

14th Meeting

on the

Joint Statement on Guiding Principles on the Development of Inland Navigation

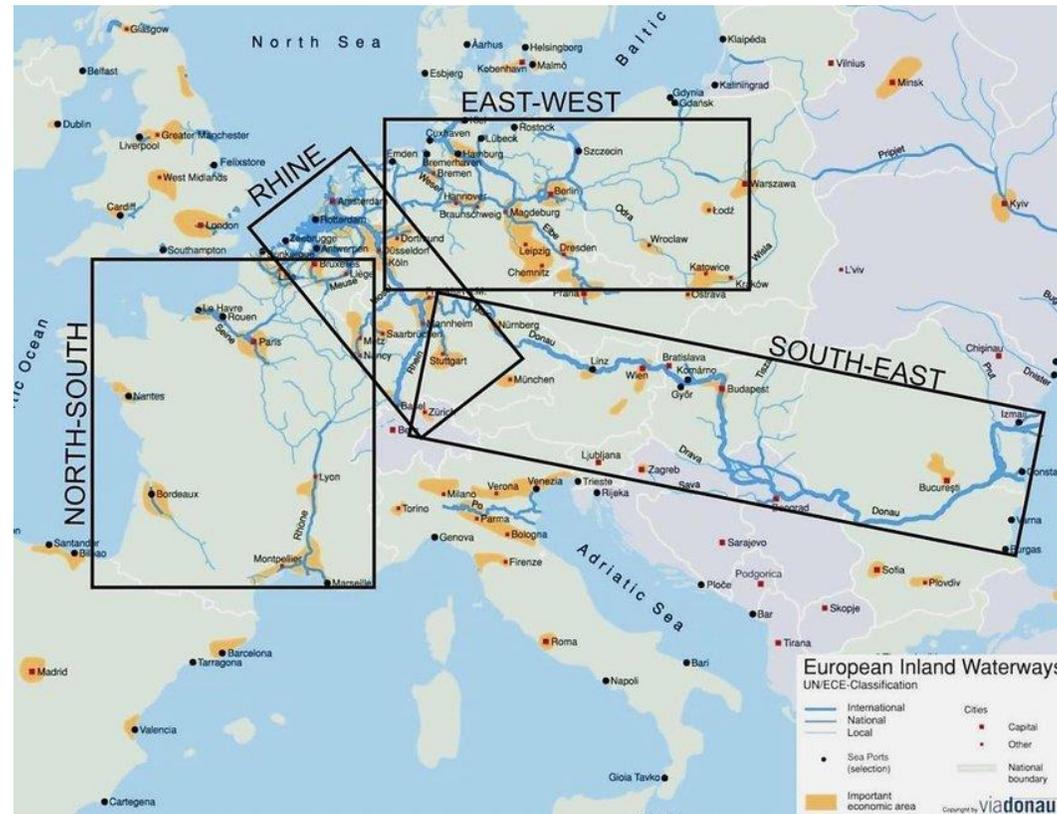
**The current state of navigation on the
Sava River and expected improvements**

Zagreb, 13-14 September 2023

Position of the Sava River on EU IWN

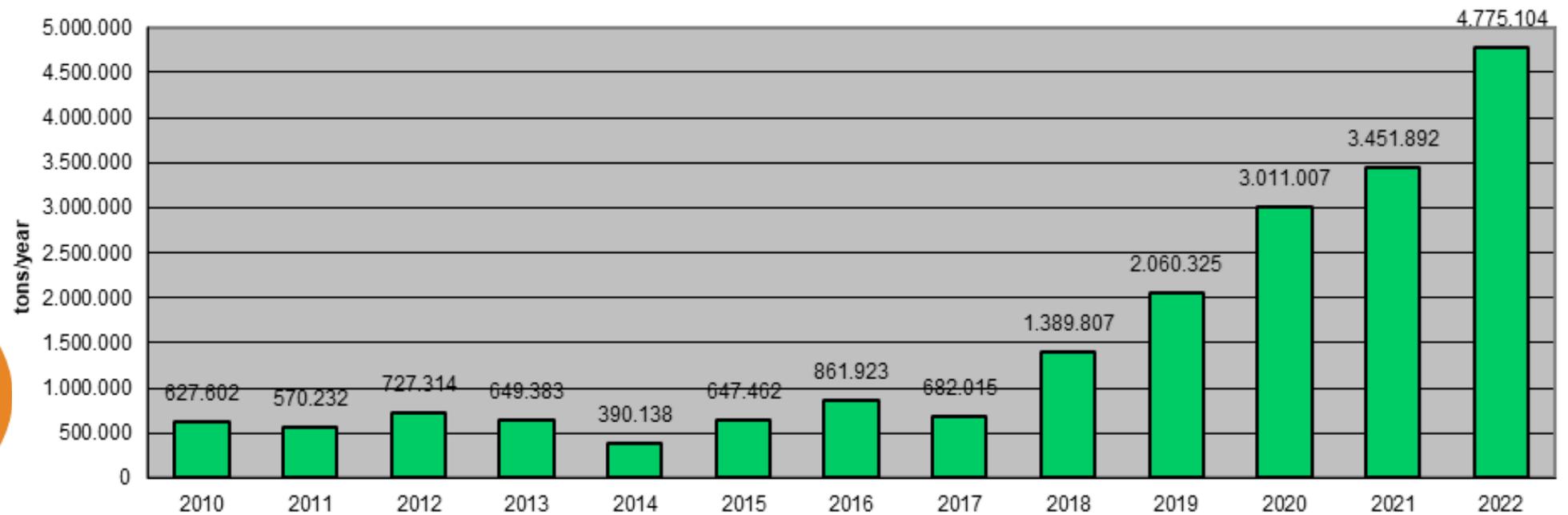
The network of European waterways - four main corridors:

- Rhine Corridor
- East – West Corridor
- North – South Corridor
- **Danube coridor (South – East) incl. r. SAVA**



Statistical data of transshipment in Ports

Transshipment in ports (BiH, Croatia and Serbia)



Statistical data of cargo traffic in Ports

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

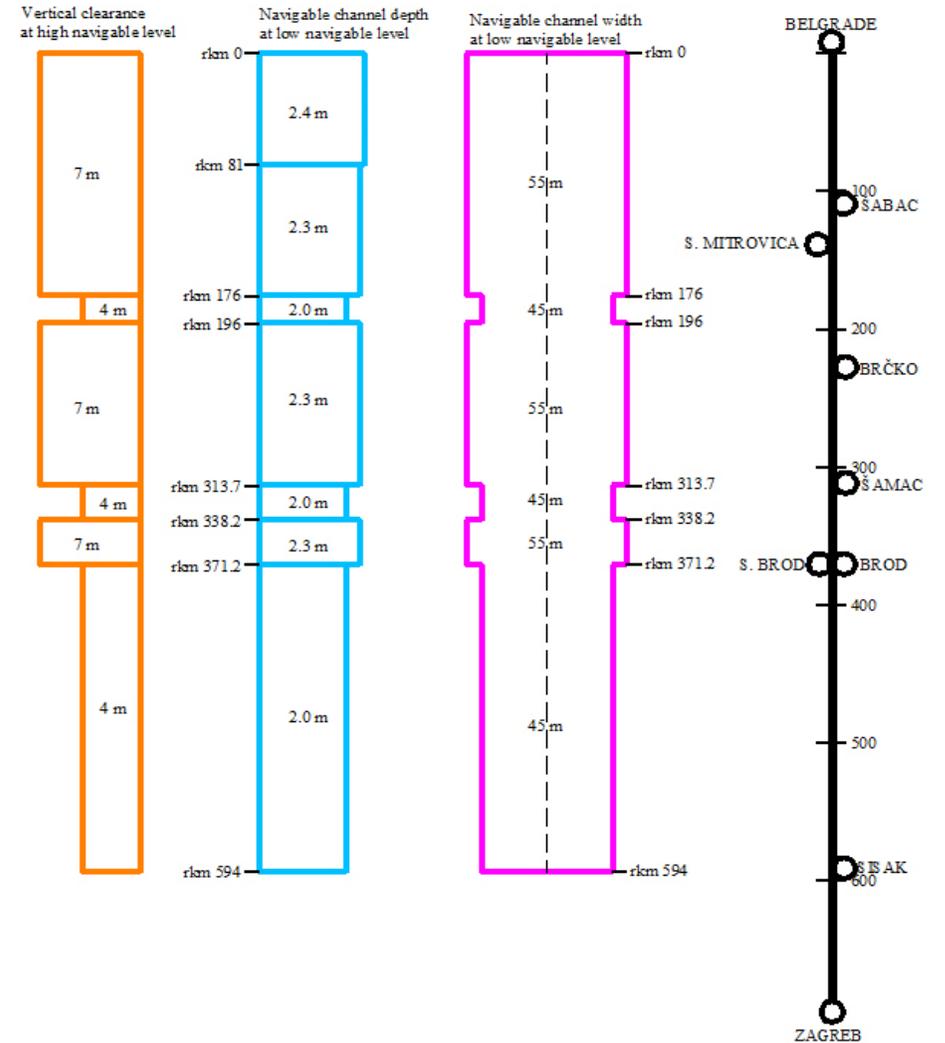
Statistical data of passanger traffic in Ports

Year	Brčko	Županja	Slavonski Brod	Jasenovac	Sisak	Sremska Mitrovica	Beograd
2013	200	100	200	-	200	200	65.000
2014	200	-	200	-	200	200	68.000
2015	200	-	200	200	200	200	60.000
2016	200	100	200	100	200	200	66.378
2017	100	100	100	100	100	421	72.347
2018	484	300	200	200	100	485	81.344
2019	515	515	368	368	368	-	103.523
2020	Corona pandemic period						561
2021							19.406
2022							55.069

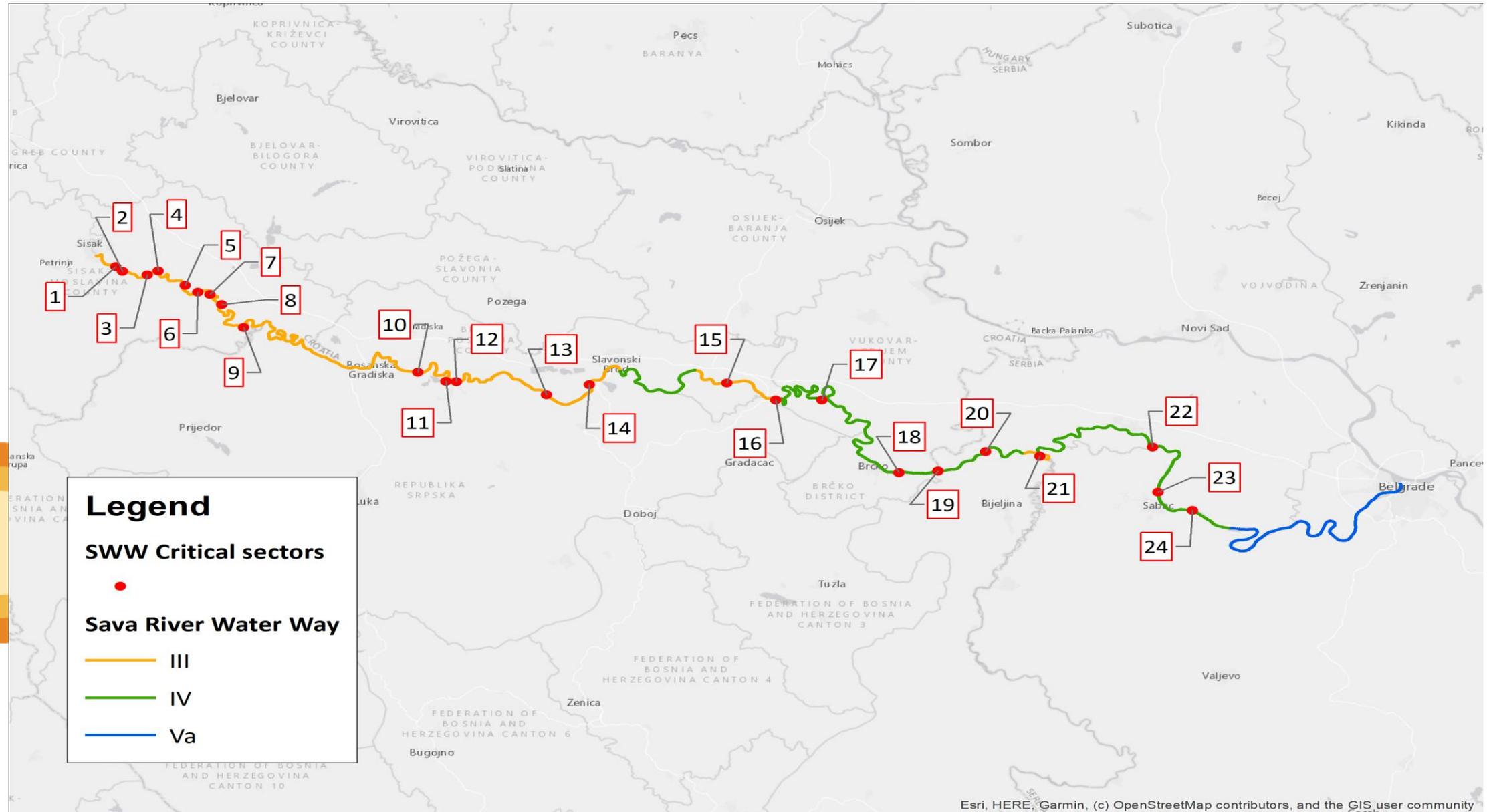
Sava Waterway

Section of the Sava River		Length (km)	Waterway Class
downstream (rkm)	upstream (rkm)		
0.0 Sava Mouth	81.0 Kamičak	81.0	Va
81.0 Kamičak	176.0 Rača	95.0	IV
176.0 Rača	196.0 Domuskela	20.0	III
196.0 Domuskela	313.7 Slavonski Šamac Šamac	117.7	IV
313.7 Slavonski Šamac Šamac	338.2 Oprisavci Rit kanal	24.5	III
338.2 Oprisavci Rit kanal	371.2 Slavonski Brod Brod	33.0	IV
371.2 Slavonski Brod Brod	594.0 Sisak	222.8	III

WATERWAY PROFILE OF THE SAVA RIVER



Critical Sectors on the Sava River Waterway



Critical Sector „Drina mauth“

The Sava is not regulated by locks and dams - it depends on the Hydro–Metheorological situation

Sector „Drina's mouth“			
Days with a draft limit of 200 cm (with a reserve of 50 cm)			
No	Period by dates	Number of days of restriction	Reasons for restrictions
1.	18.01.	1	Unavailable depth
2.	21.01.-22.02.	33	Unavailable depth
3.	07.03. – 03.04.	28	Unavailable depth
4.	23.04. – 26.04.	4	Unavailable depth
5.	03.05. – 05.05.	3	Unavailable depth
6.	08.05. – 22.09.	137	Unavailable depth
7.	27.09. – 02.10.	6	Unavailable depth
8.	11.10. – 21.11.	42	Unavailable depth
Total 200 cm draft limit:		254 days	

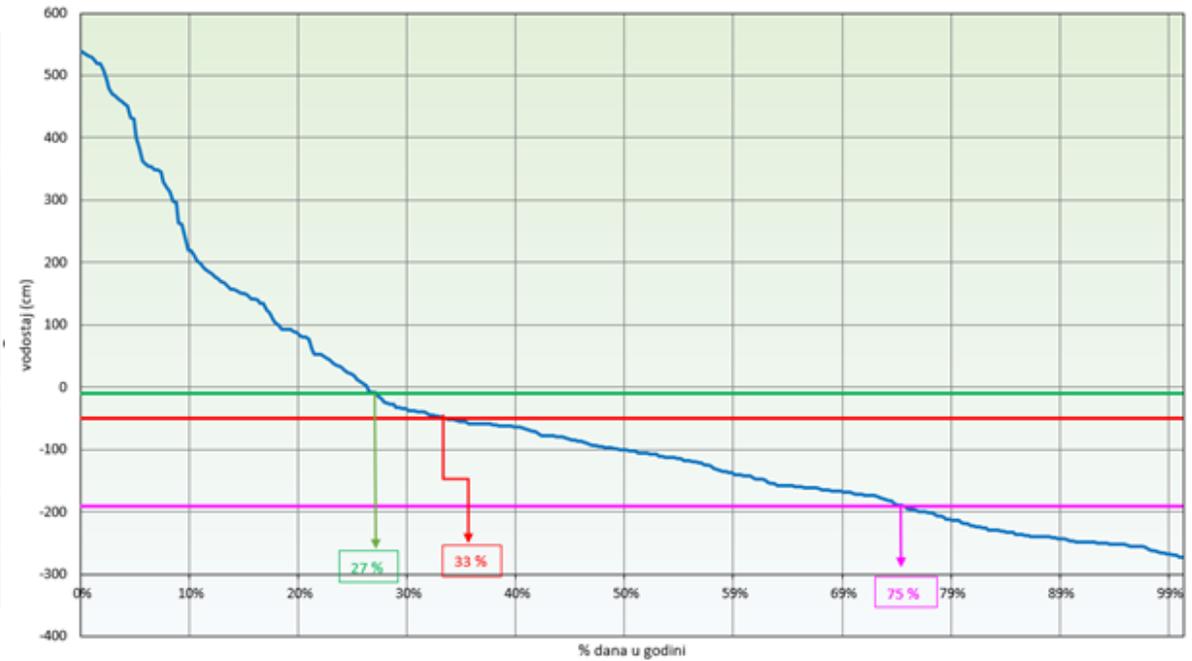
Sector „Drina's mouth“			
Days with a draft limit of 160 cm (with a reserve of 50 cm)			
No	Period by dates	Number of days of restriction	Reasons for restrictions
1.	29.01. – 19.02.	21	Unavailable depth
2.	12.03.	1	Unavailable depth
3.	14.03. – 02.04.	20	Unavailable depth
4.	17.05. – 20.05.	4	Unavailable depth
5.	22.05. – 12.06.	22	Unavailable depth
6.	18.06. – 20.09.	95	Unavailable depth
7.	28.09. – 01.10.	4	Unavailable depth
8.	29.10. – 20.11.	39	Unavailable depth
Total 160 cm draft limit:		206 days	

Critical sector „Jaruge - Novi Grad“

Sector Novi Grad – Jaruge			
Days with a draft limit of 200 cm			
No	Period by dates	Number of days of restriction	Reasons for restrictions
1.	17.01. – 22.02.	37	Limited depth and width of the fairway
2.	01.03. – 03.04.	32	
3.	19.04. – 19.09.	134	
4.	27.09. – 30.09.	4	
5.	11.10. – 19.11.	40	
Total 200 cm draft limit:		247 days	

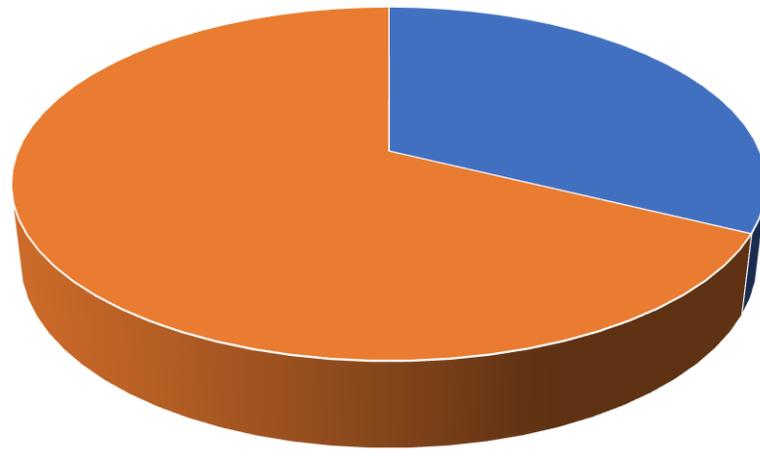
Sector Novi Grad – Jaruge			
Days with a draft limit of 160 cm			
No	Period by dates	Number of days of restriction	Reasons for restrictions
1.	21. 01. – 20. 02.	31	Limited depth and width of the fairway
2.	06. 03. – 02.04.	28	
3.	22. 04. – 26. 04.	5	
4.	02. 05. – 04. 05.	3	
5.	09. 05. – 19. 09.	134	
6.	27. 09. – 29. 09.	3	
7.	12. 10. – 19. 11.	39	
Total 160 cm draft limit:		243 days	

Water level diagram – Gauging station S. Šamac and draft levels at the critical section Jaruge – Novi grad



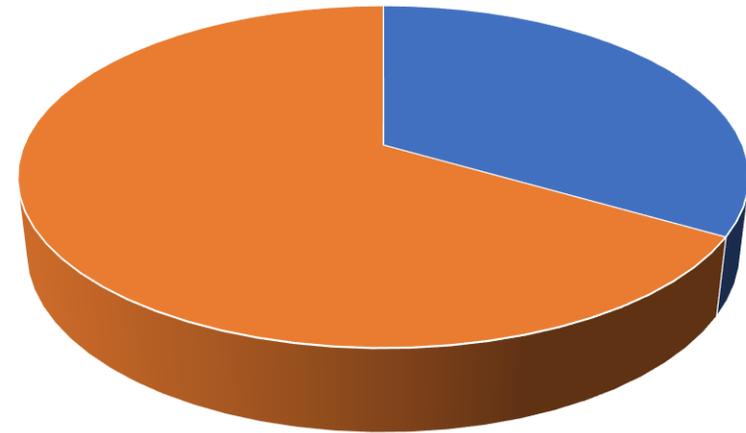
Critical sector „Jaruge - Novi Grad“

200 cm draft limit

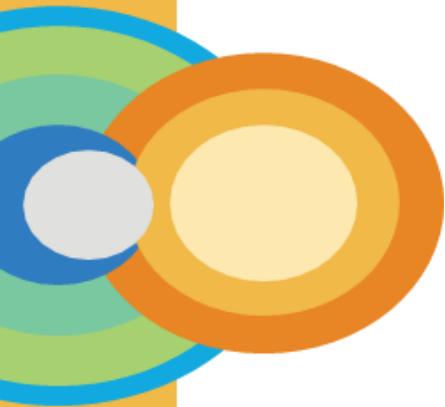


■ no limitation period ■ Total 200 cm draft limit

160 cm draft limit

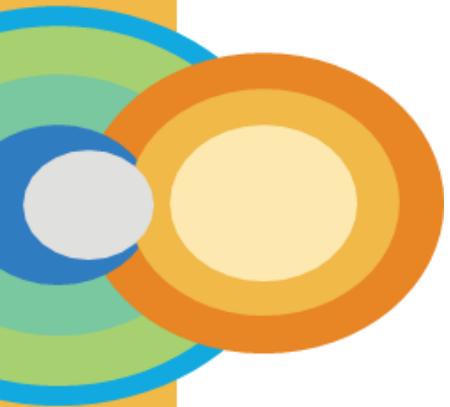


■ no limitation period ■ Total 160 cm draft limit



Overview of current condition of the waterway

- *Problems during the implementation of projects – aimed to GNS*
- *Long period unharmonized maintenance and new climate changes*
- *Physical parameters of the waterway cause bad navigation conditions, related to:*
 - *limited draft during large periods*
 - *limited width and sharp river bends limiting the size of vessels and convoys*
 - *limited height for passages under some bridges*

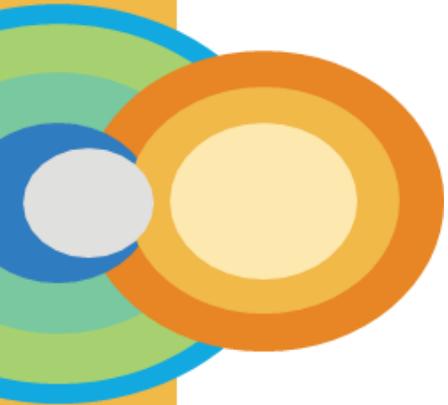


Stretches of the Sava with specific risks

**Stretches of inland waterways with specific risks
Article 9 of Directive (EU) 2017/2397 on the recognition of
professional qualifications in inland navigation**

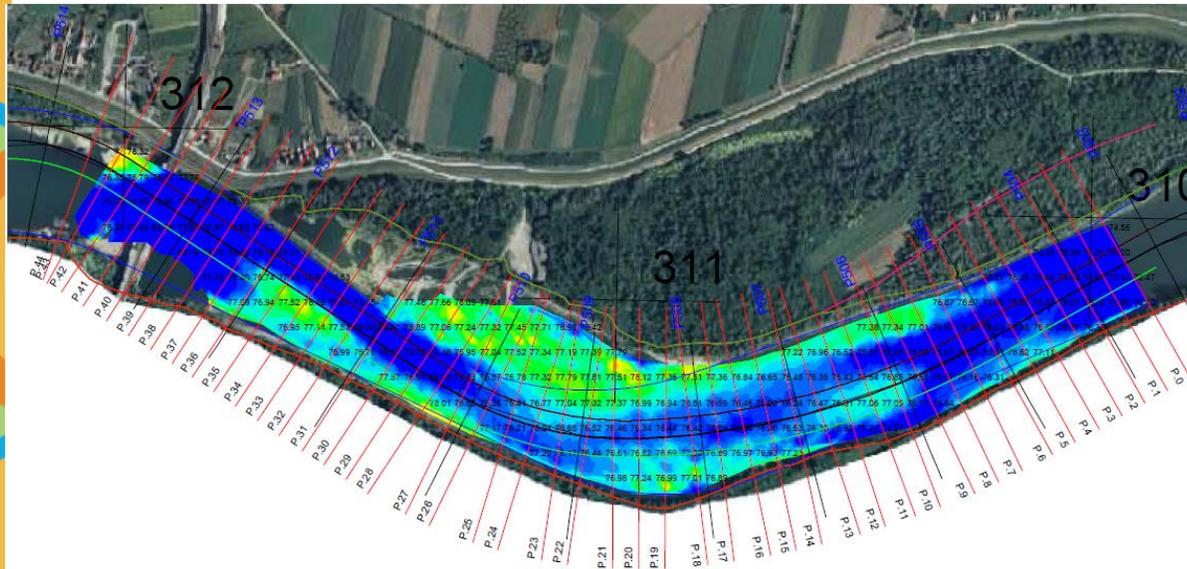
Croatia

- 1.Sava, km299 to km333
- 2.Sava, km514 to km594



Undertaking of measures - maintenance

- *Significantly increased activities of critical sections (HR and RS)*
- *Regular and interventional maintenance of critical points/micro sections*
- *ISRBC - Development of the Rules for Waterway Maintenance on the joint section between BiH and CRO*
- *Regular marking of the navigable waterway*



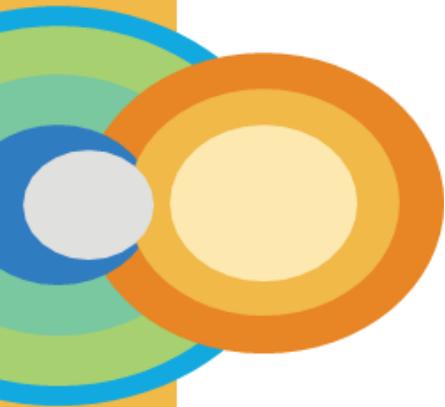
Undertaking of measures - maintenance



Undertaking of measures - Projects

Projects to solve critical sections (HR, BiH, RS)

- *HR - Improvement of navigability conditions on the critical section of the Sava River "JARUGE - NOVI GRAD,,*
- *RS - Hydro-engineering and dredging works on the regulation of the critical sector – Confluence of the Drina and Sava Rivers*
- *Marina Sisak*
- *Drina Port*
- *Passanger Terminal – Mitrovica*
- *Construction and improvement of infrastructure in the port of Slavonski Brod*



Sava Commission Activities

- **Regulations&Rules**

- **Navigation Rules** in the Sava River Basin prepared in line with the amendments to the CEVNI 6
- **Recommendation for navigation on the river Kupa – HR – SLO section**
- **Analysis and possible revisions of legislation and decision related to navigation**

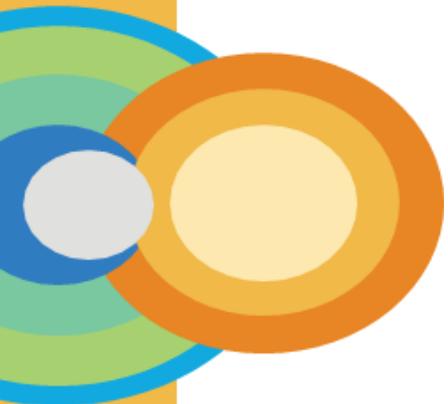
- **Navigation Manual 2nd edition** – ENG translate

- Navigation module within GIS – Sava ENC + album of bridges

- **Update of Joint Statement** on Guiding Principles for the Development of Inland Navigation and **PLATINA Manual**

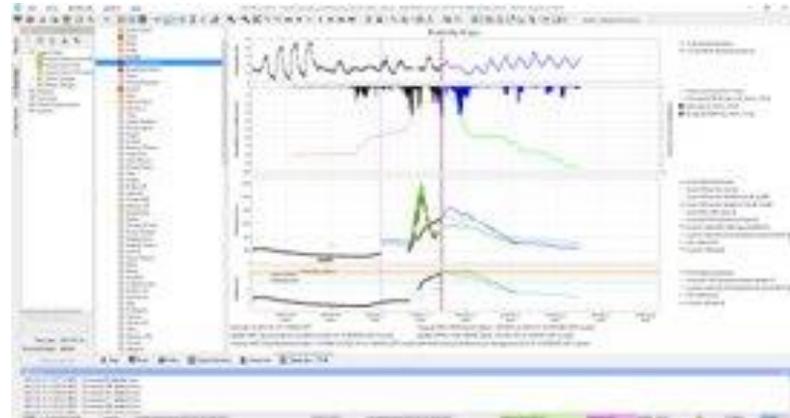
- **SDIP activities** (*Sava end Drina Integrated Program*)

Hydrology study + sediment water & biota + tourism + FFWS & LFFWS



Sava Commission Activities

- Hydrological Study of the Sava River Basin
- Study on Sediment, Water, and Biota in the Sava River Basin
- Climate Change Adaptation Strategy for the Sava River Basin
- Master plan for Sustainable tourism development in the Sava River Basin
- Advanced flood and drought monitoring, forecasting and management system
- Upgrade of the Sava GIS and Sava HIS incl. navigation





Thank You for Your Attention!

