

Status of Inland Navigation in Croatia

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Critical locations 2020-2023

CS	Name of location	from rkm	to rkm
1	Bezdan	1,429.0	1,425.0
2	Siga Kazuk	1,424.2	1,414.4
3	Apatin	1,408.2	1,400.0
4	Židovski rukavac	1,397.2	1,389.0
5	Ušće Drave	1,388.8	1,382.0
6	Aljmaš	1,381.4	1,378.2
7	Staklar	1,376.8	1,373.4
8	Erdut	1,371.4	1,366.4
9	Bogojevo	1,366.2	1,361.4
10	Dalj	1,357.0	1,351.0
11	Borovo I	1,348.6	1,343.6
12	Borovo II	1,340.6	1,338.0
13	Vukovar	1,332.0	1,325.0
14	Sotin	1,324.0	1,320.0
15	Opatovac	1,315.4	1,314.6
16	Mohovo	1,311.4	1,307.6
17	Bačka Palanka	1,302.0	1,300.0



- 17 critical locations in total length of 76.4 rkm
- on most sections there is a problem with insufficient fairway width
- Mohovo → limited depth during LNWL



Number of days with fairway depths $\geq 2.50\text{m}$ at main critical locations 2015-2023 on Danube
for a fairway width of 100m (CEMT class VIc)

Critical location	2015	2016	2017	2018	2019	2020	2021	2022	2023
Apatin	365*	366*	363*	365*	365*	366	365	365	365
Mohovo	-	-	-	-	-	-	306	237	344

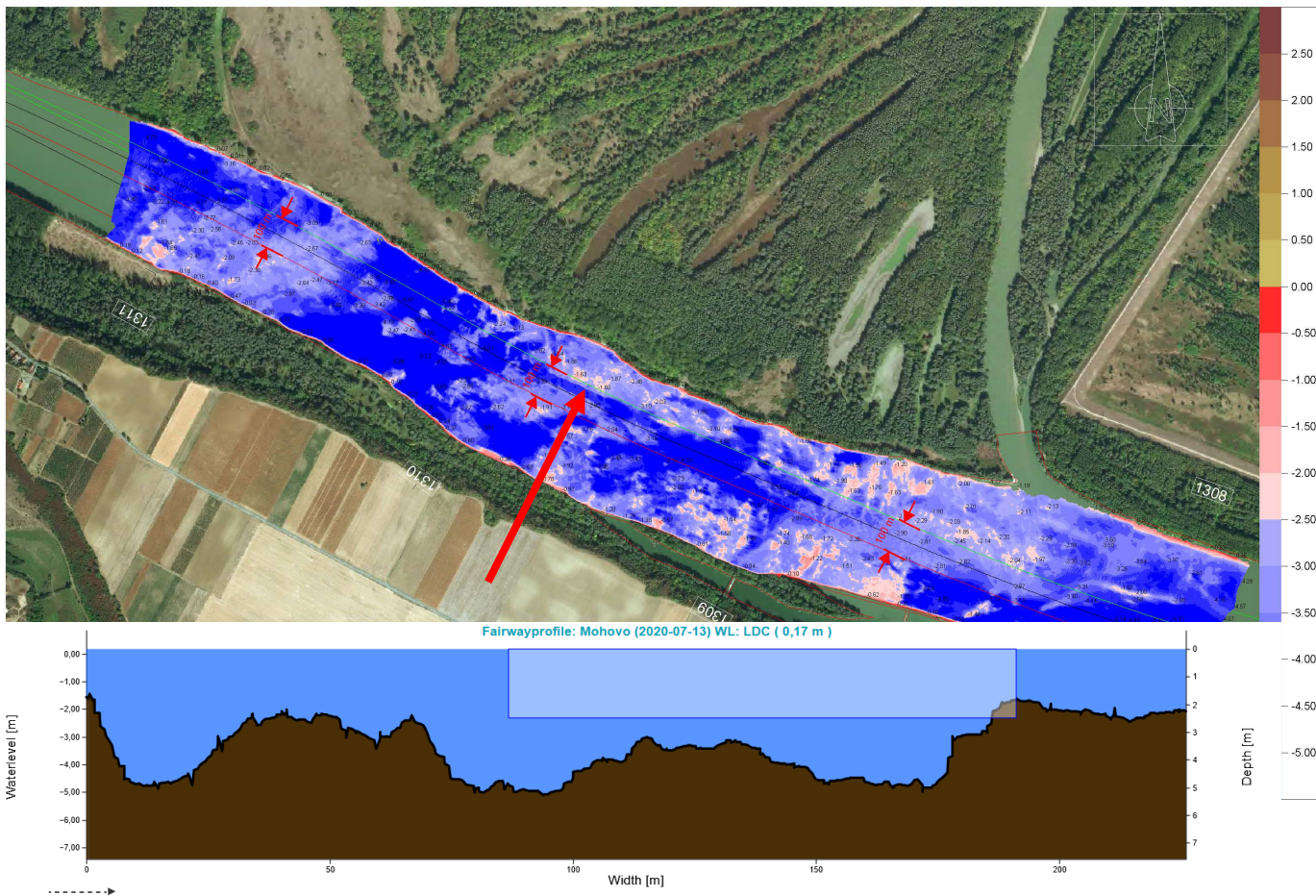
**Data provided by PLOVPUT*

Number of days with water levels $\geq \text{LNWL}$ at main critical locations 2015-2023 on Danube

Critical location	Reference gauges	2015	2016	2017	2018	2019	2020	2021	2022	2023
Apatin *	Apatin	315*	353*	352*	266*	331*	366	319	304	340
Mohovo	Mohovo	-	-	-	-	-	-	-	-	347

**Data provided by PLOVPUT*

Mohovo sector



- due to the rocky river bed fairway width is limited to 100m
- navigable channel depth of 2.5m is ensured for water levels +70 and above on the Vukovar gauge



Apatin sector

- no issues with fairway depth at Apatin in 2023
- insufficient fairway width



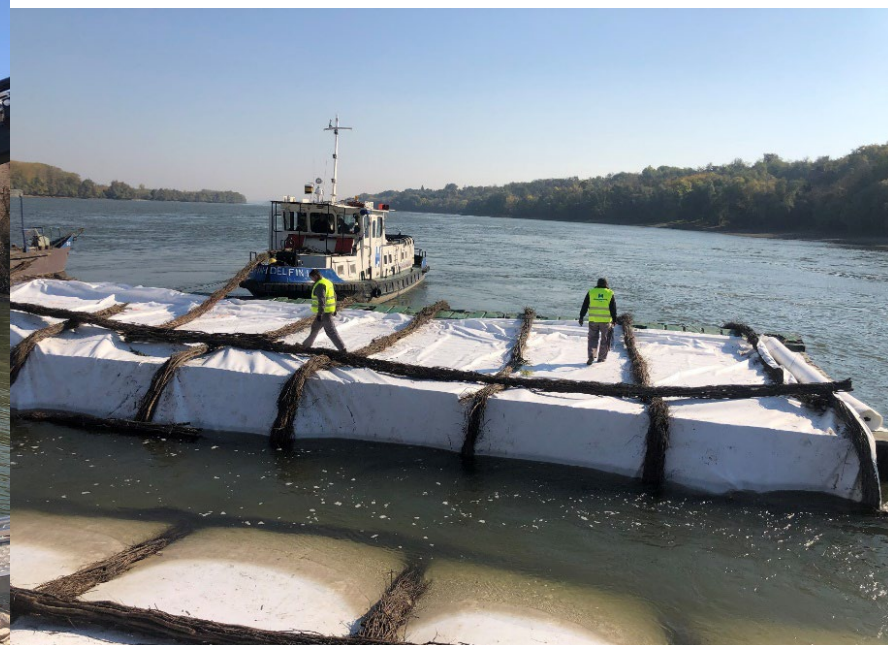
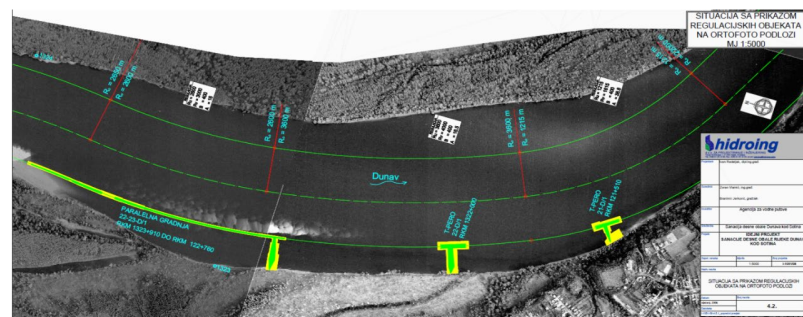
2023 Apatin												
depth	2.5				2.4				2.3			
width	200	150	120	100	200	150	120	100	200	150	120	100
Jan	10	10	31	31	13	13	31	31	16	16	31	31
Feb	10	10	28	28	11	11	28	28	11	11	28	28
Mar	4	4	31	31	5	5	31	31	7	7	31	31
Apr	20	20	30	30	20	20	30	30	22	22	30	30
May	31	31	31	31	31	31	31	31	31	31	31	31
Jun	19	19	30	30	19	19	30	30	20	20	30	30
Jul	0	0	31	31	0	0	31	31	0	0	31	31
Aug	18	18	31	31	18	18	31	31	18	18	31	31
Sep	10	10	30	30	10	10	30	30	11	11	30	30
Oct	0	0	31	31	0	0	31	31	0	0	31	31
Nov	23	23	30	30	24	24	30	30	24	24	30	30
Dec	31	31	31	31	31	31	31	31	31	31	31	31
SUM available depth	176	176	365	365	182	182	365	365	191	191	365	365



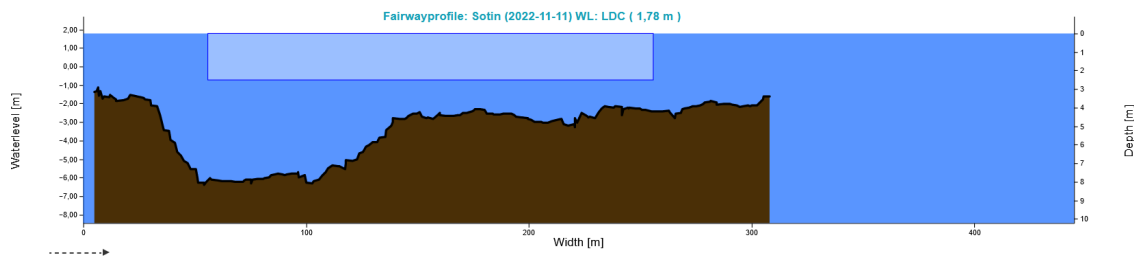
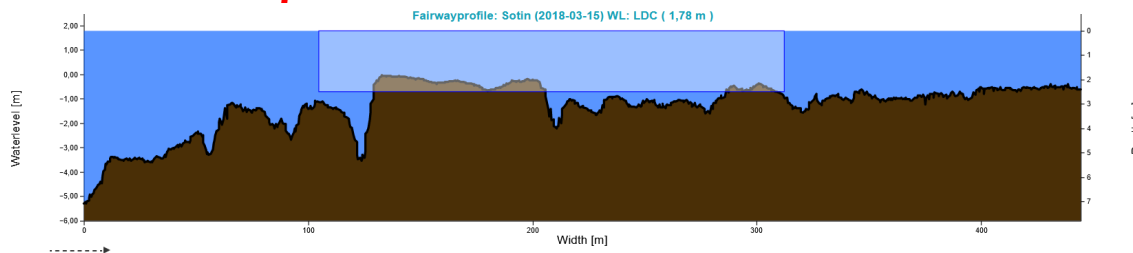
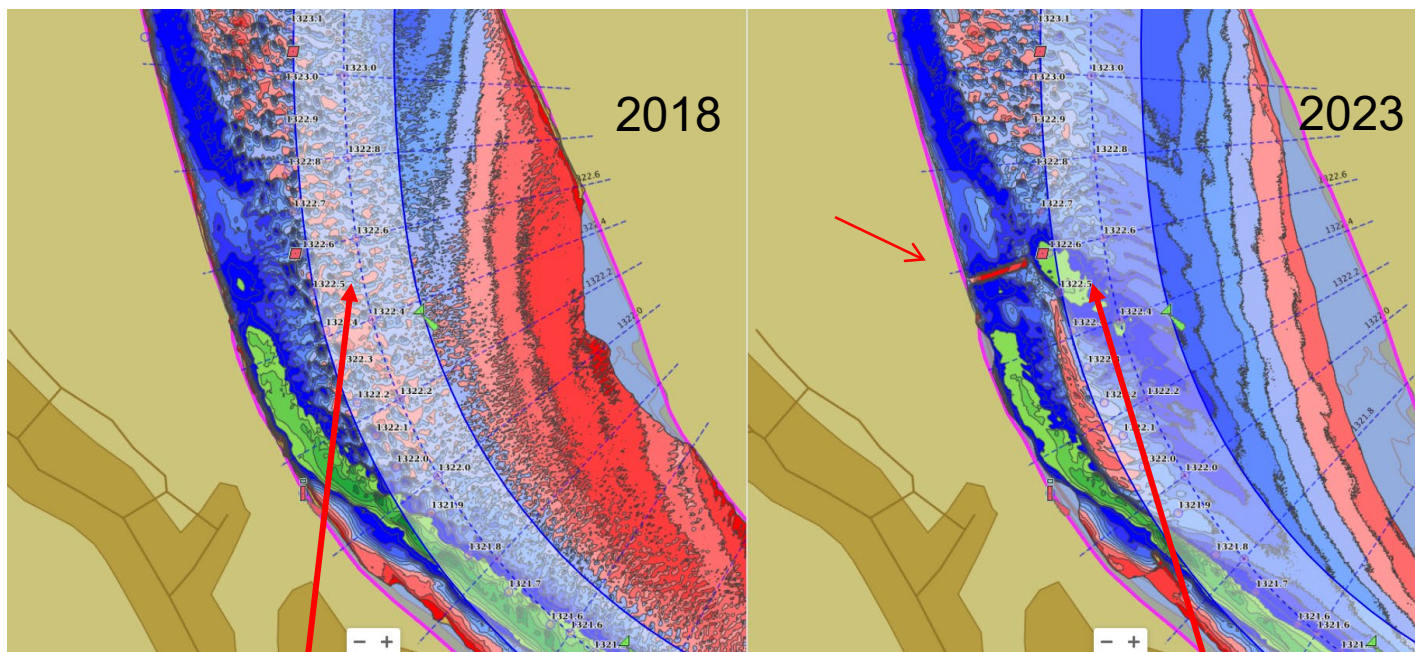
Activity concluded in 2023

National OP – Sotin - regulation works on the Danube river on rkm 1322

- 2/2020 – 12/2023
- App 3,5 mil €



Sotin critical location 2020-2023



Monitoring, rehabilitation and maintenance activities in 2023

Monitoring activities - (bathymetric survey) were regularly performed on Danube, Drava and Sava rivers

Marking department provided regular services on all navigable rivers in HR

No maintenance activities (dredging) on Danube



Planned activities in 2024

National OP – winter harbour Opatovac on rkm 1314

- 3/2020 – 9/2024
- App 4,2 mil€
- First inland winter harbor in HR

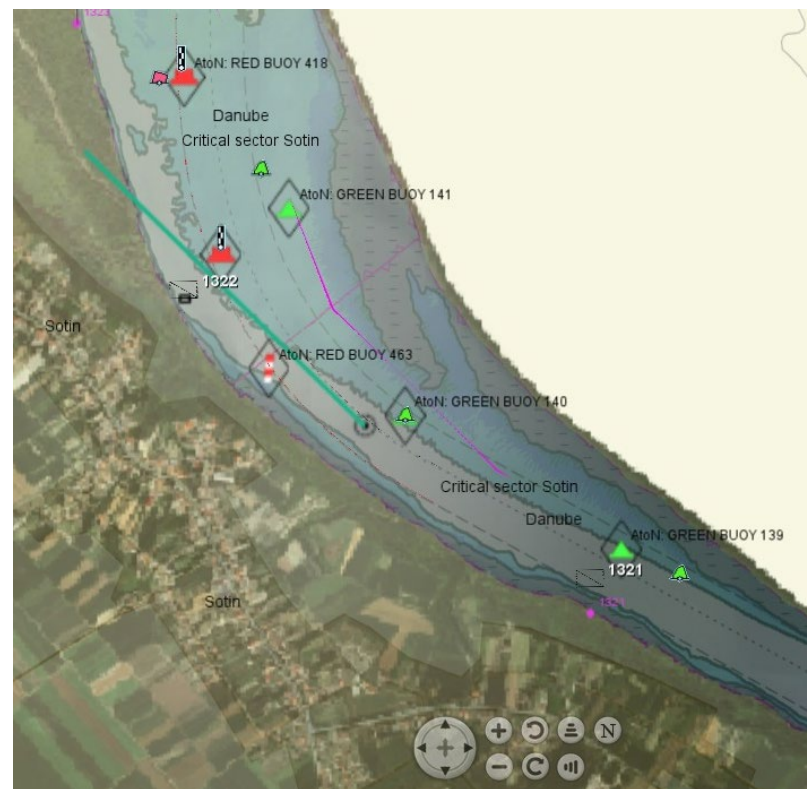


Planned activities in 2024

National OP – Modernisation of inland waterways marking system

- Two marking vessels (Sava & Drava rivers)
- AtoNs, upgrade of existing AIS system

- 1/2020 – 5/2024
- App 3,6 mil €



Operational expenditures for conducted activities in 2022 and budget needs in 2023

Need areas	Operational expenditures 2023	Required operational budget 2024	Secured operational budget 2024	Remaining financing gap 2024
Minimum fairway parameters (width/depth)	1 145 000	2 400 000	2 400 000	0
Surveying of the riverbed	n/a	n/a	n/a	n/a
Water level gauges	17 000	17 000	17 000	0
Marking of the fairway	200 000	300 000	300 000	0
Availability of locks / lock chambers	n/a	n/a	n/a	n/a
Information on water levels and forecasts	30 000 (DHMZ)	30 000 (DHMZ)	30 000 (DHMZ)	0
Information on fairway depths (national OP)	n/a	n/a	n/a	n/a
Information on marking plans	n/a	n/a	n/a	n/a
Meteorological information	5 000 (DHMZ)	5 000 (DHMZ)	5 000 (DHMZ)	0
Other needs (national OP)	App 4.5 mil€	App 2.5 mil€	App 2.5 mil€	0
Sum (Euro)	5 897 000	5 252 000	5 252 000	0



Thank you for your attention!

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