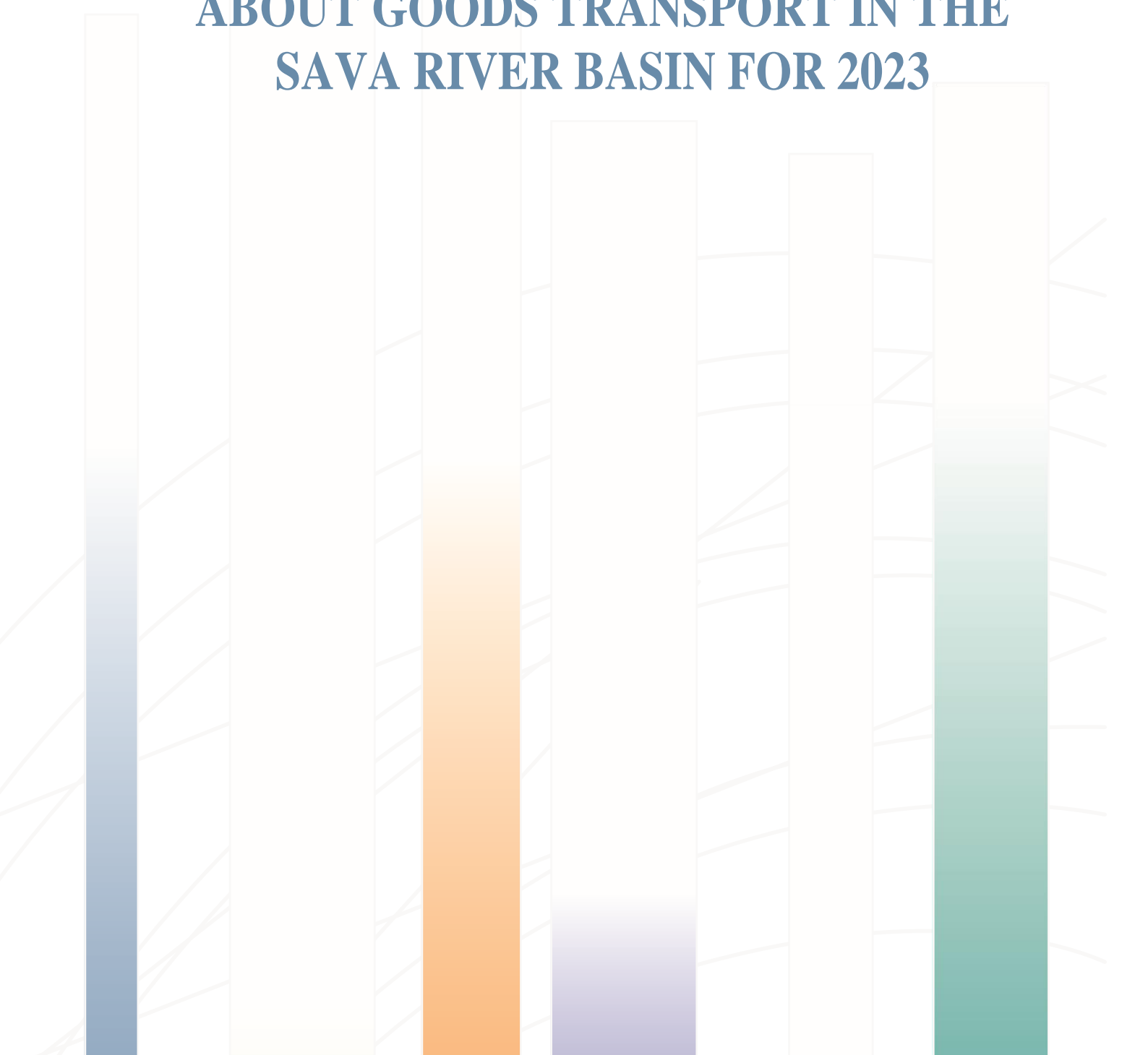




BASIC INFORMATION REGARDING THE INITIAL COLLECTION, STATISTICAL PROCESSING, AND ANALYSIS OF DATA ABOUT GOODS TRANSPORT IN THE SAVA RIVER BASIN FOR 2023



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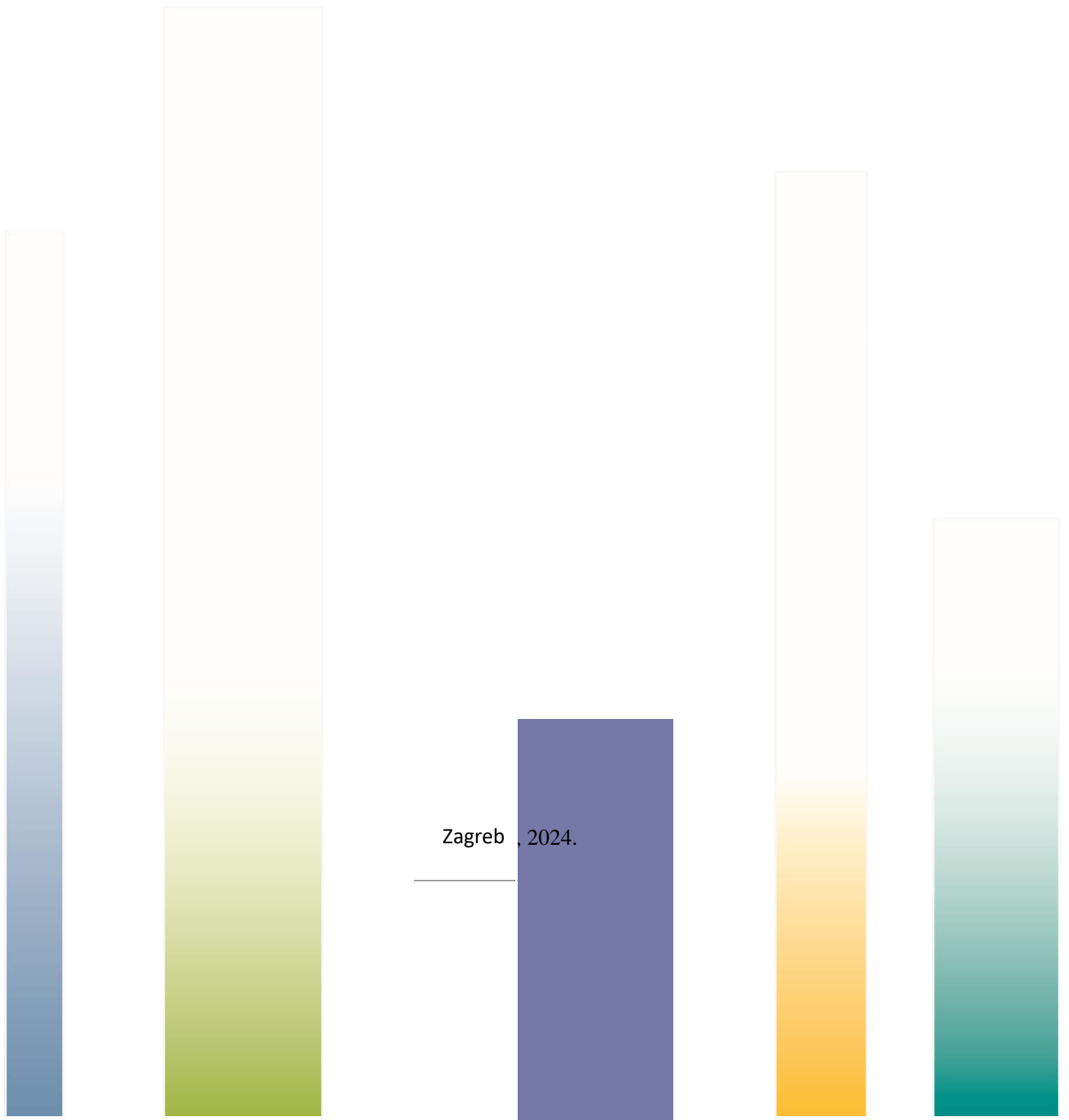
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Basic information regarding the initial collection, statistical processing, and analysis of data about goods transport in the Sava River Basin

1.

INTRODUCTION

As early as 2008 the Sava Commission Secretariat began collecting data about goods trans-shipment and passenger transport with the aim of preparing and writing a review of statistical data for the ports in the Sava River Basin, and in order to use these data for the purposes of certain analyses. In addition to the data we have collected for this period, for the purposes of analysing the situation and the need for water transport, we will use all other available relevant information, as well as data from previous studies and projects related to water transport.

According to EUROSTAT requirements, those Sava Commission Member States which are also EU Member States, serve as facilitators for non-EU countries, and will greatly accelerate the adoption of methodologies for data collection and processing in the domain of inland waterways.

Bearing all this in mind, the Secretariat has prepared this review of available statistical data on goods trans-shipment and passenger transport in ports and harbours on the Sava River and its navigable tributaries.

The quantities of transhipped goods are shown for

- each port individually,
- each country collectively, and
- in an overall summary.

Passenger transport data has so far not been processed in detail manner due to a lack of up-to-date records, as well as non-harmonised methodology and the level of datalines of the collected data, which is a result of the natural position of the port (proximity to river mouth) and of the regulation of the waterway.

Year	Brčko	Županja	Slavonski Brod	Jasenovac	Sisak	Beograd	Sremska Mitrovica
2013	200	100	200	-	200	65.000	200
2014	200	-	200	-	200	68.000	200
2015	200	-	200	200	200	60.000	200
2016	200	100	200	100	200	66.378	200
2017	100	100	100	100	100	72.347	421
2018	484	300	200	200	100	81.344	485
2019	515	515	368	368	368	103.523	-

2020	-					561	
2021						19.406	
2022						55.069	
2023	145		145	145	-	74.750	145

Table 1: Overview of passenger transport on the Sava and the Kupa river ports

From the table above, it can be noted that the passenger traffic in 2020 and 2021 recorded almost devastating statistics. The reason for this is the "COVID-19" pandemic, and it is to be expected that, to a certain extent, it will undoubtedly have an impact on 2022, as well.

In 2023, new international piers were opened in Serbia ie. Sremska Mitrovica and Šabac. This will result in an increase in the number of dockings.

It needs to be stressed that the current navigability conditions on the waterways still remain an obstacle for any kind of serious planning and has a negative effect on potential investors in the production sector.

2.

OVERVIEW OF GOODS TRANS-SHIPMENT/TRANSPORT IN THE PORTS OF THE SAVA RIVER BASIN

For the purpose of this analysis we first need to define the area for which the Secretariat collects data. It consists of the international Sava river waterway defined by the Protocol on the Navigation Regime to the Framework Agreement on The Sava River Basin.

The most complete data was available in the period between 2010-2019, which enabled a representative sample of all the member states and ports. This is a minimum requirement concerning the validity of the results of the statistical analysis, i.e. of the trends which can be detected there from.

In the table presented below can be seen the availability of data by year and port/country, as well as total trans-shipment in the Sava River Basin.

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		396.067	861.923
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

Table 2: Overview of goods transport/trans-shipment (in tons) on the Sava and the Kupa river ports

Bosna and Herzegovina

Port of Brčko is located in the north-eastern part of Bosnia and Herzegovina, on the right bank of the Sava River waterway at river kilometre 228, with an average of 260 navigable days per year. Since this port is situated on a Class IV waterway and is in the proximity of a developed industrial area has a competitive advantage over upstream ports.

The port enables a direct goods flow on the Sava River to the Danube ports of western and Eastern Europe, as well as to ports in the North Sea and Black Sea. The port is linked to the European rail network through the Tuzla-Vinkovci road, which allows axle load of up to 18t. In the immediate proximity of the port is the M14.1. state road. In conclusion, the port has a good connection to other modes of transport. In the immediate proximity of the quay are three anchorages, formed according to technological operations and types of goods.

The main trans-shipment equipment has an annual capacity of around 915 000t and enables the trans-shipment of general and grain/bulk cargo: ship – shore, shore – ship. The equipment consists of two Ganz portal cranes (5t, l=30m). The ancillary warehouses are served by forklifts and loading trucks. There was founded a modern container terminal inside the port area.

Although the types of trans-shipped goods have not been given special focus herein, it can be noted that during the period in question, trans-shipment mostly involved coal (anthracite), soybean meal, coke, steel sheets and cold rolled steel strips, and other such materials.

For the needs of industry in Bosnia and Herzegovina, some goods continue to bypassed this year the port of Brčko, while the arrangements were agreed with the ports on the Danube, which can be seen in the chart below.

In the port of Brčko, several infrastructure projects are being implemented:

The EBRD (European Bank for Reconstruction and Development) has approved EUR 10 M. 3 million are grant funds, with a repayment period of 15 years and a grace period of 3 years, with an interest rate of 1%.

The deadline for project implementation is 3 years (2021-2023).

1. Main design of the manipulative plateau with stormwater drainage in the Port of Brčko - EUR 904,986.63 (works completed on March 10, 2022)
2. Procurement and installation of a new crane 16/27 t - EUR 2,580,000 (deadline for the completion of crane installation is September 7, 2022)
3. Main design of the access road reconstruction from Bijeljinska cesta to the Port of Brčko - EUR 791,812.13
4. Main design of the industrial track of the railway station Brčko Novo - Port of Brčko with the reconstruction of the industry access - EUR 3,757,145.05.

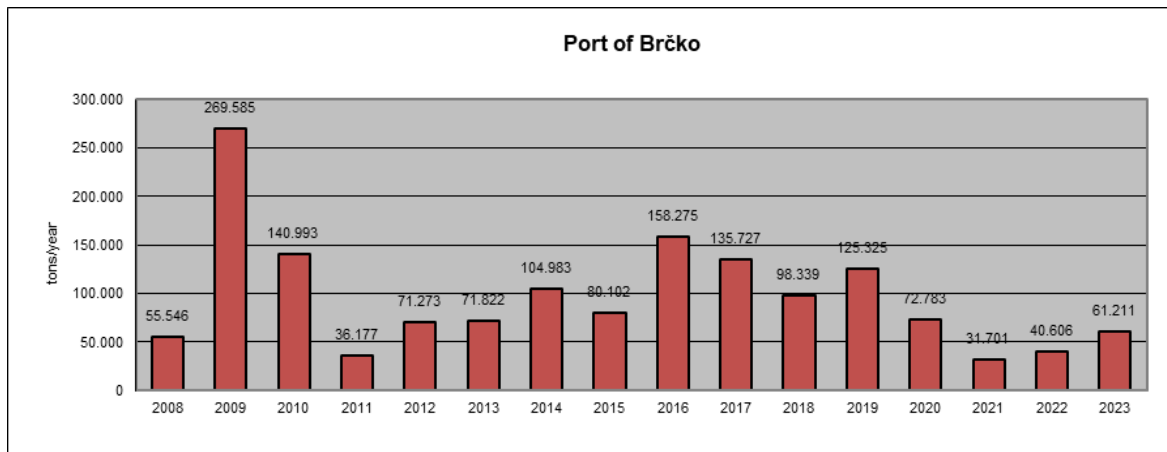


Chart 1: Review of transport/trans-shipment in Port of Brčko

Port of Šamac reported bankruptcy in 2015 and no transshipment of cargo has been performed since then.

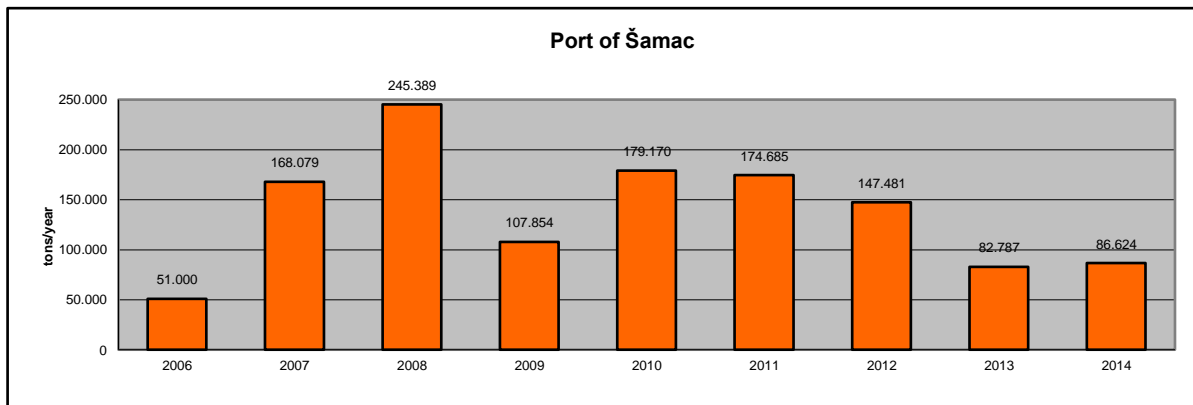


Chart 2: Review of transport/trans-shipment in Port of Šamac

Brod Oil Refinery was established in 1892 by a Hungarian chemical industry company (*Danica*). Its main advantages are its position on the Sava river, which is navigable between Sisak and its mouth into the Danube and further on to the Black Sea, as well as its proximity to *Jadranski Naftovod* (JANAF plc/Adria Pipelines) and the highway. The former rail link with the Zagreb–Belgrade railway line has not been restored given the changes in the market and economy conditions following the collapse of Yugoslavia.

Due to the already mentioned pandemic and the reconstruction of the refinery in 2021, there was no transshipment at the river terminal.

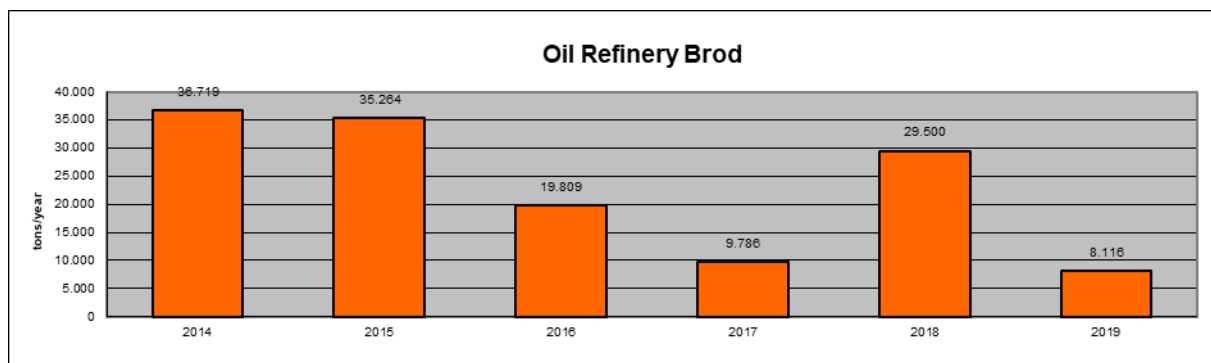


Chart 3: Review of transport/trans-shipment at Brod Oil Refinery terminal

Activities and talks are under way with the aim of finding a new model for investing in the rehabilitation of the Sava River waterway and its ports. Finally, we present a summary review of transport/trans-shipment in Bosnia and Herzegovina.

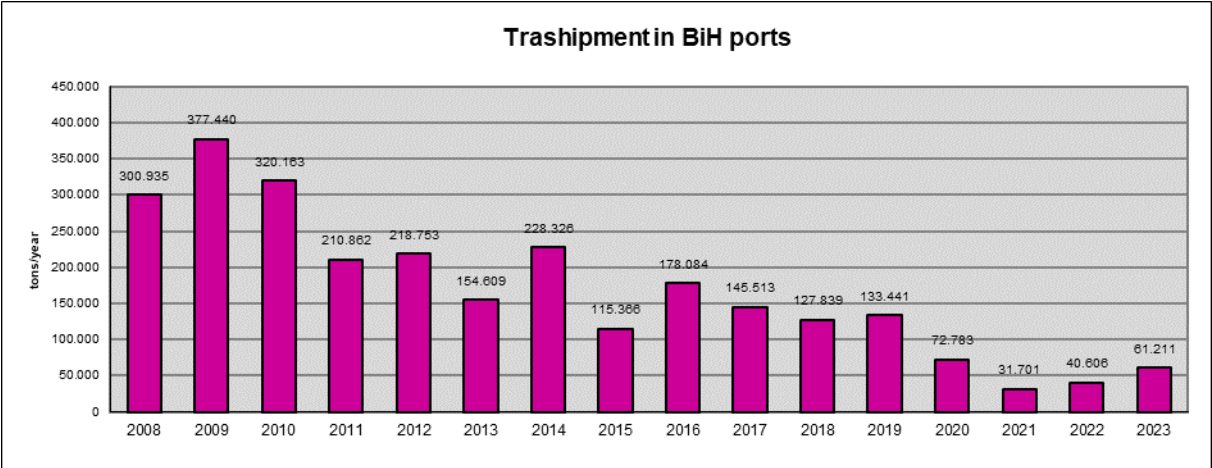


Chart 4: Summary review of transport/trans-shipment in Bosnia and Herzegovina

Republic of Croatia

Slavonski Brod Port Authority

During the period in question the port and the terminals mostly registered the trans-shipment of crude oil and stone, as well as of smaller quantities of grain, sugar, biofuels, and also individual single or multiple shipments of metal industry products and special types of cargo. There have been announcements of major investments by Croatian Railways and private investors. In addition, negotiations are under way on long-term transport/trans-shipment contracts. In 2017. Port Authority started with the construction of the new and upgrade of the existing waterside infrastructure and road network and container terminal in the amount of the 11 mil. EUR, partly financed by the EU. The port poses 370 m vertical gate. The port will have general permit of usage issued in 2022.

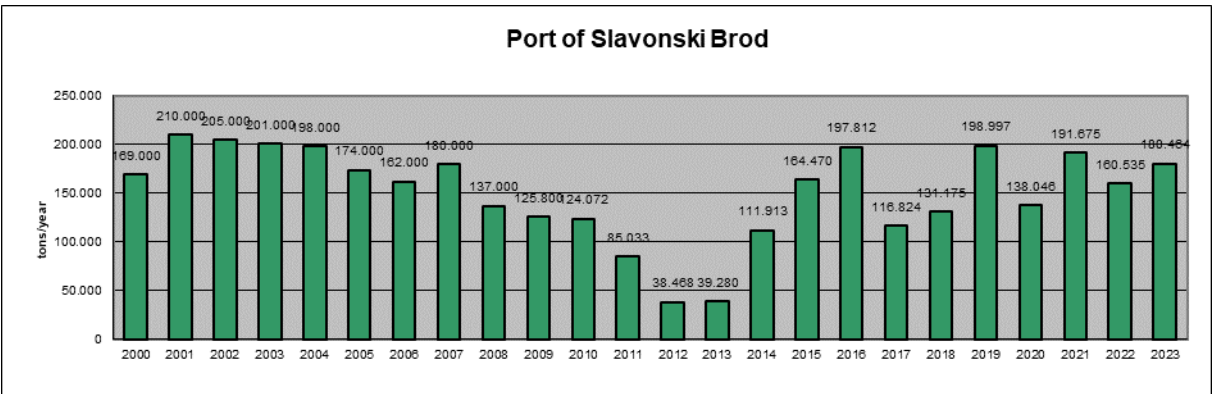


Chart 5: Review of transport/trans-shipment in the Slavonski Brod Port Authority area

Sisak Port Authority is characterised by a specific and unenviable location (being the most upstream port on the Sava river), which has resulted in modest quantities of transhipped goods, mainly based on crude oil loaded in Slavonski Brod. Navigation and cargo delivery are heavily dependent on the hydrological conditions, which is also an obstacle for the ports from which goods are transported (in this case, the Port of Slavonski Brod).

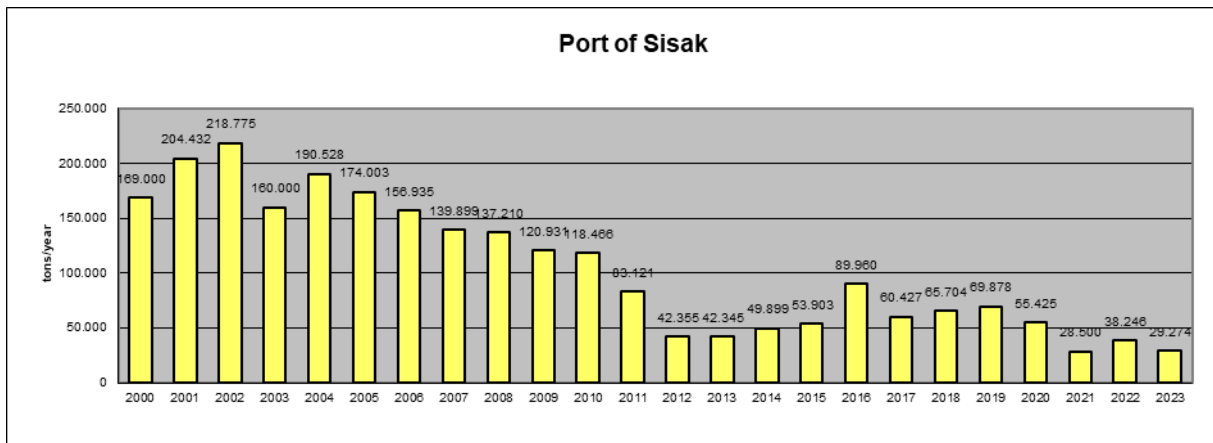


Chart 6: Review of transport/trans-shipment in the Sisak Port Authority area

Regardless of the problems which accompany the implementation of the project of the Sava River Waterway rehabilitation, port authorities and the government are committed to hard work on the reconstruction of infrastructure, the development and deployment of waterway transport, and raising awareness of its competitiveness.

The port authority “Sisak” recorded a significant decline in transshipment in 2021, still, all growth indicators are expected to significantly increase immediately after the cessation of pandemic measures.

Below is a summary review for both these port authorities.

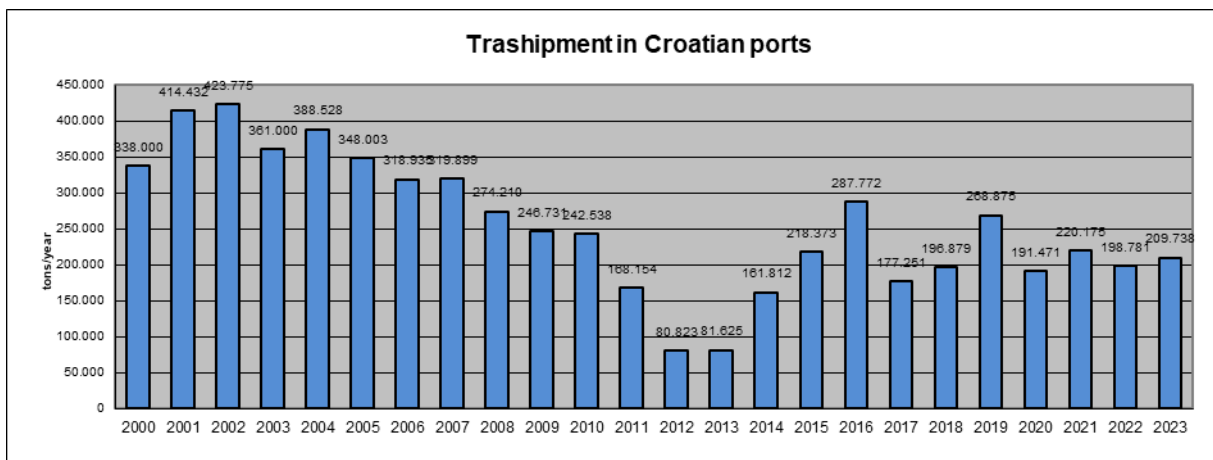


Chart 7: Summary review of transport/trans-shipment in Croatia

Republic of Serbia

Sremska Mitrovica/Port Leget is a commercial company which administers the port area and focuses mainly on the exploitation of sediment from the Sava riverbed. Sediment as a type of cargo was presented only in the case of Port Leget since the other ports do not register this type of cargo or only keep incomplete records thereof. In this case an exception was made because the exploitation of riverbed sediment is this port’s core business. The port registers significant trans-shipment quantities and its activities are highly dependent on the demand from the construction sector.

The renovated "Passenger Terminal" was opened and put into use in March 2023 and represents a significant infrastructure potential for the development of river tourism.

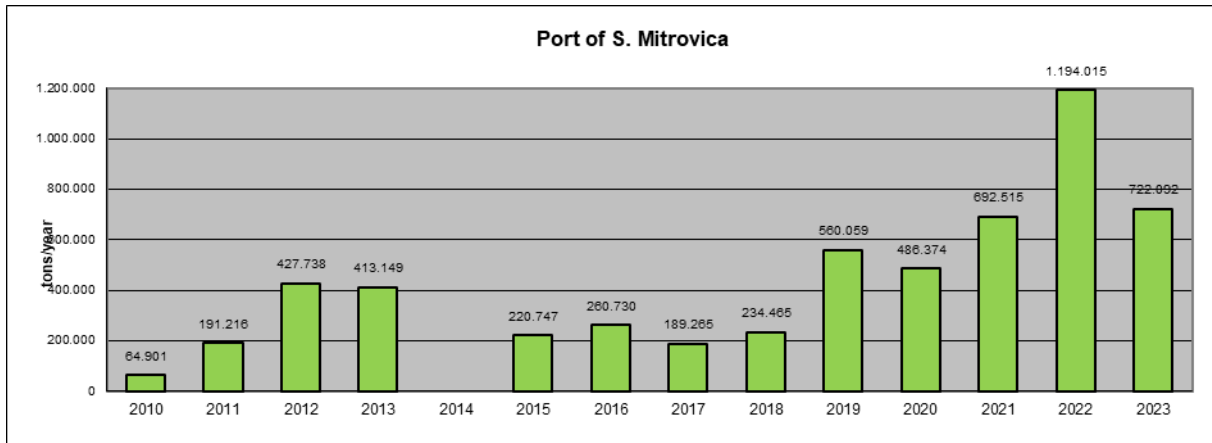


Chart 8: Review of transport/trans-shipment in Mitrovica water area

Šabac/Zorka industrial dock was constructed by the one-time chemical industry giant *Zorka* and is mostly used by the industry basin in Šabac and Valjevo. Trans-shipment is mostly carried out at the Zorka industrial dock, which comprises a vertical quay wall for unloading and loading cargo vessels and has a long tradition of using the Sava river as a waterway.

The company is situated in the Šabac industrial zone at Sava river kilometre 98 and on the M-19 state road. Given that in the Yugoslav period a construction of a dock basin was initiated and that there already exists project and spatial documentation as well as positive feasibility studies it can be expected that its increased capacity will have a positive effect on the transport services market in the foreseeable future.

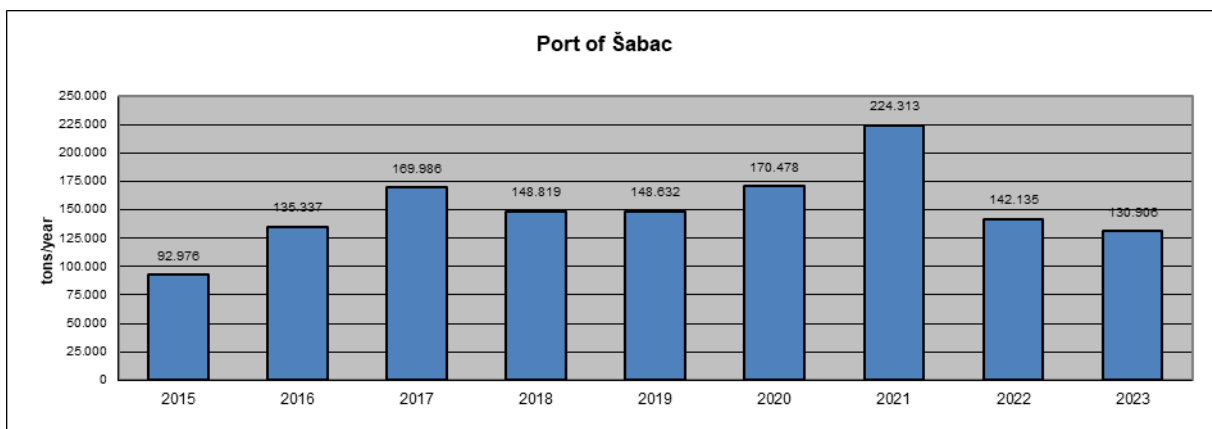


Chart 9: Review of transport/trans-shipment in Šabac water area

Other transshipment places

Since 2017 the Agency for Ports of the Republic of Serbia has kept statistical records for other smaller transshipment places, which are very important for detailed trend monitoring, both in terms of the quantity of goods transhipped and the their structure. In all these places, there is a significant increase in the overall transshipment, mainly building materials, oil products, coal and sediment dredged from the Sava River bed and its tributaries.

For the year 2021, the transshipment figures are extremely high, if we cast a glance at the challenges and stagnation of all economic activities that the Republic of Serbia and the region are facing.

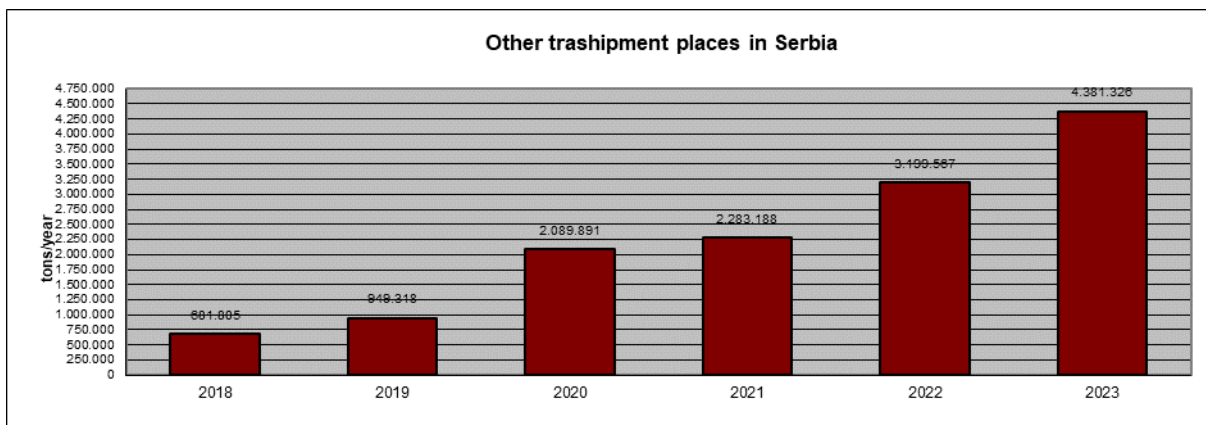


Chart 10: Review of transport/trans-shipment for other reloading places

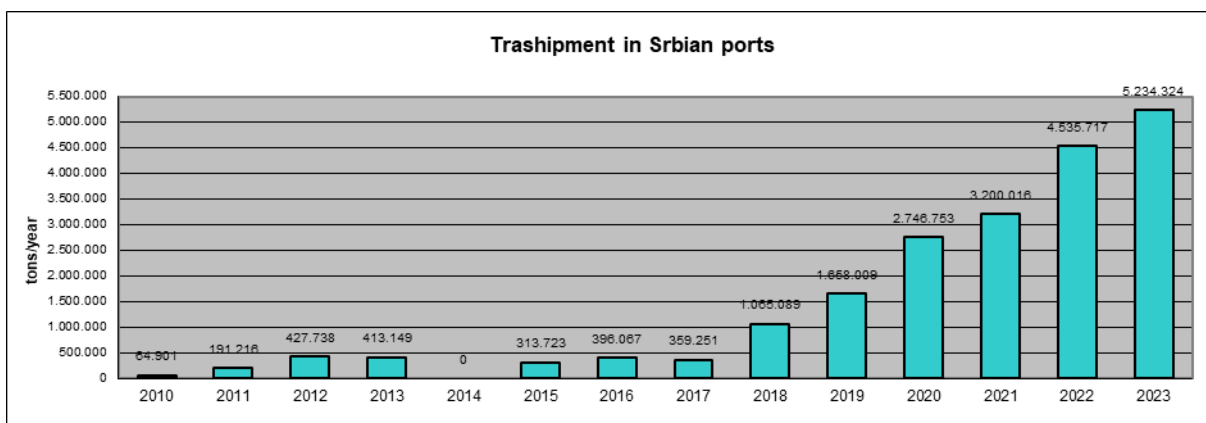


Chart 11: Summary review of transport/trans-shipment in Serbia

Finally, for the purposes of this analysis, we would like to present an interesting chart which shows the total traffic/trans-shipment figures in the Sava River Basin between 2010 and 2021, which is the period for which we were able to obtain these data from all three countries. One of our main aims is to increase the level of detail regarding the transport/trans-shipment data in the chart. We are convinced that this document will serve as a basis for a statistical yearbook for the Sava river Basin.

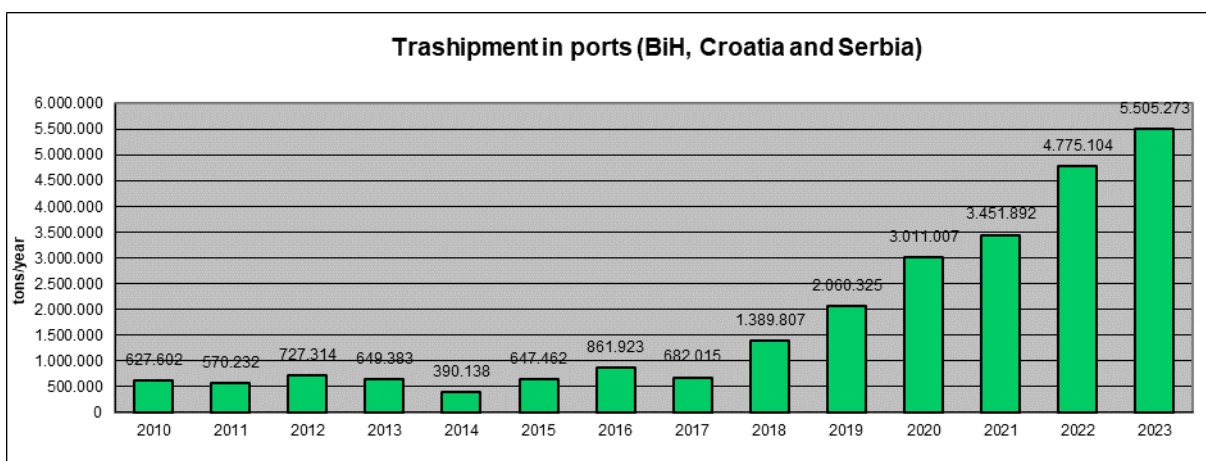


Chart 12: Summary review of transport/trans-shipment in Sava River Basin