Market Observation for Danube Navigation: Results for the Period January-March 2025

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1 Initial State of the Market

The initial state of the main sectors of the Danube shipping market by the beginning of 2025 was determined by the dynamics of the third (Q3) and the fourth (Q4) quarters of 2024 and the overall results of 2024, as well as the indicative forecasts of the relative growth of the gross domestic product of the Member States of the European Union and the Eurozone compared to 2024.

The determining factor affecting the state of the shipping market in 2024 was the consequences of Russia's full-scale military invasion of Ukraine, which began in February 2022. This led to additional risks and disruptions in the Danube shipping market.

During 2024, as well as in the first quarter of 2025, starting from January (the first attack on the Izmail region occurred on the night of 17 January 2025), Russia regularly carried out airstrikes on Ukraine's port infrastructure on the Danube, practically on a monthly basis from January to June 2025. As a result of these attacks, grain hangars, storage facilities, and administrative buildings were destroyed in Ukraine's Danube ports. Civilian objects were also affected, endangering the lives of the civilian population. Significant damage was inflicted on the ecological system of the Lower Danube region.

It should be noted that components of Russian unmanned aerial vehicles were also found on the territory of neighboring countries—Romania and the Republic of Moldova.

In fact, through its aggressive actions on the Danube, Russia has created conditions of direct threats not only to the safety of Ukraine’s Danube port infrastructure but also to the entire navigation system of the Lower Danube, including the safety of ship crews and personnel. Nevertheless, Ukraine’s Danube ports continue to operate steadily despite regular shelling, making a significant contribution to global food security.

Under these circumstances, the Danube Commission in 2024 and continuing into 2025 has remained actively engaged in providing comprehensive support for the export of Ukrainian agricultural sector products, as well as the import of goods essential for Ukraine. This work has

been carried out within the framework of the **Danube Solidarity Lanes EU–Ukraine** initiative, adopted in May 2022 to support the European Union's solidarity measures with Ukraine.

The role and importance of the **Danube Solidarity Lanes EU–Ukraine** initiative have not diminished, despite the increased activity of the Ukrainian Grain Corridor, established in the autumn 2023 through the ports of Odesa, Pivdennyi, and Chornomorsk (the ports of Greater Odesa). The primary goal remains to ensure the resilience and constant readiness of Danube navigation as a backup route to support transport to and from Ukrainian ports.

Navigation conditions on the Danube in 2024, especially in the first half of the year, can be considered relatively stable.

Taking into account the relative stability of navigation conditions, as well as the partial reorientation of the market, cargo transport volumes in 2024 amounted to:

- In cross-border traffic Germany/Austria (DE/AT): **2,627 thousand tonnes**, or **127%** of the 2023 volume;
- In cross-border traffic Hungary/Slovakia (HU/SK): **4,539 thousand tonnes**, or **114%** of the 2023 volume;
- In cross-border traffic Hungary/Croatia/Serbia (HU/HR/RS): **4,034 thousand tonnes**, or **120%** of the 2023 volume;
- Cargo volumes transported via the **Danube–Black Sea Canal** amounted to **18 million tonnes**, or **79%** of the 2023 volume;
- Cargo volumes via the **Sulina Canal** amounted to **9,902 thousand tonnes**, or **60%** of the 2023 volume.

According to operational data, a total of **3,141 vessels** passed through the Sulina Canal in 2024. Of this, **1,697 vessels** were outbound from the Danube to the Black Sea, while **1,444 vessels** were inbound from the Black Sea to the Danube.

The total cargo turnover of Danube ports in 2024 amounted to **77,4 million tonnes** (Table 1.1), which is **81%** of the 2023 volume.

Table 1.1. Cargo turnover of the Danube ports in 2020-2024 (thousand tonnes)

Port/year	2021	2022	2023	2024
Germany	2,999	2,410	2,228	2,047
Austria	6,356	5,363	5,123	5,349
Slovakia*	1,846	1,934	1,509	1,473
Hungary	5,715	4,063	3,604	4,019
Croatia**	697	582	364	392
Serbia**	13,610	12,023	12,031	12,816
Bulgaria	7,111	7,104	7,026	7,520
Romania	28,457	24,355	28,857	23,759
Republic of Moldova	1,819	2,144	2,668	2,579
Ukraine	5,505	16,505	32,021	17,396

* Only Bratislava and Komarno
**Numbers for Croatia and Serbia also include the countries' transport volumes on the Sava River

Despite a relative decline in the volume of cargo offered for transshipment, as well as a significant drop in freight rates for grain exports from the ports of the Lower Danube, the Ukrainian Danube ports — Reni, Izmail, and Ust-Dunaisk — have generally maintained stable positions in the market (Table 1.2).

Table 1.2. Cargo turnover of Ukrainian Danube (river+sea) ports in export in 2024 (thousand tonnes)

Type of goods/port	Izmail	Reni	Ust-Dunaisk
Cereals	4,989	1,258	188
Other bulk goods	1,197	567	107
Mineral oil products (bulk)	5,734	445	11

At the same time, it is worth noting that, alongside the export of agricultural products, the cargo turnover structure of the Ukrainian Danube cluster ports has seen an increase in the volume of other types of cargo.

Over the past ten years, cargo turnover at or above the level of 1.0 million tonnes per year has been maintained by 14 to 16 Danube ports, including the Port of Constanța (Table 1.3). The highest cargo volumes were recorded at ports specializing in the transshipment of raw materials (ores, pellets, coal), finished products of the ferrous metallurgy industry, and grain cargoes.

Table 1.3. Cargo turnover of selected ports of the Danube countries in 2019-2023, (thousand tonnes)

Port/year	**2020**	**2021**	**2022**	**2023**
Constanţa*	14,505	15,851	15,393	21,698
Regensburg	1,553	1,303	1,083	1,021
Linz	3,411	3,482	2,929	2,916
Bratislava	1,553	1,773	1,910	1,414
Budapest-Csepel	1,192	1,199	985	889
Smederevo	2,612	3,168	3,053	2,823
Pancevo	2,051	1,920	1,589	1,641
Novi Sad	1,632	1,435	979	918
Prahovo	1,198	1,044	933	1,054
Tulcea**	1,225	1,332	489	167
Galaţi**	5,256	5,846	5,173	2,346
Giurgiulesti**	1,185	1,819	2,144	2,668
Izmail**	3,245	4,071	8,893	20,263
Reni**	790	1,370	6,826	10,071

* Cargo turnover by river vessels
** Cargo turnover by river and sea vessels

In the passenger transport market in 2024, the stable operation of the main cruise lines on the Upper Danube began in March. This was followed by an increase in both the number of voyages and the total number of passengers transported.

In total, 610,000 passengers were transported on the Upper Danube lines in 2024, representing 109% of the 2023 volume.

In contrast, the situation on routes toward the Danube Delta were markedly different: during the first quarter of 2024, passenger vessels with cabins were practically out of operation (aside from a few transits without passengers). The total number of passengers transported on these routes amounted to only 8.7 thousand, which is 30% of the 2023 figure.

2 Navigation Conditions in the First Quarter of 2025

In the first quarter of 2025, water levels on the Danube were mostly maintained at, or above, the values of the Low Navigable Water Level (LNWL). In the first half of March, water levels on the Middle Danube dropped below the LNWL for several days.

In January, on the Upper Danube (Figure 1), minimum and average MW (Mean Water) levels were 70 cm while maximum levels were 30 cm lower than in January 2024. The absolute minimum levels were observed at the beginning and in the second half of the third ten-day period of the month.

On the Middle Danube (Figure 2), minimum water levels were 150 cm lower than in January 2024, average levels were 220 cm lower, and maximum levels were 270 cm lower. The absolute minimum levels were recorded at the beginning and mid-third ten-day period of the month.

On the Lower Danube (Figures 3 and 4), minimum water levels were 270–280 cm lower than in January 2024, average levels were 290 cm lower, and maximum levels were 220 cm lower. The absolute minimum levels were recorded in the second half of the first and at the end of the third ten-day period of the month.

In February, on the Upper Danube (Figure 1), minimum water levels were 80 cm lower than in February 2024, average levels were 70 cm lower, and maximum levels were 50 cm lower. The absolute minimum levels were observed in the early second ten-day period and at the end of the month.

On the Middle Danube (Figure 2), minimum water levels were 200 cm lower than in February 2024, average levels were 190 cm lower, and maximum levels were 70 cm lower. The absolute minimum levels were recorded at the end of the month.

On the Lower Danube (Figures 3, 4), minimum water levels were 250–270 cm lower than in February 2024, average levels were 260 cm lower, and maximum levels were 230–240 cm lower. The absolute minimum levels were observed in the second half of the third ten-day period of the month.

In March, on the Upper Danube (Figure 1), minimum and average water levels were 80 cm lower than in March 2024, while maximum levels were 70 cm lower. The absolute minimum levels were observed in the first half of the second ten-day period of the month.

On the Middle Danube (Figure 2), minimum water levels were 140 cm lower than in March 2024, and both average and maximum levels were 130 cm lower. The absolute minimum levels were recorded at the end of the first and beginning of the second ten-day period of the month. Moreover, for six days, water levels reached or dropped below the RNW (Reference Navigation Water Level).

On the Lower Danube (Figures 3, 4), minimum water levels were 200–230 cm lower than in March 2024, average levels were 140–190 cm lower, and maximum levels were 20–90 cm lower. The absolute minimum levels were observed at the beginning of the month.

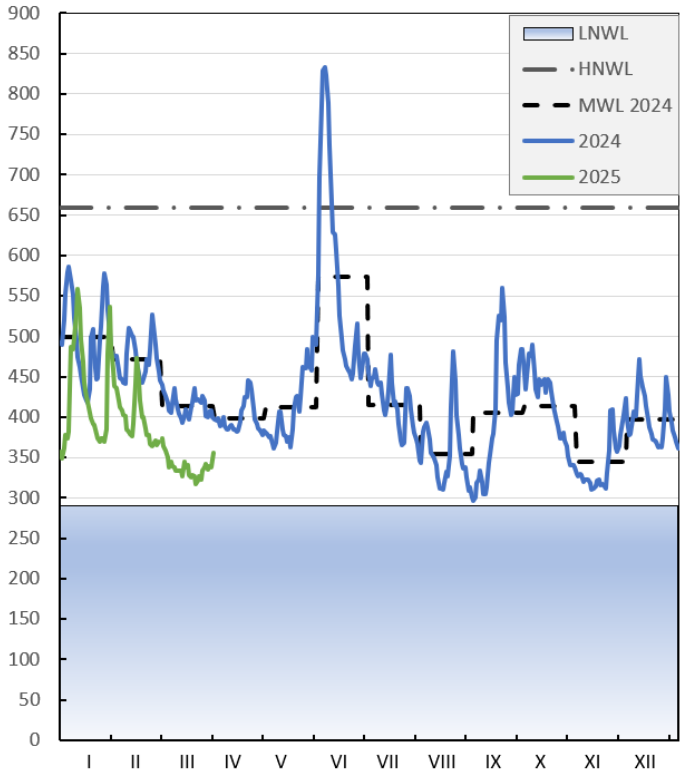

Figure 1. Daily water levels for the Pfelling gauging station (DE), (km 2306+530), in cm

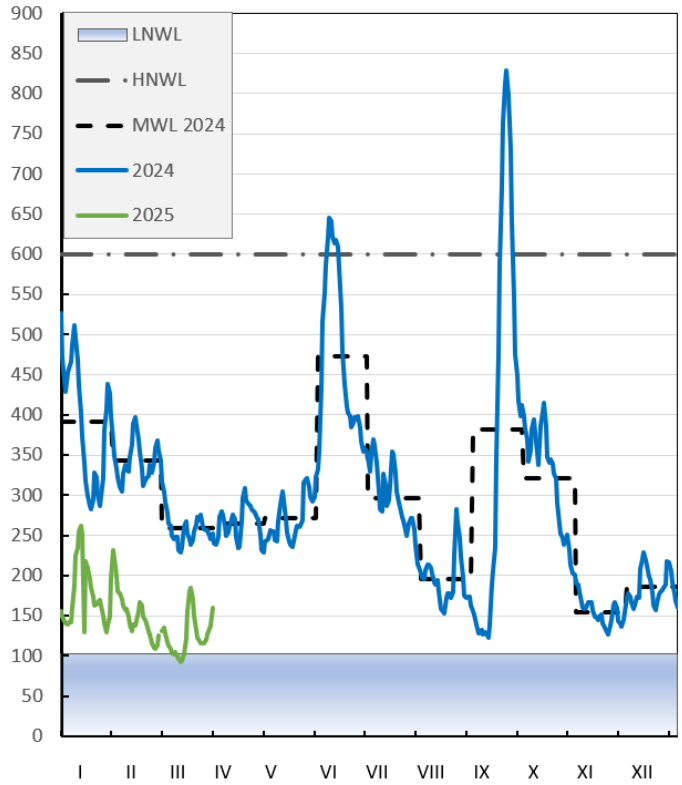

Figure 2. Daily water levels for the Budapest Vigadó station (HU), (km 1646+500), in cm

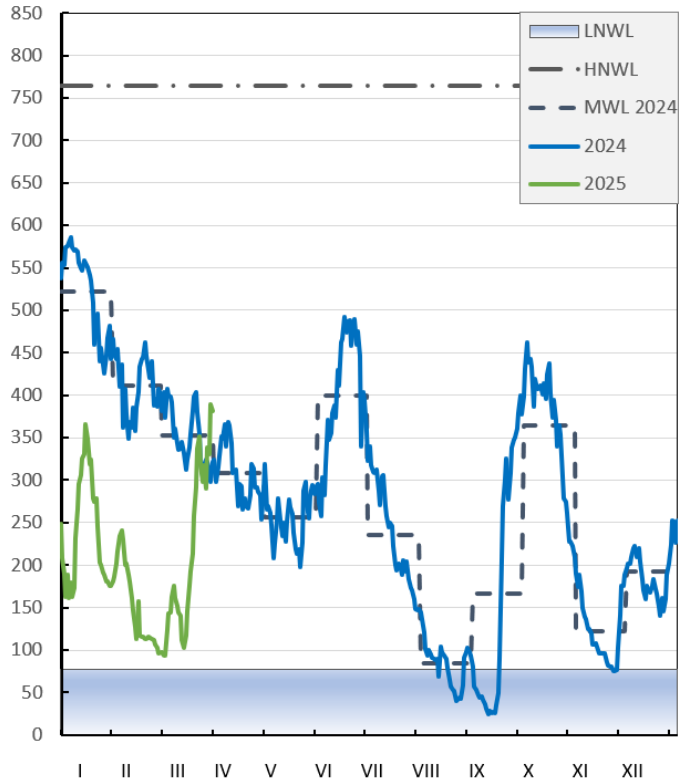

Figure 3. Daily water levels for the Novo Selo gauging station (BG), (km 833+600), in cm

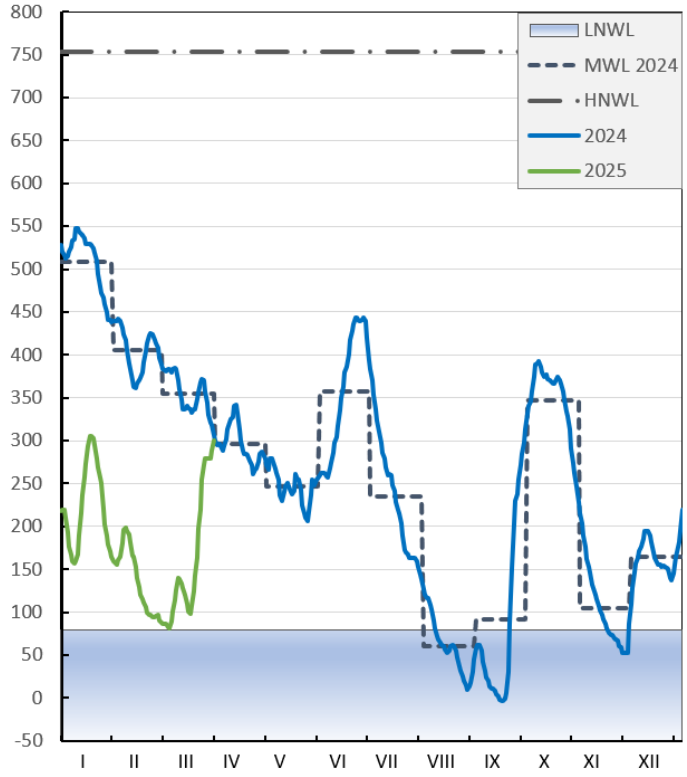

Figure 4. Daily water levels for the Silistra gauging station (BG), (km 375+000), in cm

3 Dynamics of the freight and passenger transport market in the first quarter of 2025

3.1 Hydrological conditions and availability of vessel draughts

In the first quarter of 2025, relatively stable water availability was maintained, which allowed vessels to be loaded to a draught of 2.5–2.7 meters (Table 3.1).

Table 3.1. Draught of cargo vessels in the first three months of 2025 navigation season (cm)

Month	Loaded, going upstream	Loaded, going downstream
January	250/270 (250*)	220/230 (220/230*)
February	270 (270*)	230 (230*)
March	270 (270*)	230/240 (220/240*)

* Indicators for the corresponding period of 2024 are given in brackets for comparison.

3.2 Transport volumes, cargo nomenclature and port turnover in the first quarter of 2025

The state of the cargo transport market on the Danube in the first quarter (Q1) of 2025 was shaped by the key factors outlined in Section 1, as well as the ongoing negative impact of Russian aggression against Ukraine on the main industrial sectors and the agricultural economy in the Danube region and adjacent basins.

The volume of cargo transported through the Jochenstein lock (cross-border section Germany/Austria – DE/AT) in Q1 2025 amounted to 635.4 thousand tonnes, representing 71.6% of the volume transported in Q1 2024.

In the cross-border transport between Hungary and Slovakia (HU/SK):

- The volume of cargo transported through the Gabčíkovo lock (Hungary/Slovakia border) in Q1 2025 was 1.034 million tonnes (80% of the Q1 2024 volume);
- The volumes of transported cargo by commodity group for Q1 2024 and 2025 are shown in Figure 5, while data for the years 2019–2024 are represented in Tables 3.2 and 3.3.

Table 3.2. Cargo volumes at the Upper Danube HU/SK cross-border point (going upstream, thousand tonnes)*

Commodity group/year	2021	2022	2023	2024 Q1	2025 Q1
Food products and animal feed	879	783	592	319	140
Iron ore raw materials	969	735	726	182	158
Grain	394	416	427	167	93
Metal products	71	101	56	10	13
Petroleum products	87	92	41	24	2
Organic and synthetic fertilizers	133	75	55	29	24

* Another notable cargo category of the quarter was minerals, with a total of 25 thousand tonnes transported. For a more detailed and visual representation of the transport volumes, see the visualization on the next page.

Table 3.3. Cargo volumes at the Upper Danube HU/SK cross-border point (going downstream, thousand tonnes)*

Commodity group/year	2021	2022	2023	2024 Q1	2025 Q1
Organic and synthetic fertilizers	465	445	418	149	141
Petroleum products	870	642	653	156	16
Metal products	140	173	155	40	48

* Two other notable cargo categories in the first quarter were coal (coke) (102 thousand tonnes) and iron ore raw materials (58 thousand tonnes). For a clearer visual representation of the transport volumes, see the visualization on the next page.

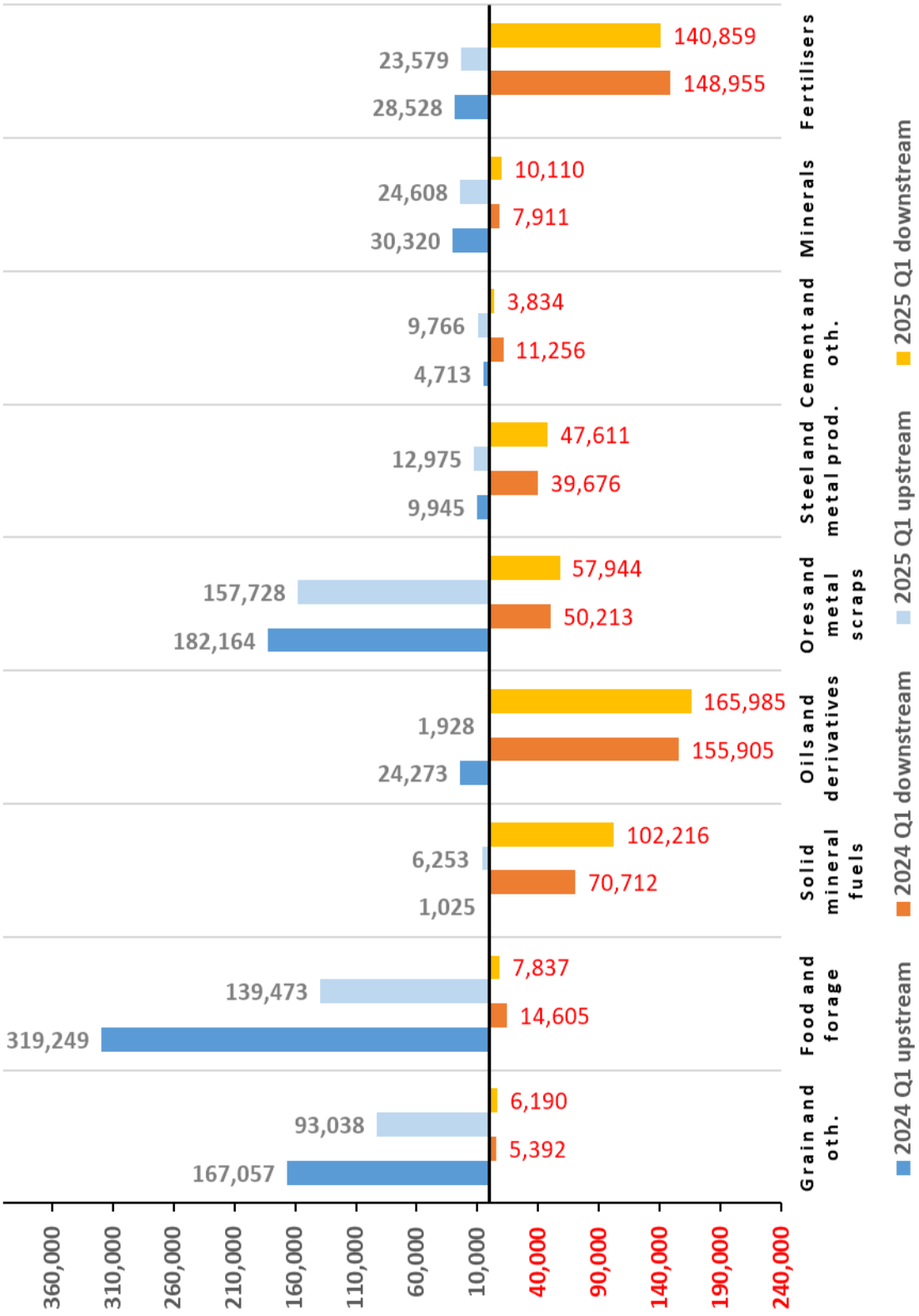

Figure 5. Commodity structure of cargo transport upstream/downstream the Danube River through the Gabčíkovo lock, in tonnes

Table 3.4. Cargo volumes at the Middle Danube HU/RS cross-border point (upstream, thousand tonnes)*

Commodity group/ year	2021	2022	2023	2024 Q1	2025 Q1
Iron ore raw materials	991	741	692	154	162
Coal (coke)	281	200	2	5	0
Fertilizers	385	256	121	47	123
Petroleum products	117	252	154	60	23
Metal products	249	205	111	77	27

* Two additional notable cargo categories of the quarter were grain (50 thousand tonnes) and minerals (38 thousand tonnes). For a more detailed representation of the transport volumes, see the visualization on the next page.

Table 3.5. Cargo volumes at the Middle Danube HU/RS cross-border point (downstream, thousand tonnes)*

Commodity group/year	2021	2022	2023	2024 Q1	2025 Q1
Grain	1,002	239	317	139	84
Petroleum products	591	322	405	130	152
Metal products	254	310	381	84	79
Food products and animal feed	219	65	216	9	16
Fertilizers	316	316	186	123	103

* Another notable cargo category of the quarter was coal (coke), with a total of 119 thousand tonnes transported. For a more detailed visualization of the transport volumes, see the visualization on the next page.

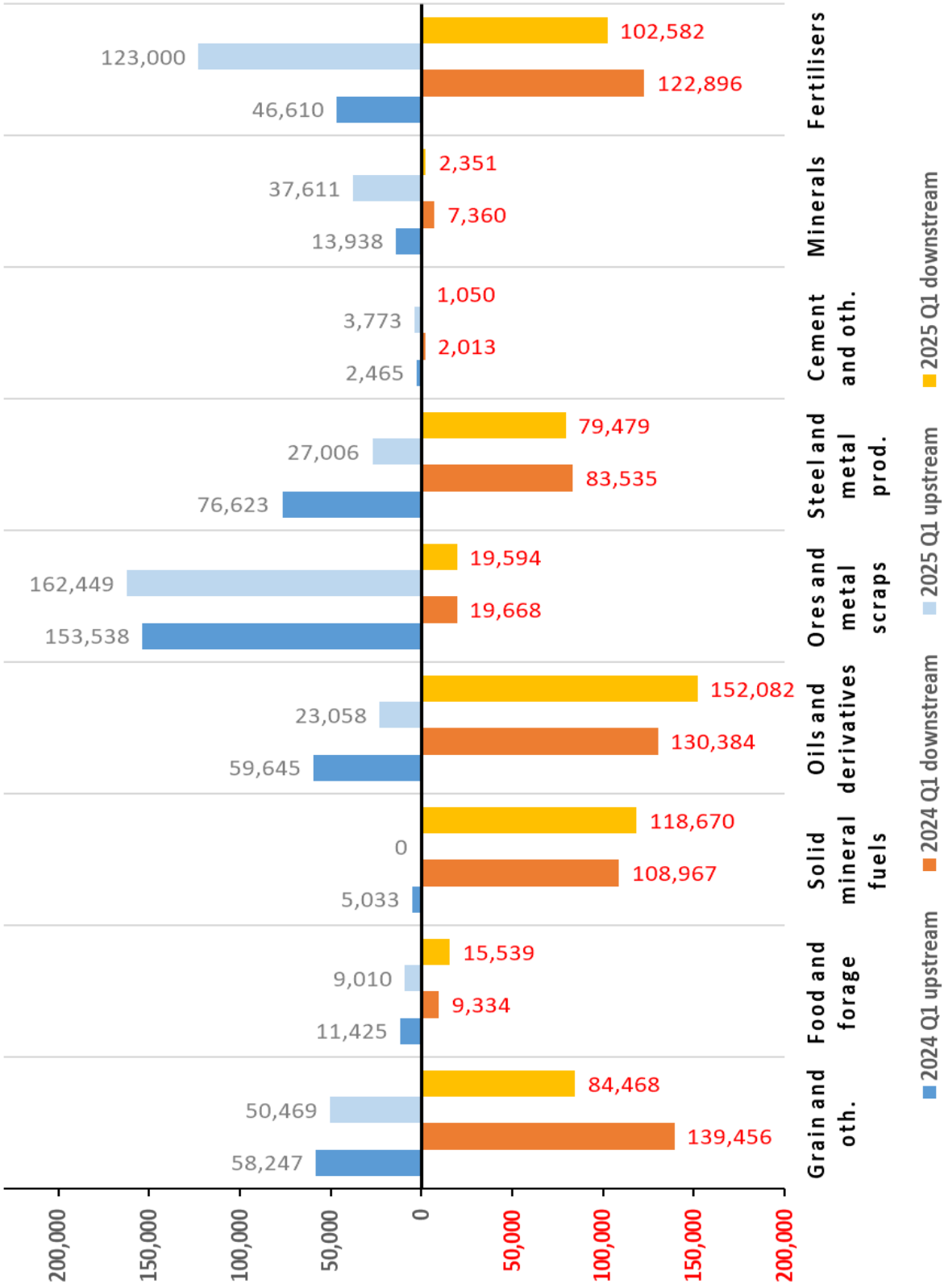

Figure 6. Commodity structure of cargo transport upstream/downstream the Danube River through Mohács, in tonnes

Transport via the Danube – Black Sea Canal

The volume of cargo transported via the Danube – Black Sea Canal in Q1 2025 amounted to 3.600 million tonnes, which is 66% of the corresponding figure for Q1 2024, including:

- International transport: 2.595 million tonnes, or 59% of Q1 2024;
- Domestic transport: 1.005 million tonnes, or 98% of Q1 2024.

Cargo turnover of Danube ports in Q1 2025 (data for Q1 2021–2024 are provided for comparison) showed divergent trends (Table 3.6).

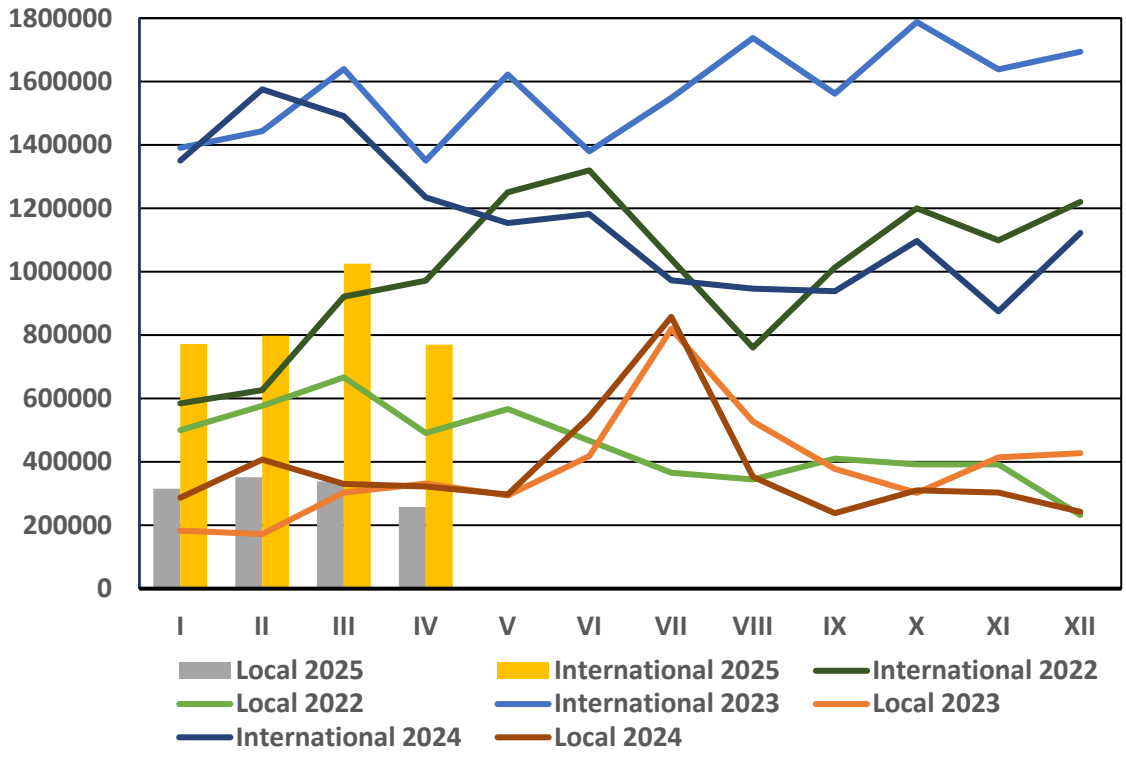

Figure 7. Volumes of international and national cargo transport through the Danube – Black Sea Canal, by month, in tonnes

Table 3.6. Cargo turnover of the ports of the Danube countries in the first quarters of recent years, (thousand tonnes)

Country/year	2021 Q1	2022 Q1	2023 Q1	2024 Q1	2025 Q1
Germany	821	615	453	1,276	542
Austria	2,050	1,669	1,232	1,391	1,339
Slovakia*	443	502	371	471	424
Hungary	1,540	1,222	840	1,122	980
Croatia**	175	180	80	90	51
Serbia**	3,703	3,055	3,426	3,295	3,043
Bulgaria	1,374	1,724	2,001	1,606	1,505
Romania	6,553	6,096	6,012	7,002	4,653
Republic of Moldova	239	486	610	699	621
Ukraine	1,047	1,431	6,806	5,653	2,311

* Only Bratislava and Komarno
** The rows for Croatia and Serbia also include the countries' transport volumes on the Sava River

The cargo turnover of the Port of Constanța by river vessels amounted to 3.244 million tonnes, which is 60% of the cargo turnover in Q1 2024. During this period, 331 thousand tonnes were loaded in Romanian ports for shipment to Ukrainian Danube ports, while 105 thousand tonnes of cargo were unloaded, arriving from Ukrainian ports.

The cargo turnover of the Ukrainian Danube ports for 2023–2024 and Q1 2025 is presented in Tables 3.7–3.9.

Table 3.7. Cargo turnover of Ukrainian Danube ports (river+sea), (thousand tonnes)*

Period/port	Izmail	Reni	Ust-Dunaisk
2023	20,263	10,071	1,688
2024	13,448	3,431	517
2024 Q1	3,889	1,567	197
2025 Q1	1,991	266	54

* Data received from the Administration of Sea Ports of Ukraine

Table 3.8. Cargo turnover of Ukrainian Danube ports (river+sea) in the first quarter of 2025 (thousand tonnes, exports)

Type of good/port	Izmail	Reni	Ust-Dunaisk
Cereals	426 (1,798*)	48(562*)	0(0*)
Other bulk goods	222 (312*)	32 (273*)	6(40*)
Mineral oil products (bulk)	53 (287*)	10 (245*)	0(7*)

* Figures in parentheses represent cargo turnover data for Q1 2024.

Table 3.9. Main components of the total cargo turnover of Ukrainian Danube ports (river+sea) in some recent periods, (thousand tonnes, total)

Period/type of good	Cereals	Other bulk goods	Mineral oil products (bulk)
2022	6,622	3,742	1,154
2023	15,192	4,883	2,920
2024	6,435	1,871	6,190
2022 Q1	3,340	908	588
2023 Q1	2,497	667	556
2024 Q1	495	270	67

3.3 Passenger transport

On the Upper Danube (Gabčíkovo lock statistics), passenger transport on cruise ships with cabins at the beginning of 2025 showed the following dynamics (Table 3.10).

Table 3.10. Passenger transport at Gabčíkovo in the first months of 2025

Month/indicator	Number of vessel passages (upstream/downstream)	Number of passengers (thousand ppl.)
January	51 (35*)	5 (3*)
February	10 (4*)	1 (0,1*)
March	167 (109*)	18 (13*)
April	449 (366*)	67 (57*)

* Indicators for the corresponding period of 2024 are given in bracket for comparison

In the direction of the Danube Delta (according to the statistics of the Mohács checkpoint), no passenger vessel traffic was recorded from January to April 2025, except for a few isolated transits without passengers.

4 Conclusions

In the first quarter of 2025, the full-scale Russian aggression against Ukraine continued to impact the Danube shipping market, maintaining the risks seen in 2024 and further escalating threats to the safety of navigation on the Lower Danube.

Special measures undertaken by the Danube Commission in cooperation with the European Commission within the framework of the *Danube Solidarity Lanes EU-Ukraine* initiative — adopted in May 2022 to support the European Union's solidarity actions with Ukraine — contributed to maintaining the transport of Ukraine's agricultural export products and other cargo types, stabilizing operations at Lower Danube ports, and enhancing the use of the Danube–Black Sea canal routes.

The Danube Commission continues to actively support efforts to address the challenges arising during the implementation of the *Danube Solidarity Lanes EU-Ukraine* initiative by organizing special coordination activities and participating in the development of strategies to prepare Danube navigation for the transport of cargo needed for the reconstruction and rehabilitation of Ukraine’s energy and transport infrastructure.