



SLOVENSKÝ
VODOHOSPODÁRSKY
PODNIK, štátny podnik



Information

of Slovak operator of the waterway Danube, Slovak Water Management Enterprise, State Enterprise, on the status of the fairway in 2023 and on the Program for maintenance work of 2024

Expert Meeting on Hydraulic Engineering (EM HYD) February 29th 2024

Elaborated:

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1. Introduction – basic information

Responsibility of the Slovak Water Management Enterprise, state company:

- to operate Danube inland waterway of international importance;
- to ensure maintenance and marking of the Danube fairway from r. km 1880,2 – 1708,2 in total length 172 km of Danube river and 42 km Canal of Waterworks Gabčíkovo, at follows sections:

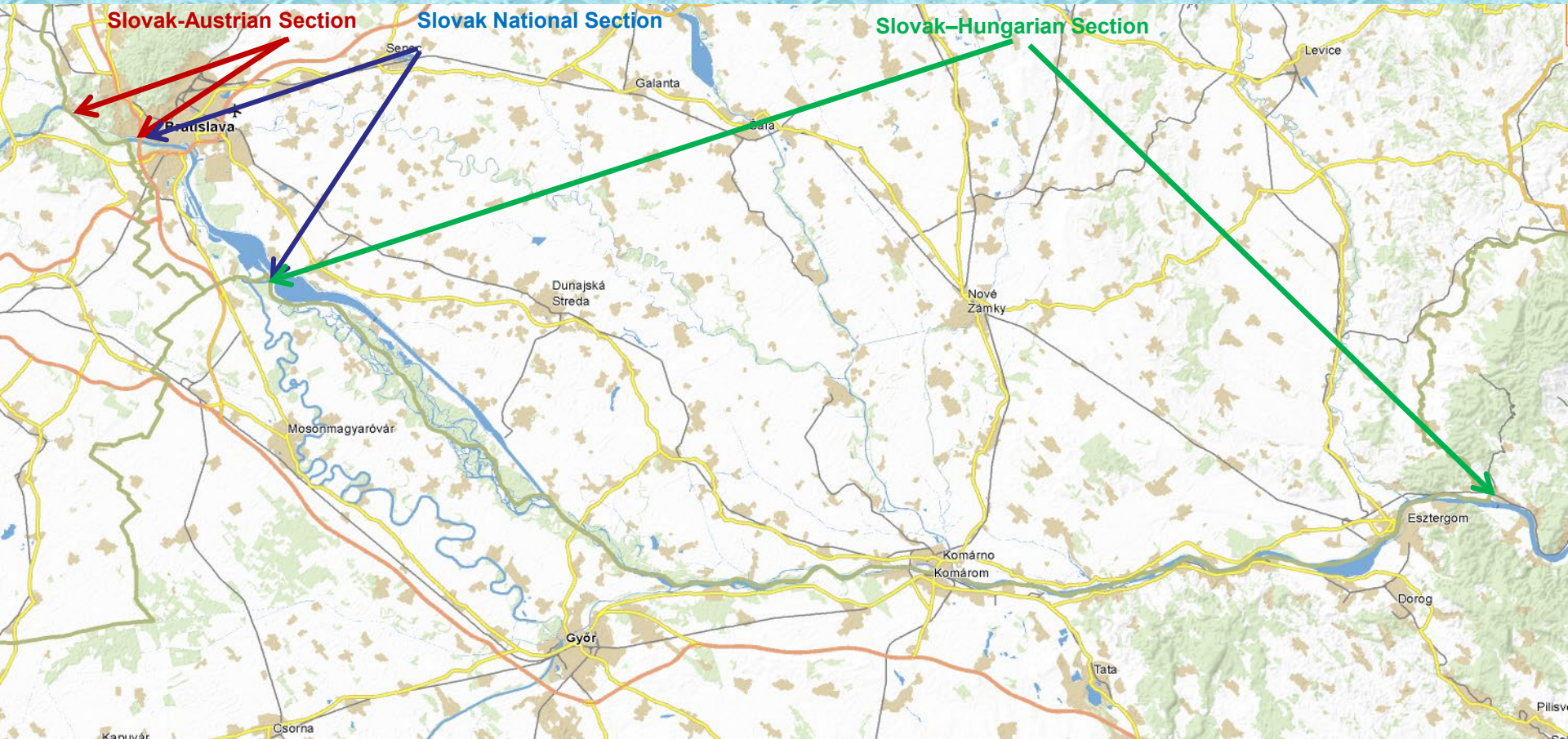
Slovak-Austrian section (7,5 km): r. km 1880,200 – 1872,700

Slovak national section (22,5 km): r. km 1872,700 – 1850,200

Slovak-Hungarian section (142,0 km): r.km 1850,200 – 1708,200

Gabčíkovo waterworks (42 km): r.km 1853,00–1811,00

1. Introduction – situation



2. The state of the main critical sections in 2021 - 2023, including information on the water level

In the monitored sections, there is pay attention to 23 localities, which are defined as critical bottlenecks.

Relevant localities you can see in the table right.

Localities, marked in yellow, they are monitored in the framework of the joint Slovak-Austrian and Slovak-Hungarian Commissions for Boundary Waters.

	location	river km	section
1	Devín	1879,6 - 1879,0	SK-AU
2	Kasmacher	1875,7 - 1875,2	SK-AU
3	Lanfranconi	1871,0 - 1870,7	SK
4	Zemník-Vlčie hrdlo	1864,3 - 1863,8	SK
5	Medved'ov	1808,1 - 1807,6	SK-HU
6	Čičov	1799,0 - 1798,7	SK-HU
7	Vének 3	1797,4 - 1796,6	SK-HU
8	Vének 2	1796,3 - 1795,5	SK-HU
9	Vének 1	1795,5 - 1795,2	SK-HU
10	Klišská Nemá 2	1793,9 - 1793,3	SK-HU
11	Klišská Nemá 1	1792,1 - 1791,6	SK-HU
12	Gonyu	1791,4 - 1791,1	SK-HU
13	Veľké Kosihy 2	1789,2 - 1788,3	SK-HU
14	Veľké Kosihy 1	1786,7 - 1785,9	SK-HU
15	Komárno	1764,3 - 1764,0	SK-HU
16	Patince 2	1757,1 - 1756,7	SK-HU
17	Patince 1	1754,3 - 1754,1	SK-HU
18	Kravany	1740,2 - 1739,8	SK-HU
19	Čenkov	1735,2 - 1733,3	SK-HU
20	Mužla	1732,6 - 1732,2	SK-HU
21	Obid	1726,0 - 1724,4	SK-HU
22	Hron sútok	1714,4 - 1713,9	SK-HU
23	Chľaba	1711,5 - 1710,7	SK-HU

3. Overview of monitoring, restoration and maintenance in 2023

From the point of view of navigation, the water conditions of the Danube in 2023 were assessed as average, and compared to 2022, navigation conditions improved due to higher flows

Higher flows were reflected in a reduction in the number of days with restricted navigation conditions at fords and bottlenecks.

The created fords enabled 100% utilization of the ship's cargo space during the year 2023 to 66.8% for a duration of 244 days. In 2022, 100% utilization of the ship's cargo space was 47.4% for a duration of 173 days

An overview of the status of the narrow places of the fairway is presented in the next table.

3. Overview of monitoring, restoration and maintenance in 2023

Serial number	Location	Section (rkm)	Width	Number of days		
				2021	2022	2023
1	Medved'ov	1808,10 – 1807,60	120	69		
2	Číčov	1799,00 – 1798,30	100	73	94	89
			110	109	130	87
3	Vének 3	1797,40 – 1796,60	80	73	130	89
			90	78		87
			100	31	94	
4	Vének 2	1796,30 – 1795,50	100	23	26	
			110	159	198	150
5	Vének 1	1795,50 – 1795,20	80	84	130	26
			90	67		89
			100	31	94	87
6	Kližská Nemá 2	1793,90 – 1793,30	80	151	130	87
			100	31	94	89
			110			
7	Kližská Nemá 1	1792,10 – 1791,60	100	182	224	176
8	Velké Kosihy 2	1789,20 – 1788,30	120	92	151	65
9	Velké Kosihy 1	1786,70 – 1785,90	120	103	170	65
10	Nyerges	1735,20 – 1733,30	100	156	207	144
11	Obid	1726,00 – 1724,40	130	75	138	77
12	Hron	1714,40 – 1713,90	120	29	57	28
13	Chřaba	1711,50 – 1710,70	100	124	192	121

3. Overview of monitoring, restoration and maintenance in 2023

The low discharges were also reflected in the number of days with maximum use of vessels for the transport of goods at 100% utilization of vessel capacity. In 2023, sailing conditions were more favorable than in 2022.

Depth of fairway	Ship sinking	Use of the ship's cargo space	Usability	number of days	
Year			2021	2022	2023
27 dm and more	25 dm and more	100%	240	173	244
25 - 26 dm	23 – 24 dm	80 – 90 %	38	54	44
23 - 24 dm	21 – 22 dm	70 – 80 %	23	39	34
21 - 22 dm	19 – 20 dm	60 – 70 %	35	42	15
19 - 20 dm	17 – 18 dm	50 – 60 %	18	38	6
19 - 20 dm	15 – 16 dm	40 – 50 %	11	16	16
15 - 16 dm	13 – 14 dm	30 – 40 %		3	6

3. Overview of monitoring, restoration and maintenance in 2023

Monitoring of the fairway status is permanent ensured by relevant expert group. Slovak surveying vessels navigated 14 787 km.

It includes:

- The control of navigational signs and marks, along all fairway and the navigational depths and widths at bottlenecks / critical sections of the fairway.
- Fairway monitoring of the waterway by bathymetric measurements of the entire section of the Danube at least once a year and selected critical sections several times a year.

In 2023, bathymetric measurements were taken from March to November.

In 2023, maintenance work was concentrated on 3 bottlenecks / critical sections of the Danube fairway.

3. Overview of monitoring, restoration and maintenance in 2023

Regulatory dredging of the national section of the Danube

r. km 1864,8 – 1863,7 - location Vlčie hrdlo

- dredged material in the amount 109 475 m³ of gravel and sand

Regulatory dredging of the Slovak-Austrian section of the Danube

r. km 1879,60 – 1879,00 - location Devín

- dredged material in the amount of 11 620 m³ of gravel and sand

Navigation km 32 – 34 – Hrušov reservoir

- dredged material in the amount of 19 912 m³ of gravel and sand

4. Planned activities to ensure navigation in 2024

DREDGING:

Regulatory dredging - national section of the Danube

The amount of 60.000 m³ of material

Regulatory dredging of the Slovak-Hungarian section of the Danube

Amount of 30.000 m³ of material

Fairway of Hrušov reservoir

Fairway repair and maintenance of the Danube waterway

r. km 1880-1860 and r. km 1810-1709

Bathymetric measurements of the fairway

5. Operating costs for activities implemented in 2023

Regulatory dredging of the national section of the Danube

rkm 1864,8 – 1863,7 - location Vlčie hrdlo 1 543 033 €

Regulatory dredging of the Slovak-Austrian section of the

Danube

rkm 1879,6 – 1879,00- location Devín 283 449 €

Dredging of the Fairway of Hrušov reservoir 486 262 €

Repair and maintenance of the Danube waterway 1880-1860 and 1810-1709 577 949 €

Bathymetric measurements of the waterway 314 778 €

5. Budget requirements for 2024

Dredging:

Regulatory dredging - national section of the Danube

1 223 000 €

Regulatory dredging of the Slovak - Hungarian section of the Danube

991 000 €

Fairway of Hrušov reservoir

1 000 000 €

Repair and maintenance of the Danube waterway 1880-1860
and 1810-1709

500 000 €

Bathymetric measurements of the waterway

315 000 €



Thank you for your attention

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