH,
all modes of transport, 2019 and 2023)

Origin of import	2019	2023	2019=100
Germany	1 192 756	1 702 703	143
Austria	368 136	508 767	138
Slovakia	78 340	124 539	159
Hungary	269 968	318 310	118
Croatia	1 030 917	1 068 889	104
Serbia	1 097 051	1 443 884	132
Bulgaria	56 389	72 471	129
Romania	112 786	132 175	117
Moldova	2 596	5 303	204
Ukraine	22 272	31 236	140
Non-Danube countries	5 717 046	8 758 850	153
From which			
Italy	1 189 871	1 974 215	166
China	739 206	1 340 856	181
Türkiye	491 958	785 855	160
Slovenia	462 369	547 569	118
United States	343 680	403 544	117
Poland	297 622	444 293	149
Russia	230 108	235 559	102
Total	9 948 257	14 167 125	142

Source: <https://bhas.gov.ba/>

Figure 8. Import by Danube countries
(thousand EUR, from Danube countries to BiH,
all modes of transport, 2019 and 2023)



Source: <https://bhas.gov.ba/>

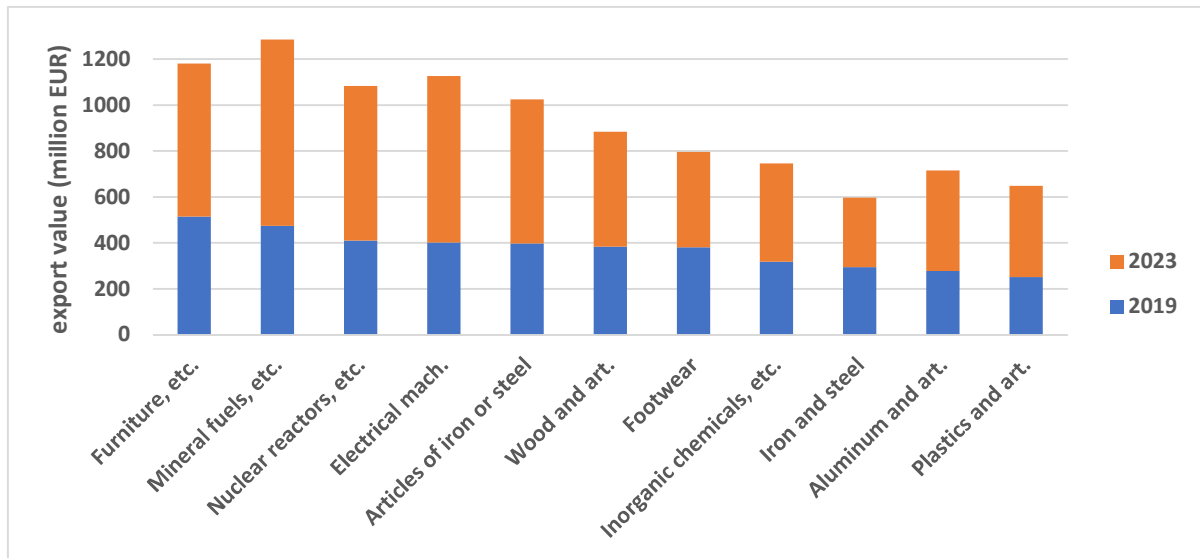
Notable increases are seen in "Mineral fuels, oils, and products of their distillation" (171% growth), "Electrical machinery" (181%), and "Nuclear reactors, boilers, machinery, and mechanical appliances" (164%). The total export value across all categories increased from 5,864 million EUR in 2019 to 8,520 million EUR in 2023, representing a 45% overall growth which can of course be partly the consequence of the general inflation. Other significant categories include plastic and articles, aluminum, and articles of iron or steel, all showing strong export growth.

Table 8. Export by the largest categories
(million EUR, from BiH to all the countries of the world,
all modes of transport, 2019 and 2023)

Category of good (HS)	2019	2023	2019=100
94. Furniture	514	667	130
27. Mineral fuels and oils and products of their distillation, etc.	474	811	171
84. Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof	410	672	164
85. Electrical machinery	401	726	181
73. Articles of iron or steel	398	626	157
44. Wood and articles of wood	384	500	130
64. Footwear	380	416	109
28. Inorganic chemicals; organic or inorganic compounds of precious metals, etc.	318	428	135
72. Iron and steel	294	303	103
76. Aluminum and articles	277	438	158
39. Plastic and articles	251	397	158
Other categories of goods	1 764	2 537	144
Total (all categories of goods)	5 864	8 520	145

Source: <https://bhas.gov.ba/>

Figure 9. Export by the largest categories
(million EUR, from BiH to all the countries of the world,
all modes of transport, 2019 and 2023)



Source: <https://bhas.gov.ba/>

The total imports grew from 9,948 million EUR in 2019 to 14,167 million EUR in 2023, reflecting a 42% overall increase which can of course be partly the consequence of the general inflation.. Notable increases are observed in categories such as "Mineral fuels, oils, and products of their distillation" (142%), "Nuclear reactors, boilers, machinery and mechanical appliances" (149%), and "Copper and articles" (226%). Other significant categories include "Plastics and articles" (136%), "Vehicles other than railway" (144%), and "Aluminum and articles" (213%), indicating diverse growth across multiple sectors.

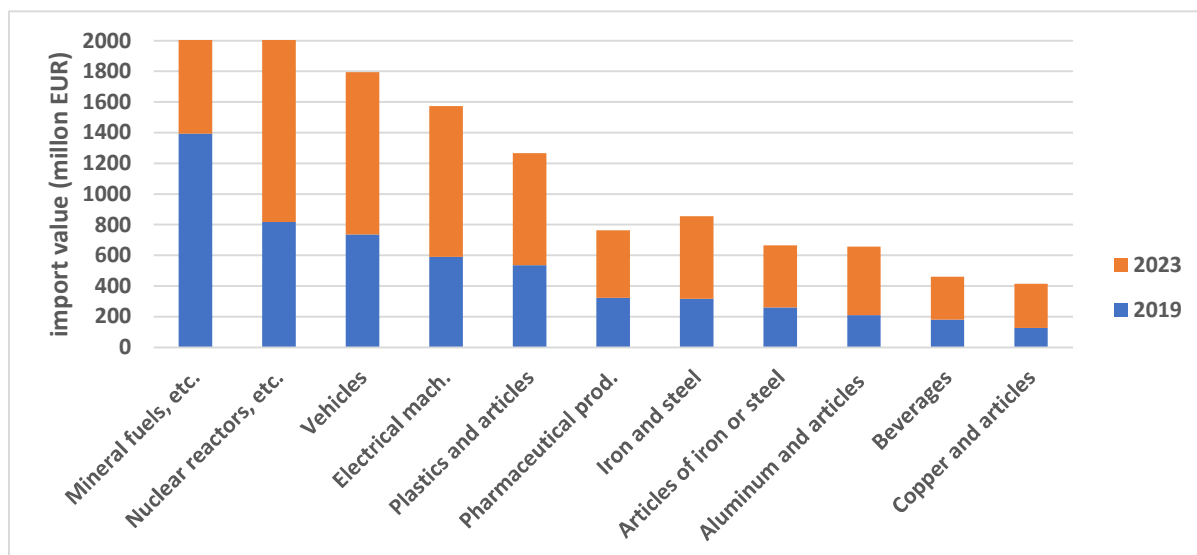
Table 9. Import by the largest categories
(million EUR, from all the countries of the world to BiH,
all modes of transport, 2019 and 2023)

Category of good (HS*)	2019	2023	2019=100
27. Mineral fuels and oils and products of their distillation, etc.	1 394	14 167	142
84. Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof	818	1 221	149
87. Vehicles other than railway	736	1 059	144
85. Electrical machinery	589	983	167
39. Plastics and articles	536	731	136
30. Pharmaceutical products	323	441	136
72. Iron and steel	317	539	170
73. Articles of iron or steel	261	405	155
76. Aluminum and articles	210	448	213
22. Beverages	182	278	153
74. Copper and articles	127	287	226
Other categories of goods	4 455	5 902	132
Total (all categories of goods)	9 948	14 167	142

Source: <https://bhas.gov.ba/>

*HS (Harmonized System) - an internationally standardized system used by customs authorities worldwide to classify traded products (developed by WCO).

Figure 10. Import by the largest categories (million EUR, from all the countries of the world to BiH, all modes of transport, 2019 and 2023)



Source: <https://bhas.gov.ba/>

5 Freight Statistics with a special focus on Port of Brčko

5.1 Freight transport in the Sava River basin

The Sava River Basin, encompassing Slovenia, Croatia, Bosnia and Herzegovina, and Serbia, plays a critical role in the inland waterway network of Southeast Europe. Managed by the International Sava River Basin Commission (ISRBC), the Sava River is a vital route for the transportation of goods and passengers, linking various economic hubs within these countries.

The Sava River spans approximately 945 kilometers, of which around 583 kilometers are navigable from Sisak in Croatia to its confluence with the Danube River at Belgrade. The connectivity provided by the Sava River enhances regional trade by linking the waterway to major European transport corridors. This connection allows for the seamless movement of goods from the Sava River to the Danube and further to the North Sea and the Black Sea via the Rhine-Main-Danube Canal. The river supports several key ports, including Brčko, Sisak, Slavonski Brod, and Sremska Mitrovica. These ports are integral to the transport of various types of cargo, such as bulk goods, containers, and general cargo.

From 2010 to 2019, significant volumes of goods were transported through the Sava River ports. In 2023, the total volume of goods transhipped reached approximately 5.5 million tons. The key goods being transported included crude oil, petroleum products, gravel, sand, coal, and other bulk materials. For example, the Port of Sremska Mitrovica handled 0.72 million tons of gravel, sand, and stone aggregates, highlighting the port's importance to the construction industry.

However, compared to the river Danube and the Rhine, the Sava river's navigability is more fluctuating, with an average of 260 navigable days per year in key sections like the

Port of Brčko. The navigability is partly affected by seasonal fluctuations in water levels, posing challenges to cost-effective and reliable transport operations. To address these issues, comprehensive dredging activities have to be carried out regularly. For example, last year, approximately 6.94 million cubic meters of dredging were executed across the Sava River Basin to maintain and improve navigability.

Also, recently, the European Bank for Reconstruction and Development (EBRD) has provided significant financial support for the revitalization of the Port of Brčko as it has seen a total investment of EUR 10 million, comprising EUR 3 million in grants and EUR 7 million in loans. These funds have been allocated for key infrastructure projects, including the procurement and installation of a new 27-ton crane, the construction of an operational plateau, and the reconstruction of access roads and railway tracks.

Looking ahead, planned dredging activities for 2024 aim to further enhance the river's navigability. Bosnia & Herzegovina, Croatia, and Serbia have identified several locations for dredging, focusing on both the Sava River and its tributaries with a total volume of planned dredging around 3,25 million cubic meters during the year. Another important recent development is that in 2023 new international piers were opened in Serbia, specifically in Sremska Mitrovica and Šabac which with the dredging developments are expected to increase the number of docking opportunities, enhancing the efficiency and capacity of the Sava River's transport network. However, the ISRBC has also expressed their concerns on the current navigational situations in their report on Statistics 2023: *"It must be stressed that the current navigability conditions on the waterways remain an obstacle to any kind of serious planning and negatively affect potential investors in the production sector."*

The challenges are varied, spanning administrative issues (such as the lack of an adopted rulebook between BiH and Croatia), as well as technical and financial obstacles. The Sava Commission member states are contributing unevenly to the international commitment of fairway maintenance. Also, a demining project for the right bank of the Sava River, covering 85 sites across nine municipalities, including Brčko, is set to commence by the end of 2024. This project, valued at 8 million euros, is funded by the World Bank and the EU/WBIF.

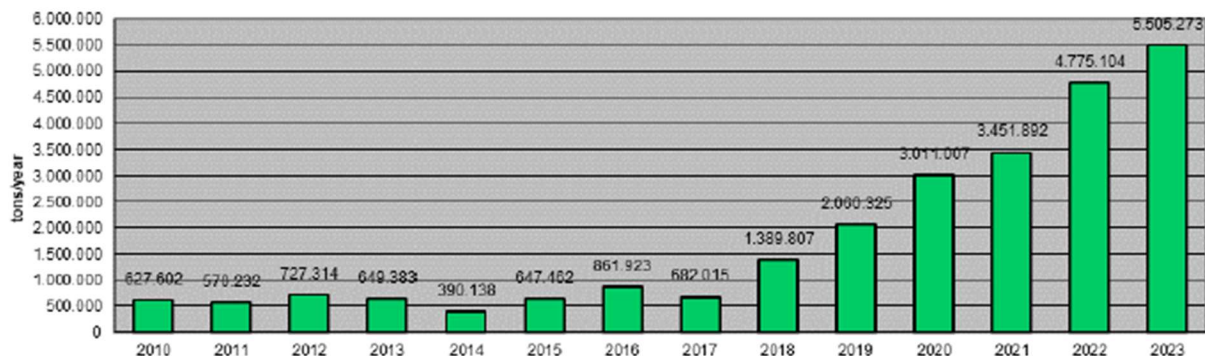
Also, since 2017, the Agency for Ports of the Republic of Serbia (PGA) has been maintaining statistical records for smaller transshipment sites, which are crucial for tracking detailed trends in both the volume and composition of transshipped goods. These locations have seen a significant rise in overall transshipment, primarily driven by building materials, oil products, coal, and sediment dredged from the Sava River bed and its tributaries.

Table 10. Transported freight in the Sava river basin by ports (tonnes, inland waterway transport, 2000-2023)

Year.	Brčko	Šamac	Oil-raf. Brod	BiH	Sl. Brod	Sisak	Croatia	Šabac	Sremska Mitrovica	Other places	Srbija	Total
2000					169.000	169.000	338.000					338.000
2001					210.000	204.432	414.432					414.432
2002					205.000	218.775	423.775					423.775
2003					201.000	160.000	361.000					361.000
2004					198.000	190.528	388.528					388.528
2005					174.000	174.003	348.003					348.003
2006		51.000		51.000	162.000	156.935	318.935					369.935
2007		168.079		168.079	180.000	139.899	319.899					487.978
2008	55.546	245.389		300.935	137.000	137.210	274.210					575.145
2009	269.585	107.854		377.440	125.800	120.931	246.731					624.171
2010	140.993	179.170		320.163	124.072	118.466	242.538		64.901		64.901	627.602
2011	36.177	174.685		210.862	85.033	83.121	168.154		191.216		191.216	570.232
2012	71.273	147.481		218.754	38.468	42.355	80.823		427.738		427.738	727.315
2013	71.822	82.787		154.609	39.280	42.345	81.625		413.149		413.194	649.428
2014	104.983	86.624	36.719	228.326	111913	49.899	161.812					390.138
2015	80.102	-	35.264	115.366	164470	53.903	218.373	92.976	220.747		313.723	647.462
2016	158.275	-	19.809	178.084	197812	89.960	287.772	135.337	260.730		1.658.009	2.060.325
2017	135.727	-	9.786	145.513	116.824	60.427	177.251	169.986	189.265		359.251	682.015
2018	98.339	-	29.500	127.839	131.175	65.704	196.879	148.819	234.465	681.805	1.065.089	1.389.807
2019	125.325	-	8.116	133.441	198.997	69.878	268.875	148.632	560.059	949.318	1.658.009	2.060.325
2020	72.783	-	-	72.783	138.046	55.425	191.471	170.478	486.374	2.089.891	2.746.753	3.011.007
2021	31.701	-	-	31.701	191.675	28.500	220.175	224.313	692.515	2.283.188	3.200.016	3.451.892
2022	40.606	-	-	40.606	160.535	38.246	198.781	142.135	1.194.015	3.199.567	4.535.717	4.775.104
2023	61.211	-	-	61.211	180.464	29.274	209.738	130.906	722.092	4.381.326	5.234.324	5.505.273

Source: ISRBC

Figure 11. Transported freight in the Sava River basin by ports (tonnes, inland waterway transport, 2000-2023)



Source: ISRBC

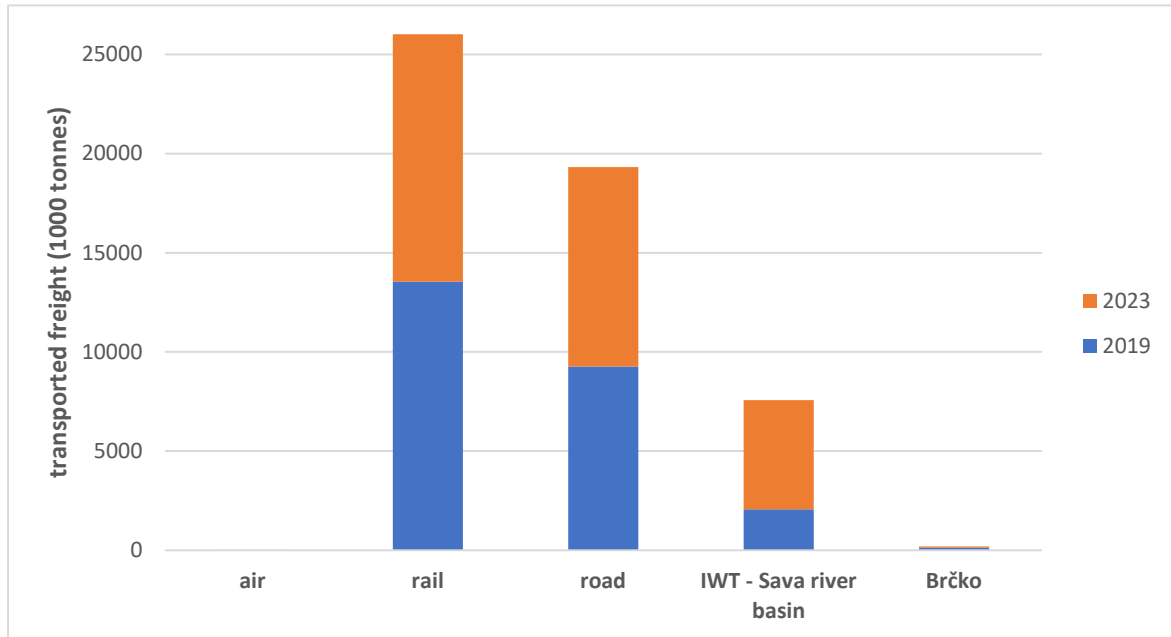
Between 2019 and 2023, air transport remained stable at 2 thousand tonnes, while rail transport saw a decline from 13,538 thousand tonnes to 12,486 thousand tonnes (92% of the 2019 level). Road transport experienced growth, increasing from 9,266 to 10,056 thousand tonnes (109%). In contrast, Brčko port faced a significant decrease, dropping from 125 to 61 thousand tonnes (49%). Overall, total freight turnover slightly decreased from 22,931 to 22,605 thousand tonnes (99%). A standout sector was the Sava River basin, which saw a substantial increase, jumping from 2,060 to 5,505 thousand tonnes, marking 267% growth.

Table 10. Freight turnover by mode of transport (thousand tonnes, from/to/inside BiH, 2019 and 2023)

Mode of transport	2019	2023	2019=100
Air	2	2	100
Rail	13 538	12 486	92
Road	9 266	10 056	109
Brčko	125	61	49
Total	22 931	22 605	99
The whole Sava River basin	2 060	5 505	267

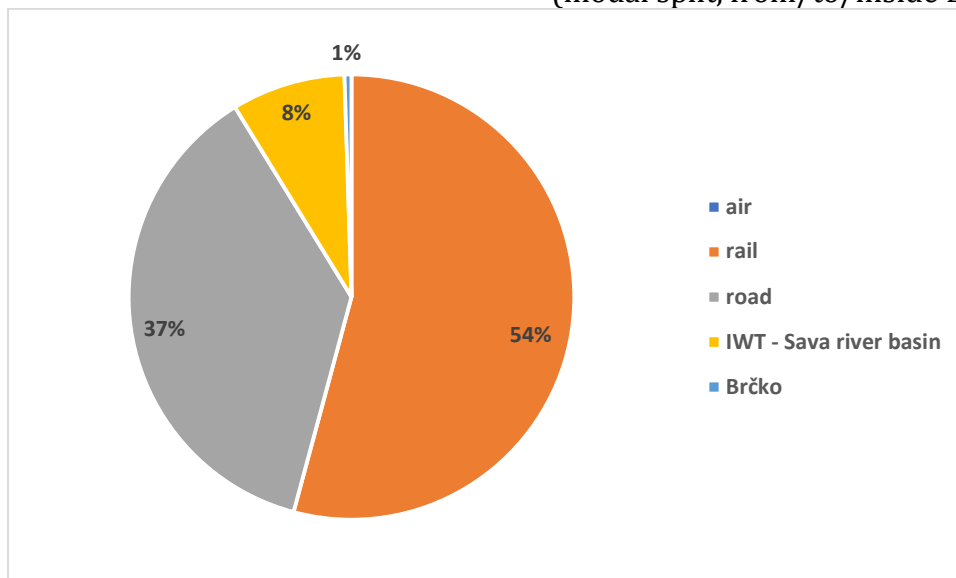
Sources: BHAS, ISRBC

Figure 12. Freight turnover by mode of transport (thousand tonnes, from/to/inside BiH, 2019 and 2023)



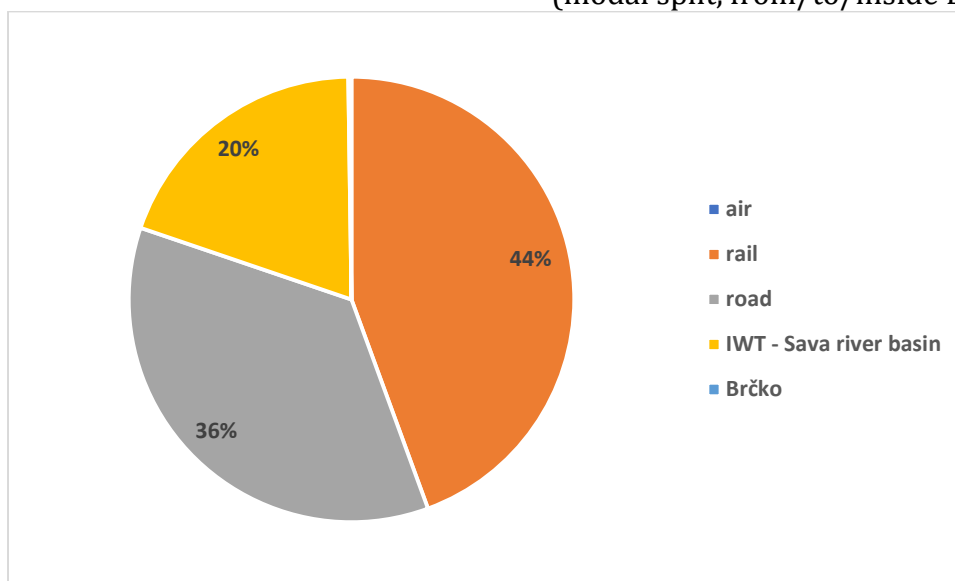
Sources: BHAS, ISRBC

Figure 13. Freight turnover by mode of transport (modal split, from/to/inside BiH, 2019)



Sources: BHAS, ISRBC

Figure 14. Freight turnover by mode of transport
(modal split, from/to/inside BiH, 2023)



Sources: BHAS, ISRBC

5.2 The Port of Brčko

The Port of Brčko, established in 1913 and expanded during the mid-20th century, serves as a pivotal logistic hub of the Sava region. It is located on the right bank of the Sava River in northeastern Bosnia & Herzegovina which allows it to connect directly with international markets via the Sava River by establishing direct trade flows along the river with the Danube ports of Western and Eastern Europe, as well as ports on the North Sea and Black Sea.

Port of Brčko spans approximately 13 hectares and features an operational coastline of 180 meters. It is equipped with various facilities, including closed and open storage spaces, a customs terminal, and railway tracks extending 2.5 kilometers. The port's main transshipment equipment includes several gantry cranes, forklifts, and a newly installed 27-ton crane, which enhances handling capacity and operational speed.

The port's annual capacity for transshipment is approximately 915,000 tons, handling diverse goods such as coal, petroleum coke, steel, and other bulk materials. However, in the past few years it has only used less than 10% of its capacity. The container terminal has also been expanded as part of ongoing revitalization efforts.

The Port of Brčko is strategically connected to the Tuzla-Vinkovci railway and major road networks, enhancing its accessibility and operational efficiency which is also supported by recent significant EBDR investments such as the construction of a new operational plateau, the installation of the already mentioned new crane, and the reconstruction of access roads and railway tracks.

The future development plans include further enhancements to the port's facilities and connectivity. These plans are part of broader efforts to integrate Brčko Port into the Rhine-Danube TEN-T core corridor, promoting economic growth and enhancing its competitiveness as a logistics hub in the region.

The highest cargo turnover was in 2009 with 270 thousand tonnes, which represented a significant increase compared to 2007 (482%) and the previous year. After a decline in 2011, the port saw gradual recovery in the following years, with peaks in 2016 and 2017. The years 2020 and 2021 reflect another sharp drop, likely due to disruptions, followed by a slow recovery, reaching 61 thousand tonnes in 2023, which was 49% higher than in 2022.

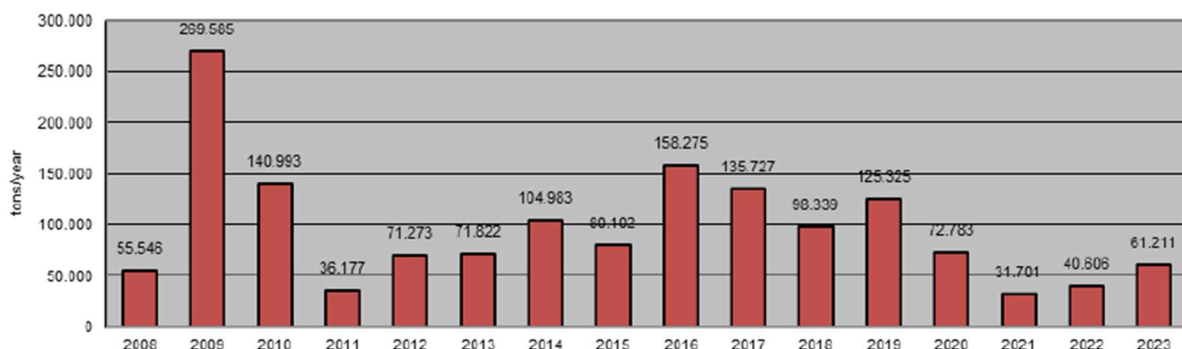
Another reason for the decrease after 2019 can be the closure of the bridge between BiH and Croatia at Brčko in 2019. During the 66th ISRBC session, held on 20 June 2024 in Vukovar it has been proposed that the Rulebook on the maintenance of common navigation sectors between BiH and Croatia to be adopted by BiH by the time of the workshop in Brčko on 19 September 2024. Overall, the port experienced fluctuations in cargo turnover with both sharp increases and declines over the period as a result of unstable navigation conditions, shortcomings in accessibility, administrative barriers for cross-border traffic and a generally volatile business environment.

Table 11. Freight transport – Port of Brčko
(thousand tonnes, 2008-2023)

Year	Cargo turnover	2008=100	Previous year=100
2008	56	100	NA
2009	270	482	482
2010	141	252	52
2011	36	64	26
2012	71	127	197
2013	72	129	101
2014	105	188	146
2015	80	143	76
2016	158	282	198
2017	136	243	86
2018	98	175	72
2019	125	223	128
2020	73	130	58
2021	32	57	44
2022	41	73	128
2023	61	109	149

Source: ISRBC

Figure 15. Freight transport – Port of Brčko
(tons, 2008-2023)



Source: ISRBC

It is important to note that the Secretariat's three different sources (the Excel file from the administration of the Port of Brčko and the 2 ISRBC tables) are not equal to each other when it comes to the port turnover of Brčko.

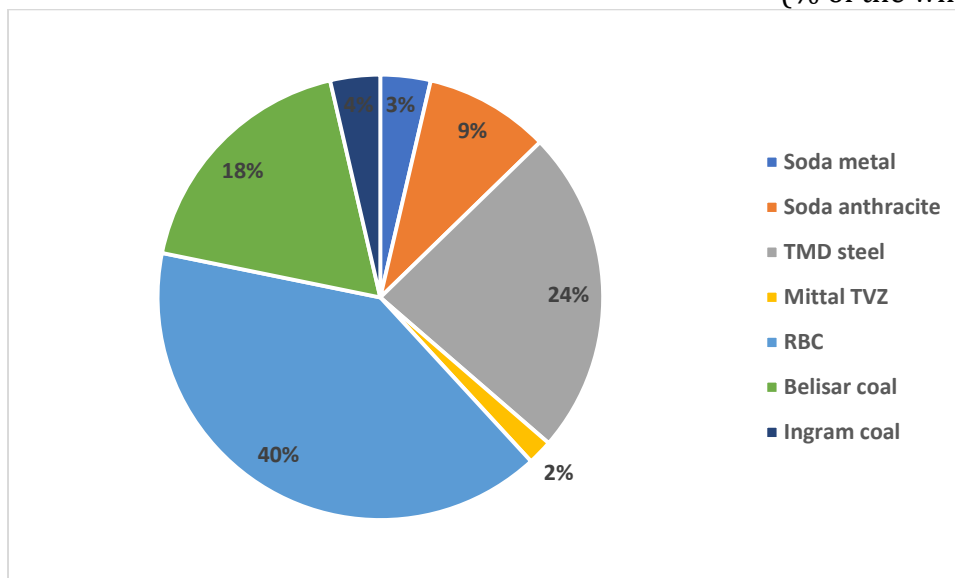
When it comes to examining the composition of goods being transported from/to the port of Brčko, we can see that in 2021, the total cargo volume was 41 thousand tonnes, with RBC steel (40%) and Belisar coal (18%) making up the majority. By 2022, the cargo volume dropped to 32 thousand tonnes, with Belisar coal contributing a dominant 53%, followed by grains (13%) and other goods. In 2023, the total volume returned to 41 thousand tonnes, with Belisar coal still holding a significant share at 34%, and other important commodities like Mittal TVZ and CBR steel rollers (22% and 15%) and rail cargo logistics with 17%. Over the three years, coal consistently remained the primary cargo, while other types of goods varied.

Table 13. Freight transport – Port of Brčko by type of good (thousand tonnes, 2021)

Type of good	Volume	% of total
Soda metal	2	4%
Soda anthracite	5	9%
TMD steel	13	24%
Mittal TVZ	1	2%
RBC	22	40%
Belisar coal	10	18%
Ingram coal	2	4%
Total	41	100%

Source: the administration of the Port of Brčko

Figure 16. Freight transport – port of Brčko by type of good (% of the whole, 2021)



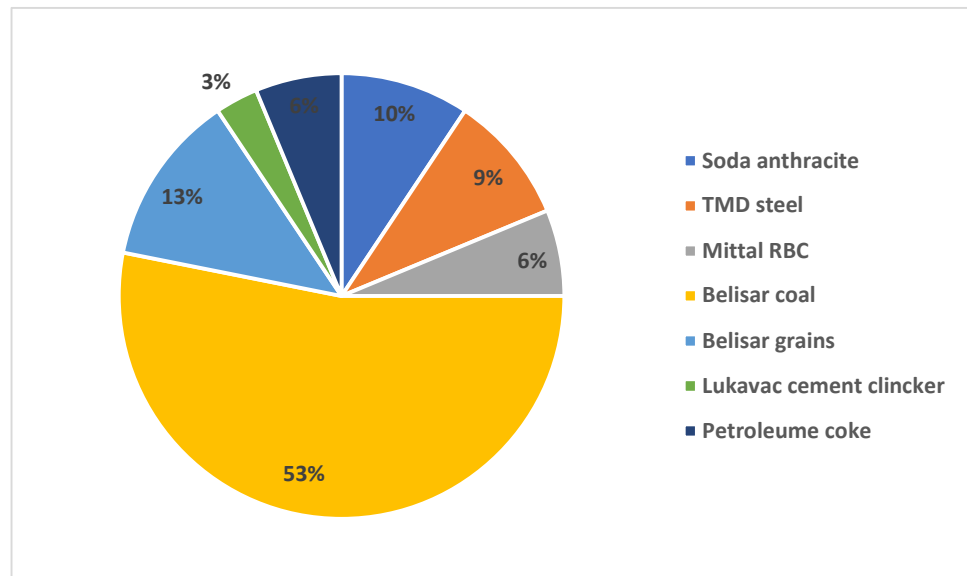
Source: the administration of the Port of Brčko

Table 14. Freight transport – port of Brčko by type of good
(thousand tonnes, 2022)

Type of goods	Volume	% of total
Soda anthracite	3	9%
TMD steel	3	9%
Mittal RBC	2	6%
Belisar coal	17	53%
Belisar grains	4	13%
Lukavac cement clinker	1	3%
Petroleum coke	2	6%
Total	32	100%

Source: the administration of the Port of Brčko

Figure 17. Freight transport – Port of Brčko by type of goods
(% of the whole, 2023)



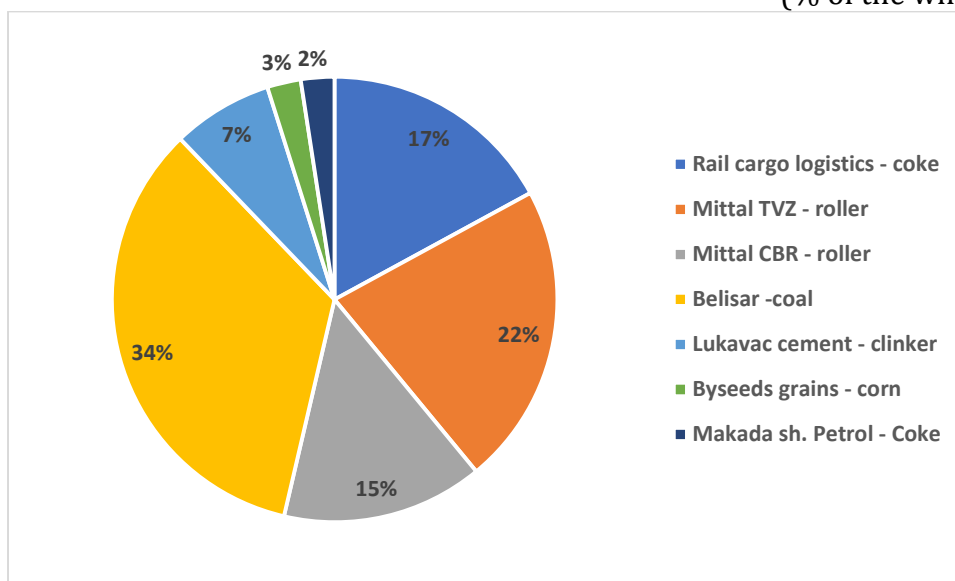
Source: the administration of the Port of Brčko

Table 15. Freight transport – port of Brčko by type of good
(thousand tonnes, 2023)

Type of good	Volume	% of total
Rail cargo logistics – coke	7	17%
Mittal TVZ – pulley/roller	9	22%
Mittal CBR – pulley/roller	6	15%
Belisar – coal	14	34%
Lukavac cement - clinker	3	7%
Byseeds grains – corn	1	2%
Makada sh. Petrol – coke	1	2%
Total	41	100%

Source: the administration of the Port of Brčko

Figure 18. Freight transport – port of Brčko by type of goods (% of the whole, 2023)



Source: the administration of the Port of Brčko

6 Freight potentials and infrastructure investment needs identified at the Workshop

The workshop “*Promoting Port of Brčko as a logistics gateway and its better integration into the Rhine-Danube TEN-T core corridor*” took place on 19 September 2024, in Brčko, Bosnia & Herzegovina. Organized by the Danube Commission Secretariat with support from EC/DG MOVE, the TCT Permanent Secretariat, and the International Sava River Basin Commission (ISRBC). The workshop preceded by a tour of the Port of Brčko and meeting of the 11th TCT - Technical Committee for Waterborne Transport and Multimodality held on 18 September 2024. The event aimed to explore the port’s role in regional trade and logistics. It brought together over 50 participants, including local authorities, international organizations, and business representatives, to discuss the port's potential and the infrastructure investments necessary to enhance its operations.

During the workshop several statements were made on the topic. The Port of Brčko is strategically located along the Sava River, near the intersection of Bosnia and Herzegovina, Croatia, and Serbia. This positioning provides access to key regional trade routes, including rail and road networks that connect directly to European markets. The workshop emphasized the port’s potential to become a vital logistics hub for the Western Balkans, facilitating trade flows between the European Union and the region’s economic centers, such as Tuzla and Bijeljina. Two panel discussions on the following topics were organised as part of the workshop: *Improving the navigability of the Sava River and the accessibility of Port of Brčko by water, rail and road* and *Promoting economic development of the Port of Brčko and its integration into logistics and transport networks*.

One of the key statements of the workshop was that with improved navigability of the Sava River and modernized port facilities, the Port of Brčko has the potential to significantly increase its cargo handling capabilities. The participants discussed that efforts to restore the river’s navigability could expand shipping days from the current 180-200 days to around 300 days per year, thus increasing the port's attractiveness for regional and international trade. It was also noted that transshipment volumes have declined from the peak of approximately

270,000 tonnes in 2009 to around 40,000-60,000 tonnes in recent years. However, with targeted investments, stakeholders aim for a 20% increase in transshipment volumes by 2027.

Also, it was noted that the port's capacity for handling various types of bulk cargo, including coal, grain, and iron, positions it as a flexible node for multimodal transport. During the workshop, it was highlighted that the modernized infrastructure and enhanced connectivity could attract more diverse freight flows, thus improving the economic viability of the port as a logistics center.

One of the key infrastructure projects discussed at the workshop involves the modernization of the Port of Brčko's facilities. Supported by a 3 million euro grant from the European Union and a 7 million euro low-interest loan from the European Bank for Reconstruction and Development (EBRD), this project aims to upgrade the port's capabilities. A new 27-tonne crane, operational since March 2024, is central to these efforts, enabling the port to handle up to 140,000 tonnes of cargo annually. However, further investments in storage and handling facilities are also needed to fully capitalize on the port's strategic position and attract additional freight flows.

Also, as earlier mentioned, enhancing the navigability of the Sava River is critical for the port's future operations. Participants identified the need for coordinated efforts between Croatia and Bosnia & Herzegovina to manage the waterway effectively. A specific focus was placed on demining the right bank of the Sava River, a project that is scheduled to begin by the end of 2024 and is valued at 8 million euros. Clearing these obstacles would enable safer and more reliable navigation, allowing the port to operate more efficiently throughout the year.

Another key priority was declared to be the reopening of the bridge over the Sava River for cargo transport, which has been closed to truck traffic since 2019. Its rehabilitation is expected to reconnect vital trade routes between Bosnia & Herzegovina and Croatia, thus improving the port's accessibility. Additionally, improving road and rail links, such as the connection between the port and the European railway network, is essential for ensuring smooth logistics operations and expanding the port's hinterland reach.

The workshop also addressed the need for sustainable practices in the port's operations. This includes continuing efforts to reduce pollution in the Sava River and meeting obligations within existing public-private partnerships. Thus, implementing environmental protection measures and ensuring compliance with EU standards were also seen as crucial steps for attracting further investments and ensuring the long-term viability of the port.

During the two-day event, the topic of the future transformation of the management model of the Port of Brčko was discussed among stakeholders which will be based on a study prepared by the end of 2024 by a team of experts commissioned by the EBRD. It is a very important topic, and the final decisions should be made carefully. Also, the results of numerous projects that have been implemented in the Danube region until 2023 on the topic of building the capacity of Danube ports can support this process.

Finally, DC Secretariat can conclude that the workshop in Brčko identified freight potentials tied to the port's strategic location and outlined key infrastructure investment needs to unlock this potential. By focusing on modernizing facilities, improving navigability, and enhancing transport connections, stakeholders aim to transform the Port of Brčko into a major logistics hub for the Western Balkans. With the support of local and international partners, these efforts are expected to strengthen trade flows, increase transshipment volumes, and integrate the port more closely into European logistics networks.