# Market Observation for Danube Navigation: Results for the period January-June 2024

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# 1 Overview of the Danube navigation market in the first half of 2024

## 1.1 Initial state of the Danube transport market in 2024

The initial state of the main sectors of the Danube shipping market, in the first half of 2024, was determined by the overall results of 2023, the market dynamics of the first quarter ($Q_1$) of 2024, and the forecasts of the relative growth of the gross domestic product of the Member States of the European Union and the Eurozone, compared to 2023.

The initial state of the shipping market in 2024 was determined by the consequences of Russia's full-scale military invasion of Ukraine, which began in February 2022 and resulted in additional risks and distortions in certain shipping sectors of the Danube shipping market, weak steel consumption, rising prices for energy resources and raw materials, which caused a partial reorientation of the market.

In connection with the blockade of Ukrainian seaports by Russia and to ensure global food security, the Ukrainian Grain Corridor, based on the ports of Odesa, Pivdennyi and Chernomorsk, was established and is supported by the Ukrainian Armed Forces. By 15 July 2024, over 57.6 million tonnes of export cargo had been transhipped through these ports, including 39 million tonnes of Ukrainian agricultural products.

At the same time, ensuring global food security still largely depends on the creation and support of new logistical schemes for the export of Ukrainian agricultural products based on the cluster of Danube ports of Ukraine.

On the night of 24 July 2023 and in the following months, including the current period of 2024, Russia carried out a series of air attacks on Ukraine's port infrastructure on the Danube River.

As a result of these attacks, particularly on 23 July, port infrastructure, grain silos, warehouses, administrative and civilian buildings in the Danube ports of Ukraine were destroyed. Civilians were also injured.

In fact, Russia's aggressive actions on the Danube River have created conditions of direct security threats not only to Ukraine's Danube port infrastructure but also to the entire navigation system on the Lower Danube River, including the safety of ship crews and personnel.

Under the current circumstances, the Danube Commission, in 2024, continued to work actively to maximise the promotion of exports of Ukrainian agricultural products, as well as imports of goods necessary for Ukraine within the framework of the *EU-Ukraine Danube Solidarity Lanes* initiative, adopted in May 2022, in support of the European Union's solidarity measures with Ukraine, namely in support and development of logistics schemes for freight transport based on the Danube ports of Ukraine, the Republic of Moldova and Romania, as well as the Danube-Black Sea Canal links. In the context of this initiative, it should be noted:

- systematic coordination meetings of the maritime administrations of Ukraine, Republic of Moldova and Romania, organised by the DC Secretariat with the participation of the European Commission’s DG MOVE representatives;

- targeted visits to ports and administrations of the Danube - Black Sea canal links to address the removal of unnecessary administrative barriers in vessel traffic management systems and the implementation of real projects to support monitoring of the navigational environment;

- presenting the current situation at various international forums, to support the EU - Ukraine *Danube Solidarity Lanes* initiative*.* Among the many fora, it is worth mentioning the speech and presentation of the Director-General of the Danube Commission (DC) Secretariat at the 13th European Union Strategy for the Danube Region Forum (*13th EUSDR Annual Forum*), which took place in Vienna on 20 June 2024.

Despite real threats to the safety of navigation on the Lower Danube, the total cargo turnover of the Danube ports in 2023 was 95.1 million tonnes, which is an increase of 124.3 % compared to the volume of 2022. The Lower Danube ports showed the highest growth: Romania - 118.5 %; the Republic of Moldova - 124 %; Ukraine - 194 %.

The significant increase in cargo turnover of Ukraine's Danube ports - a total of 32.021 million tonnes by the end of 2023 - was mainly due to the growth of exports of agricultural products. Grain cargo accounted for 15.2 million tonnes, or 47.4% of the total volume, with 2.9 million tonnes being vegetable oil. Other bulk cargo accounted for 4.9 million tonnes.

## 1.2 Transport market dynamics in the first quarter of 2024

### *1.2.1 Water flow and operating draught of vessels*

Snow reserves at the beginning of 2024 in the Danube River basin were estimated to be below the long-term average. The absence of river freezing and ice phenomena ensured uninterrupted navigation in the first quarter of 2024.

Stable flow for efficient navigation throughout the first quarter was ensured, allowing vessels to be loaded to a maximum draught of 2.5-2.7 metres.

### *1.2.2 Market dynamics in the first quarter of 2024*

The state of the Danube freight transport market in the first quarter ($Q_1$) of 2024 is shaped by the main factors listed in Section 1 and the continuing negative impact of the Russian aggression in Ukraine on key industries and the agricultural sector of the economy in the Danube and adjacent basins.

Taking into account the relative stability of navigation conditions and partial market reorientation, cargo transport volumes in ($Q_1$) 2024 are:

- in $Q_1$ 2024, the volume of freight transported via the Jochenstein lock (cross-border connection Germany/Austria) was 887.6 thousand tonnes, which is 190.1 % of the volume in $Q_1$ 2023;
- the volumes of cargo transported through the Gabcikovo lock (cross-border connection Hungary/Slovakia) in $Q_1$ 2024 amounted to 1,288 thousand tonnes (130.7 % of $Q_1$ 2023 volumes);
- the volume of cargo transported via Mohács (cross-border connection Hungary/Croatia/Serbia) in $Q_1$ 2024 was 1,051 thousand tonnes, or 119 % of the volume of cargo transported in $Q_1$ 2023.
- transport volumes on the Danube-Black Sea Canal in $Q_1$ 2024 amounted to 5,422 thousand tonnes (106 % compared to the same indicator in $Q_1$ 2023), including:
  - international transport: 4,418 thousand tonnes, which is 98.7 % by $Q_1$ 2023;
  - domestic transport: 1,024 thousand tonnes, which is 155.6 % by $Q_1$ 2023.

Port cargo turnover in the first quarter ($Q_1$) 2024 varied differently (Table 1.1).

***Table 1.1*** Cargo turnover of the ports of the Danube countries in the first quarter ($Q_1$) 2022-2024, (thousand tonnes)

| **Country** | **2022 $Q_1$** | **2023 $Q_1$** | **2024 $Q_1$** |
|---|---|---|---|
| Germany | 615 | 453 | 1,276* |
| Austria | 1,669 | 1,232 | 1,391 |
| Slovakia | 502 | 370.8 | 470.7 |
| Hungary | 1,222 | 840 | 1,122 |
| Croatia | 180 | 79.6 | 89.9 |
| Serbia | 3,055 | 3,426 | 3,295 |
| Bulgaria | 1,724 | 2,001 | 1,606 |
| Romania | 6,096 | 6,012 | 7,002 |
| Republic of Moldova | 486.2 | 610 | 699 |
| Ukraine | 1,431 | 6,805.6 | 5,653 |

* Total cargo turnover of Bavarian ports, including the Danube section (in $Q_1$ 2023 - 978 thousand tonnes) (www.destatis.de)

- The cargo turnover of the port of Constanta by river vessels amounted to 5,380 thousand tonnes, or 117.8% of the cargo turnover in $Q_1$ 2023; at the same time, 280 thousand tonnes of cargo were loaded from Romanian ports in the direction of the Danube ports of Ukraine, and 1,951 thousand tonnes of cargo from Ukrainian ports were discharged.

- Cargo turnover of the main Danube ports of Ukraine is given in Tables 1.2-1.3.

***Table 1.2*** Cargo turnover of Ukrainian Danube ports in exports in the first quarter ($Q_1$) 2024, (thousand tonnes)*

| **Name of cargo** | **Izmail** | **Reni** | **Ust-Dunaisk** |
|---|---|---|---|
| Grain | 1.798,41 | 561,90 | 105,80 |
| Other bulk | 311,52 | 272,56 | 39,50 |
| Bulk oil | 287,02 | 244,78 | 6,60 |

***Table 1.3*** Main components of the total cargo turnover of the Danube ports of Ukraine

| Period / % | Grain | Other bulk goods | Bulk oil |
|---|---|---|---|
| 2022 (thousand tonnes) | 6,622.30 | 3,742.04 | 1,154.08 |
| 2023 (thousand tonnes) | 15,192.11 | 4,882.64 | 2,919.67 |
| % | 229.40 | 130.50 | 253.00 |
| $Q_1$ 2023 (thousand tonnes) | 3.339.67 | 908.26 | 587.52 |
| $Q_1$ 2024 (thousand tonnes) | 2,497.07 | 667.26 | 556.03 |
| % | 74.77 | 73.47 | 94.64 |

* Data obtained from the Administration of Sea Ports of Ukraine

- It should be noted that according to operational data, a total of 4,385 vessels passed through the Sulina Canal to the Lower Danube ports in 2023, of which 2,660 vessels in the direction of the Danube-Black Sea and 1,625 vessels in the Black Sea-Danube direction.
- A total of 3,568 ships passed through the Kiliya Branch and the Bystroye Canal, of which 2,257 from the Black Sea to the Danube and 1,311 from the Danube to the Black Sea.

### *1.2.3 Passenger transport*

On the Upper Danube (Gabcikovo lock statistics) passenger traffic on cruise ships with cabins at the beginning of 2024 showed the following dynamics (Table 1.4):

***Table 1.4.***

| Month 2024 | Number of vessel passages (upstream/downstream) | Number of passengers (thousands) |
|---|---|---|
| March | 109 (97*) | 13.4 (9,5*) |
| April | 366 (395*) | 56,8 (54,6*) |

* The figures for the corresponding month of 2023 are shown for comparison purposes

In the direction of the Danube Delta in January-March 2024 there were no passenger vessel movements, except for single passages without passengers (statistics of the port of Mohács).

# 2 Market observation for Danube navigation: fleet and cargo traffic

## 2.1 Navigation conditions on the Danube in 2024

### *2.1.1 Navigation conditions in the first half of 2024*

In the first quarter of 2024, sufficiently stable navigation conditions for shipping were ensured throughout the Danube River.

In the second quarter of 2024, water levels throughout the Danube were consistently maintained above the low navigable water level (LNWL).

**<u>In April,</u>** on the Upper Danube (Figure 1), minimum water levels were observed at the beginning and the end of the month and were identical to the values of April 2023. The mean and maximum water levels were respectively 30 cm and 60 cm below the same values of April 2023. The maximum levels were observed in the middle of the month.

In the Middle Danube (Figure 2), minimum water levels were observed at the beginning and the end of the month and were 40 cm above the corresponding values of April 2023.

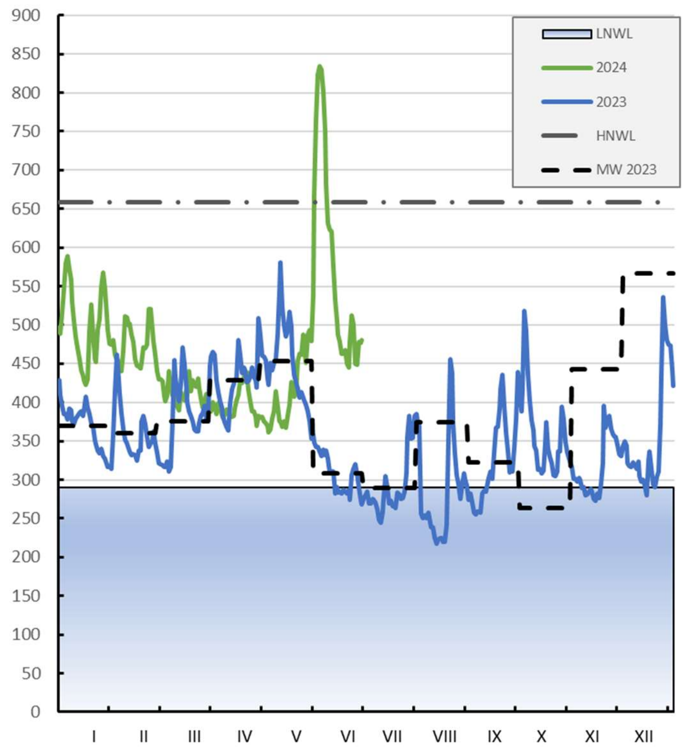


***Figure 1.*** Daily water levels for the Pfelling gauging station (DE),
(km 2306+530), in cm

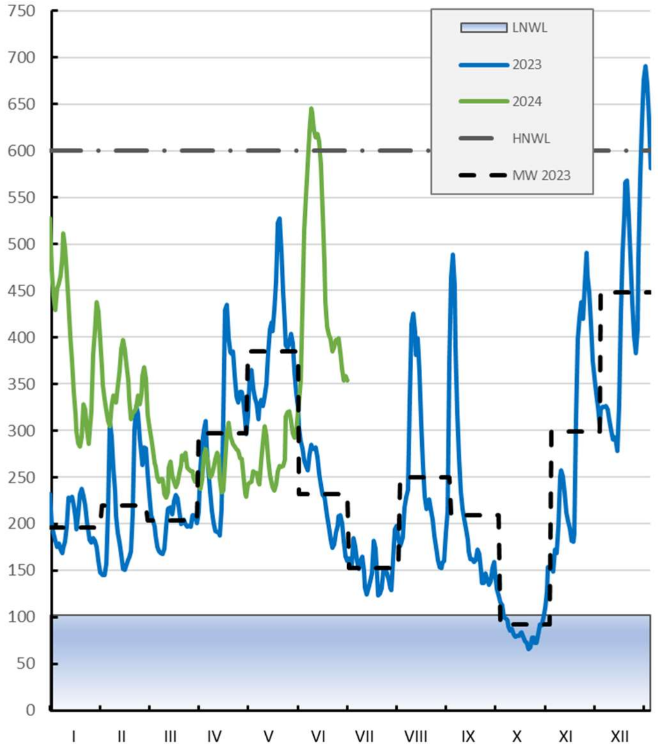


***Figure 2.*** Daily water levels for the Budapest Vidago gauging station (HU), (km 1646+500), in cm

The average water level was 30 cm lower and the maximum level was 130 cm lower than the corresponding values of April 2023. Maximum levels were observed at the end of the second and in the first half of the third decade.

On the Lower Danube (Figures 3, 4), the minimum water levels were 50-80 cm lower than similar values observed in April 2023, and the average and maximum water levels were 130-140 cm lower, respectively. The maximum levels were observed at the end of the first and the beginning of the second ten-day periods of the month, and the minimum levels at the end of the second and beginning of the third ten-day periods.

**In May**, on the Upper Danube (Figure 1), the minimum water levels were identical to the values of May 2023. The average level was 40 cm and the maximum level was 90 cm below the similar values of May 2023. The maximum levels were observed in the third ten-day period of the month, while the minimum levels were observed in the first and second ten-day periods.

On the Middle Danube (Figure 2), minimum water levels were 80 cm below similar values in May 2023, while average levels were 110 cm and maximum levels were 200 cm lower. Maximum levels were observed in the second half of the third decade. The minimum levels were observed in the middle of the second ten-day period of the month.

On the Lower Danube (Figures 3, 4), the minimum water levels were 50-100 cm lower than similar values in May 2023, while the average level was 210-230 cm and the maximum level was 300-320 cm lower, respectively. The maximum levels were observed at the beginning of the month. The minimum levels were observed at the beginning of the second ten-day period of the month.

**In June,** on the Upper Danube (Figure 1), the minimum water levels were 90 cm higher than the same values in June 2023, the average level was 270 cm higher and the maximum level was 480 cm higher. The maximum levels were observed in the first half of the month. It should be noted that in the first decade, water levels exceeded high navigable water levels (*HNWL*) values by 10-180 cm, which in some areas caused the cessation of navigation. Minimum levels were observed at the end of the second and the beginning of the third ten-day period of the month.

On the Middle Danube (Figure 2), the minimum water levels were higher than similar values in June 2023, the average level was 240 cm higher and the maximum level was 340 cm higher. The maximum levels were observed at the end of the first and the beginning of the second decade of the month, and they exceeded the *HNWL* values by 10-45 cm. The minimum levels were observed at the beginning and the end of the month.

0n the Lower Danube (Figures 3, 4), the minimum water levels were 50-170 cm below similar values of June 2023, the average level was 120-270 and the maximum level was 220-300 cm. Maximum levels were observed in the second half of the month. The minimum levels were observed at the beginning of the first ten-day period of the month.

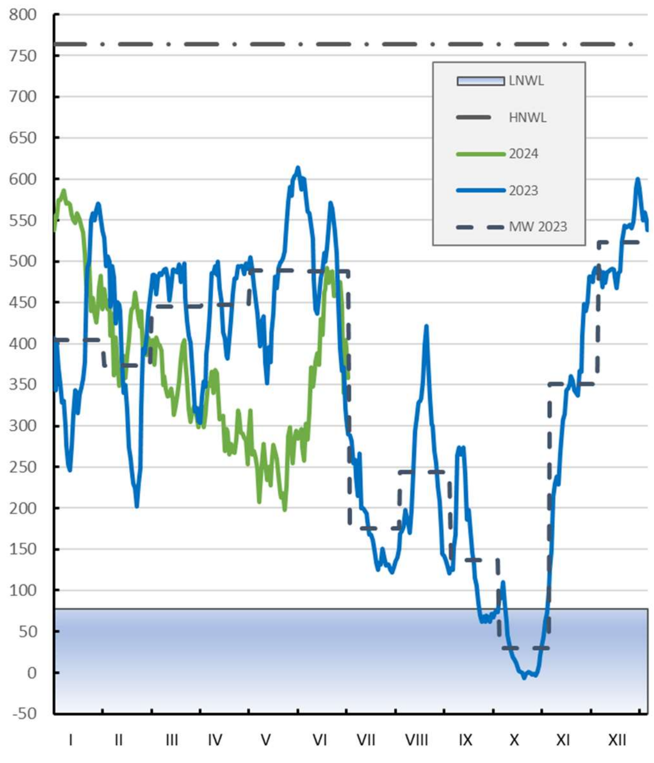


***Figure 3.*** Daily water levels for the Novo Selo gauging station (BG), (km 833+600), in cm

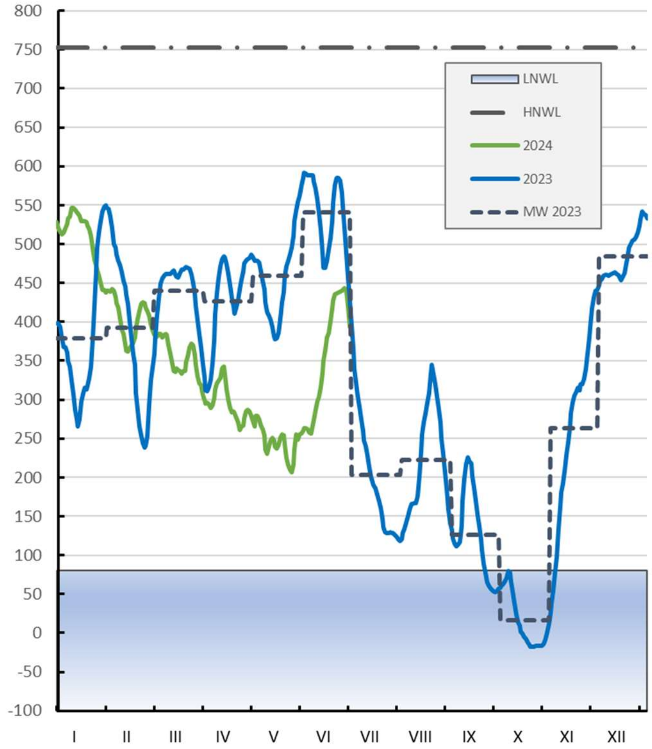


***Figure 4.*** Daily water levels for the Silistra gauging station (BG), (km 375+000), in cm

### *2.1.2 Water flow and operating draught of vessels*

The absence of river freezing and ice events ensured uninterrupted navigation in the first quarter of 2024. Stable water flow required for efficient navigation was ensured throughout the whole half-year, which allowed loading of vessels up to maximum draught when travelling upstream at levels up to 2.5-2.7m (Table 2.1).

***Table 2.1.*** Drafts of cargo ships in the 2024 navigation season

| **Month** | **Loaded, going upstream, in cm** | **Loaded, going downstream, in cm** |
|---|---|---|
| January | 250 (250*) | 220/230 (220/230*) |
| February | 270 (270) | 230 (230) |
| March | 270 (270) | 230/240 (230/240) |
| April | 270 (270) | 230/240 (230/240) |
| May | 270 (270) | 230/240 (230/240) |
| June | 270 (270) | 230/240 (230/240) |

* For comparison, the indicators for the corresponding period of 2023 are indicated

## 2.2 Monitoring of fleet and cargo flows traffic

### *2.2.1 Passenger transport*

Transport on the Upper Danube

Relatively stable passenger traffic on cruise passenger ships with cabins started in April.

***Table 2.2*** Dynamics of passenger transport[1] (in thousands)

| Lines | Year | | | | | | |
|---|---|---|---|---|---|---|---|
| | **2019** | **2020** | **2021** | **2022** | **2023** | **2023 Q1 + Q2** | **2024 Q1 + Q2** |
| Upper Danube | 720.80 | 56.10 | 149.10 | 469.30 | 561.50 | 209.90 | 208.70 |
| To the Danube Delta | 135.04 | 5.15 | 34.10 | 74.00 | 28.50 | 17.03 | 4.51 |

The majority of passenger transport on ships with cabins are "short" voyages of 5-7-8 days, on destinations Passau - Vienna - Bratislava - Budapest - Passau, Vienna - Bratislava - Budapest, voyages from/to the ports of Rhine and Main, as well as in the direction of the Danube Delta (Table 2.2):

- 1,339 ship passages were recorded through the Jochenstein lock (cross-border traffic Austria/Germany, AT/DE), which is 85.5 % of the number in the first half of 2023.
- Vessels passing through the Gabcikovo lock (cross-border connection Hungary/ Slovakia, HU/SK), conventionally "Upper Danube", recorded 1,530 (1,548 in 2023) vessel passages, of which 34.2 % occurred in May and 32.8 % in June. A total of 208.7 thousand passengers (upstream/downstream) were carried in the first half of the year, which corresponds to the level of passenger traffic in 2023.

Transport on the Middle Danube: cross-border traffic Hungary/Croatia/Serbia (HU/HR/RS) (statistics from the Mohács checkpoint).

Passenger ship traffic with cabins (based on the lines from Passau and from Vienna towards the Danube Delta with a duration of 14-15-16 days). In the first quarter there was practically no passenger ship traffic, except for occasional passages without passengers. A total of 3 upstream and 32 downstream passages were made in the first half of the year. Correspondingly, 4,508 passengers travelled downstream in the second quarter (Table 2.2).

[1] Calculations performed by the Danube Commission Secretariat, based on Gabcikovo and Mohacs data

### 2.2.2 Freight transport

<u>Transport on the Upper Danube</u>

<u>Transport volume</u>

a) The volume of freight transported via the Jochenstein lock (cross-border connection Germany/Austria, DE/AT) in the first half of 2024 was 1,485 thousand tonnes, which is 136.1 % of the volume in 2023.

b) The volume of registered cargo transported through the Gabcikovo lock (cross-border connection Hungary/Slovakia, HU/SK) in the first half of 2024 was over 2,400 thousand tonnes, which is 115.3 % of the 2023 volume. The upward transit was about 1,461 thousand tonnes, or 60.7 % of the total volume (Figure 5).

Dry cargo - 2,061 thousand tonnes transported , of which:

- <u>upstream</u> - 1,394 thousand tonnes;
- <u>downstream</u> - 667 thousand tonnes.

Bulk cargo 363.6 thousand tonnes transported, including:

- <u>upstream</u> - 67.5 thousand tonnes;
- <u>downstream</u> - 296.1 thousand tonnes.

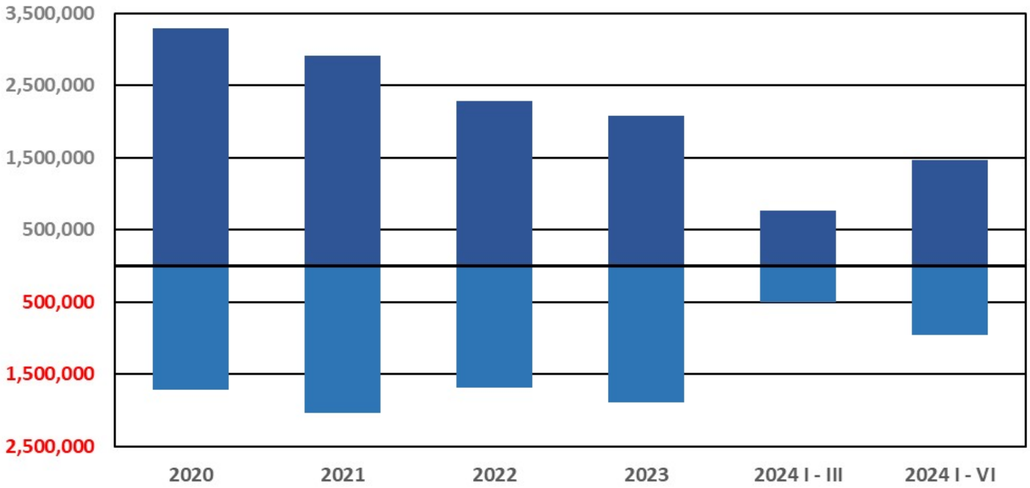


***Figure 5.*** Cargo transport volumes upstream/downstream the Danube through the Gabcikovo lock by year, in tonnes

<u>Fleet traffic</u>

<u>Transport by pushed convoys</u> (statistics of the Gabcikovo lock)

A total of 1,011,000 tonnes were transported by pushed convoys in the first half of 2024, which is 92.2% of the volume in 2023 and 42% of the total volume of cargo that passed through the Gabcikovo lock, including liquid cargo.

a) In terms of volumes of dry cargo transported by pushed convoys, 892 thousand tonnes were transported, of which:

- upstream - 504.5 thousand tonnes, which is 36.2% of the volume of dry cargo transported upstream;
- downstream - 387.4 thousand tonnes, which is 58.1% of the volume of dry cargo transported downstream.

b) In terms of liquid cargo volumes, non-self-propelled barge-tankers as part of convoys transported 119 thousand tonnes, including:

- upstream - 12.8 thousand tonnes;
- downstream - 106.2 thousand tonnes.

Transport by self-propelled vessels

In total, self-propelled vessels transported about 1,414 thousand tonnes in the first half of 2024, of which:

- upstream - 944.7 thousand tonnes;
- downstream - 469.3 thousand tonnes.

a) Self-propelled dry cargo vessels transported a total of 1,169,000 tonnes, which was 152.5% of the volume in 2023, of which:

- upstream - 890 thousand tonnes;
- downstream - 279.3 thousand tonnes.

b) Self-propelled tankers transported a total of 244.7 thousand tonnes of liquid cargo, of which:

- upstream - 54.7 thousand tonnes;
- downstream - 190,000 tonnes.

Nomenclature of goods (statistics of the Gabcikovo lock):

The market features of the first half of 2024 (Figure 6) consist of:

a) in the decrease of upstream transport volumes of iron ore raw materials (80% of the volume in 2023 and 69.4% of the volume in the first half of 2022), as well as steel products and oil products upstream/downstream;

b) in increasing upstream/downstream fertiliser transport volumes.

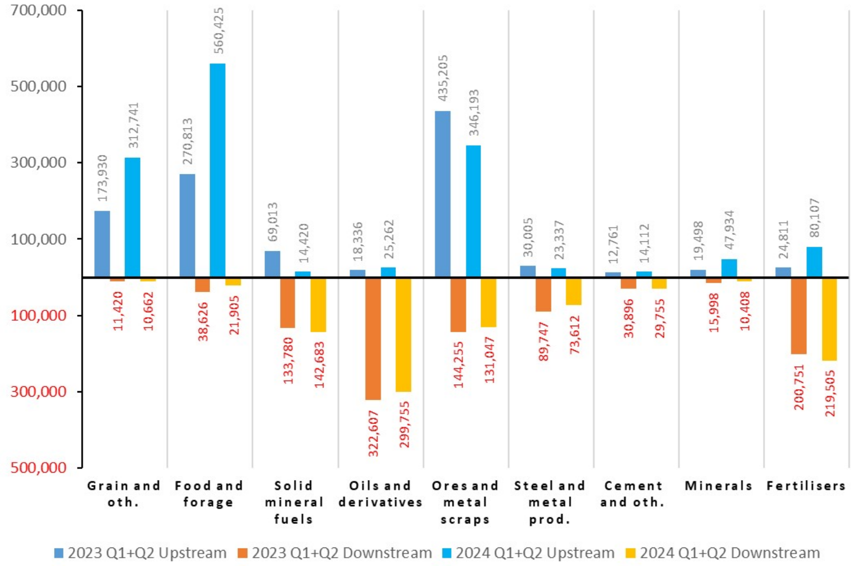


***Figure 6.*** Commodity structure of cargo transport upstream/downstream the Danube River through the Gabcikovo lock, in tonnes

The absolute ratio of the main cargo volumes in the upstream and downstream direction (cross-border traffic Hungary/Slovakia, HU/SK) is presented in Tables 2.3 and 2.4.

***Table 2.3.*** Cargo volumes (by nomenclature), transported in cross-border traffic HU/SK: upstream

| Year, thousand tonnes / Commodity group | 2019 | 2020 | 2021 | 2022 | 2023 | 2023 $Q_1+Q_2$ | 2024 $Q_1+Q_2$ |
|---|---|---|---|---|---|---|---|
| Food and feed cargoes | 1,774.0 48% [2] | 1,321.0 | 879.0 | 783.0 | 592.0 | 270.9 | 560.4 |
| Iron ore raw materials | 841.0 22% | 948.0 | 969.0 | 735.0 | 726.0 | 435.5 | 346.2 |
| Grain | 271.0 7.3% | 352.0 | 394.0 | 416.0 | 427.0 | 173.8 | 312.7 |
| Metal products | 340.0 9.2% | 117.0 | 71.0 | 101.0 | 55.6 | 30.0 | 23.3 |
| Petroleum products | 241.0 6.5% | 212.0 | 86.7 | 92.1 | 40.5 | 18.4 | 25.3 |
| Fertilisers | 91.5 2.5% | 75.2 | 132.8 | 74.5 | 54.9 | 24.9 | 80.1 |

[2] From the volume of cargo transported upstream

***Table 2.4.*** Cargo volumes (by nomenclature),
transported in cross-border traffic HU/SK: downstream

| Year, thousand tonnes / Commodity group | 2019 | 2020 | 2021 | 2022 | 2023 | 2023 Q1+Q2 | 2024 Q1+Q2 |
|---|---|---|---|---|---|---|---|
| Fertilisers | 535.0<br>25% | 505.0 | 464.5 | 444.9 | 417.5 | 200.8 | 219.5 |
| Petroleum products | 671.3<br>31.4% | 578.0 | 870.0 | 642.0 | 653.0 | 322.7 | 299.8 |
| Metal products | 380.4<br>17.8% | 96.5 | 140.0 | 173.0 | 155.0 | 89.7 | 73.6 |

Traffic on the Middle Danube
(statistics from the Mohács checkpoint), cross-border traffic Hungary/Croatia/Serbia (HU/HR/RS)

Transport volume

The volume of registered cargo transported through Mohács in the first half of 2024 was 2,109 thousand tonnes (Figure 7), or 130.3 % of the volume of cargo transported in 2023, of which upstream transit was 947 thousand tonnes, *i.e.* 44.9 % (42 % in 2023).

1,779 thousand tonnes of dry cargo was transported, of which:

- upstream - 828.5 thousand tonnes,
- downstream - 950.8 thousand tonnes.

329.6 thousand tonnes of bulk cargo was transported, including:

- upstream - 118.2 thousand tonnes,
- downstream - 211.4 thousand tonnes.

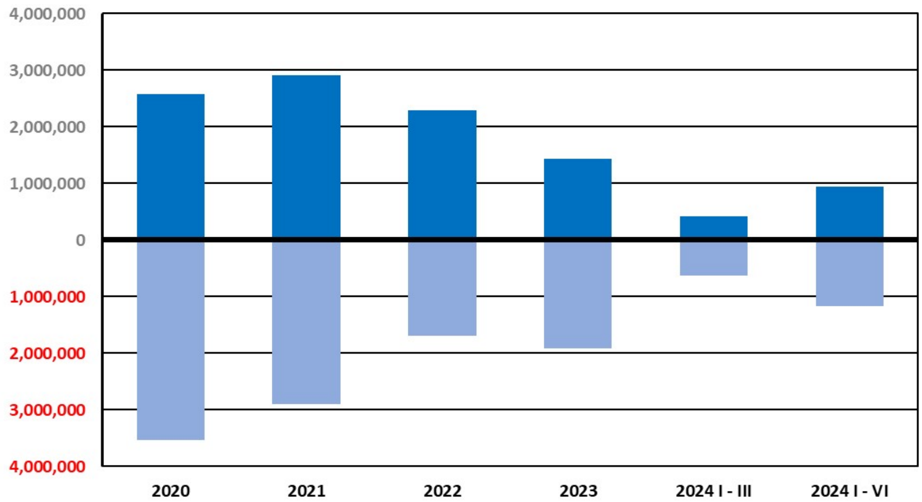


***Figure 7.*** Cargo transport volumes upstream/downstream the Danube River via Mohács, by year in tonnes

Fleet traffic

Transport by pushed convoys

In the first half of 2024, more than 1,425,000 tonnes were transported by pushed convoys through the Mohács control point, which is 67.5 % (70 % in 2023) of the total cargo volume, including liquid cargo.

a) In terms of volumes of dry cargo transported by pushed convoys, 1,354 thousand tonnes were transported, of which:

- upstream - 642 thousand tonnes;
- downstream - 712,000 tonnes.

b) In terms of liquid cargo volumes, 71.5 thousand tonnes were transported by non-self-propelled barge-tankers as part of convoys, including:

- upstream - 13.5 thousand tonnes;
- downstream - 58 thousand tonnes.

Transport by self-propelled vessels

A total of 683,400 tonnes were transported by self-propelled vessels in the first half of 2024, which is 32.5% of the total volume transported through the Mohács control point in 2023, of which:

a) Self-propelled dry-cargo vessels transported 425.3 thousand tonnes, of which:

- upstream - 186.5 thousand tonnes;
- downstream - 238.8 thousand tonnes.

b) Self-propelled tankers transported 258.1 thousand tonnes of liquid cargo, including:

- upstream - 104.7 thousand tonnes.
- downstream - 153.4 thousand tonnes.

Nomenclature of cargo (statistics from the Mohács checkpoint)

The features of the market in the first half of 2024 (Figure 8) are:

a) upstream decline in iron ore volumes (95.7 % of the volume in ($Q_1$ +$Q_2$) 2023 and 69.4% of the volume in ($Q_1$ +$Q_2$) 2022);

b) actual exclusion of upstream coal transport (6.9 % of the volume in ($Q_1$ +$Q_2$) 2022;

c) significant growth in grain cargo volumes downstream;

d) upstream growth of metal products volumes of oil products, as well as fertiliser volumes upstream/downstream.

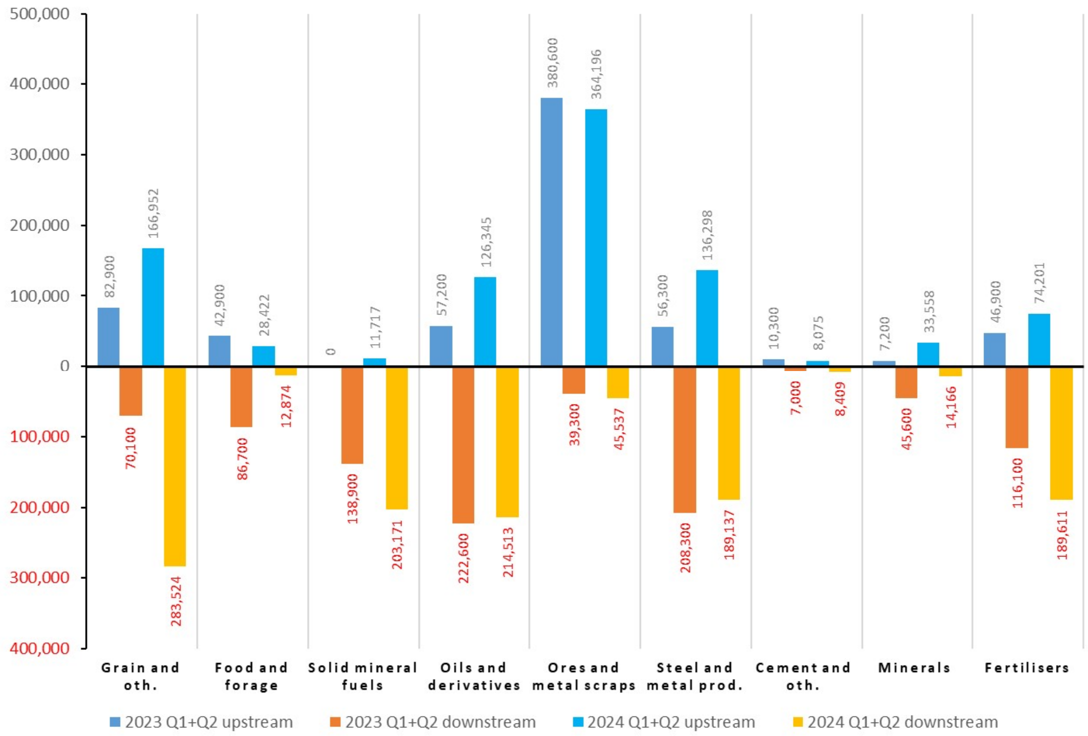


***Figure 8.*** Commodity structure of cargo transport upstream/downstream the Danube River through Mohács, in tonnes

The absolute ratio of the main cargo volumes in upstream and downstream movements (cross-border traffic Hungary/Croatia/Serbia, HU/HR/RS) is presented in Tables 2.5 and 2.6.

***Table 2.5.*** Cargo volumes (by nomenclature), transported in cross-border traffic HU/HR/RS: upstream

| Year, thousand tonnes / Commodity group | 2019 | 2020 | 2021 | 2022 | 2023 | 2023 Q1+Q2 | 2024 Q1+Q2 |
|---|---|---|---|---|---|---|---|
| Iron ore raw materials | 1,247.0<br>37.6% | 954.0 | 991.0 | 741.0 | 692.0 | 380.6 | 364.2 |
| Coal (coke) | 479.0<br>14.4% | 323.0 | 281.0 | 200.0 | 2.2 | 0.0 | 11.7 |
| Fertilisers | 392.0<br>11.8% | 436.0 | 385.0 | 255.6 | 121.0 | 46.9 | 74.2 |
| Petroleum products | 109.0<br>3.2% | 106.0 | 117.0 | 252.0 | 153.7 | 57.2 | 126.3 |
| Metal products | 270.0<br>8.1% | 243.0 | 249.0 | 205.0 | 111.1 | 56.3 | 136.3 |

***Table 2.6.*** Cargo volumes (by nomenclature), transported in cross-border traffic HU/HR/RS: downstream

| Year, thousand tonnes / Commodity group | 2019 | 2020 | 2021 | 2022 | 2023 | 2023 Q1+Q2 | 2024 Q1+Q2 |
|---|---|---|---|---|---|---|---|
| Grain | 479<br>21.1% | 1,471 | 1,002 | 238.9 | 317.4 | 70.1 | 283.5 |
| Petroleum products | 428<br>18.9% | 528 | 591 | 322.3 | 405.4 | 222.6 | 214.5 |
| Metal products | 316<br>13.9% | 295 | 254 | 310 | 381 | 208.3 | 189.1 |
| Food products and animal feed | 203<br>9% | 520 | 218.5 | 65 | 216.4 | 86.7 | 12.8 |
| Fertilisers | 272<br>12% | 364 | 316 | 315.5 | 185.7 | 116.1 | 189.6 |

### *2.2.3 Inter-basin transport*

Shipments via the Danube-Black Sea Canal

The volume of traffic on the Danube-Black Sea canal in the first half of 2024 was 10,174 thousand tonnes[3], which is 96.6 % of the same indicator in 2023, of which:

[3] *www.acn.ro*

- international transport: 7,988 thousand tonnes (90.5% of the 2023 figure);
- domestic transport: 2,186 thousand tonnes (203% of the 2023 figure).

Transport volumes by month are shown in Figure 9.

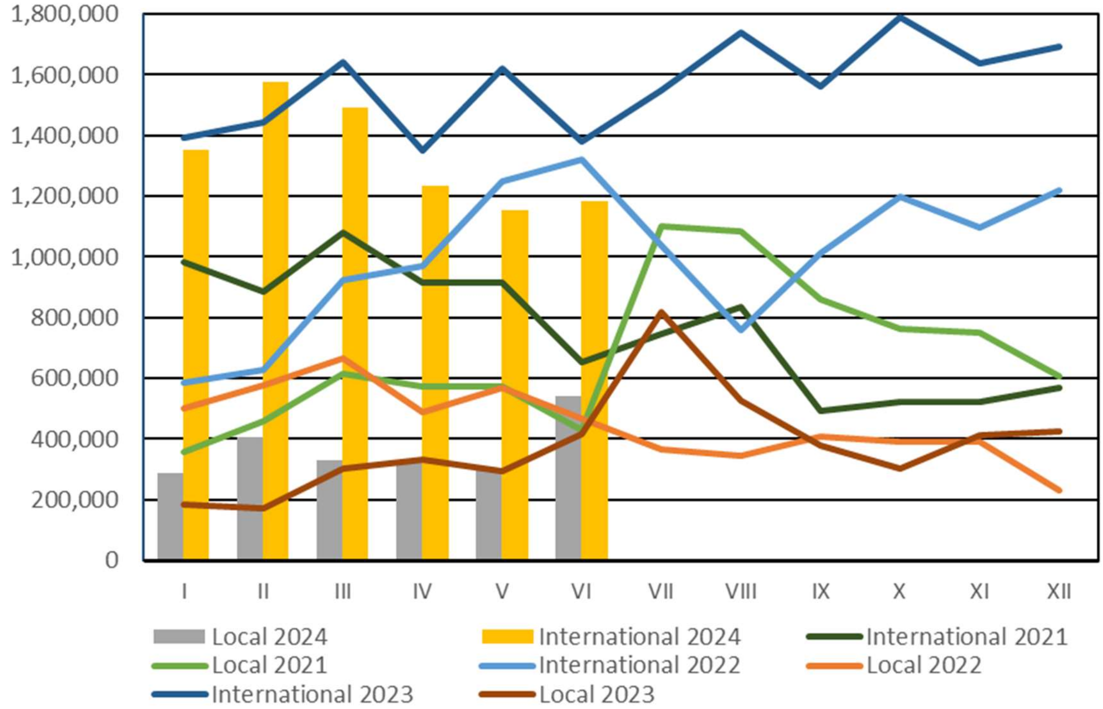


***Figure 9.*** Volumes of international and national cargo transport through the Cernavoda-Constanta canal, by month, tonnes

## 3 Overview of cargo turnover in the Danube ports

The cargo turnover of the Danube ports in the first half of ($Q_1+Q_2$) 2024 compared to ($Q_1+Q_2$) 2023 varied differently (Table 3.1).

The activity of the Danube ports of Ukraine should be separately noted, namely, the dynamics of cargo turnover, which is an indicator of the effectiveness of decisive actions taken by the Government of Ukraine, with the support of the European Union and the Danube Commission, to organise exports through the ports of Reni, Izmail and Ust-Dunaisk of products of the agricultural sector of the country's economy (Tables 3.2 - 3.3).

***Table 3.1.*** Cargo turnover of ports in the Danube countries in 2020-2024

| **Ports (thousand tonnes)** | **2020** | **2021** | **2022** | **2023** | **2023 Q +Q12** | **2024 Q +Q12** |
|---|---|---|---|---|---|---|
| Germany | 3.511 | 2.999 | 2.410 | 2.228 | 1.047 | 1.244* |
| Austria | 6.050 | 6.356 | 5.363 | 4.460 | 2.506 | 2.642 |
| Slovakia | 1.553 | 1.846 | 1.934 | 1.509 | 810* | 721** |
| Hungary | 6.742 | 5.715 | 4.063 | 3.604 | 1.746 | 2.163 |
| Croatia | 948 | 697 | 582 | 365,5 | 186,4 | 163,8 |
| Serbia | 8.164 | 13.610 | 12.023 | 12.031 | 6.628 | 6.463 |
| Bulgaria | 5.431 | 7.111 | 7.104 | 7.026 | 4.004 | 3.623*** |
| Romania | 27.307 | 28.457 | 24.355 | 28.857 | 13.053 | 13.103 |
| Republic of Moldova | 1.185 | 1.819 | 2.144 | 2.144 | 1.238 | 1.254*** |
| Ukraine | 4.055 | 5.505 | 16.505 | 32.021 | 15.146 | 10.273*** |

* January-May, total cargo turnover on the Bavarian section of the waterway
** Bratislava and Komarno ports
*** Data received from the maritime administrations of Bulgaria, the Republic of Moldova, and Ukraine

***Table 3.2.*** Cargo turnover of Ukrainian Danube ports (thousand tonnes)*

| **Port/period/%** | **Izmail** | **Reni** | **Ust-Dunaisk** |
|---|---|---|---|
| 2023 | 20,263.0 | 10,071.0 | 1,688.0 |
| % by 2022 | 227.9 | 147.5 | 214.8 |
| ($Q_1$+$Q_2$) 2024 | 7,462.0 | 2,489.0 | 322.1 |

***Table 3.3.*** Cargo turnover of Ukrainian Danube ports in exports in the first half of the year ($Q_1$+$Q_2$) 2024 (thousand tonnes)

| **Name of cargo** | **Izmail** | **Reni** | **Ust-Dunaisk** |
|---|---|---|---|
| Grain | 3,775.5 | 1,253.0 | 210.0 |
| Bulk (oil) | 455.8 | 363.1 | 11.2 |

* Data received from the Administration of Sea Ports of Ukraine

# 4 Conclusions

In the first half of 2024, the impact of full-scale Russian aggression in Ukraine continued to pose real threats to the security of shipping on the Lower Danube. The ongoing attacks on the infrastructure of Ukraine's Danube ports have exacerbated the economic risks in the Danube shipping market, affecting almost all major market sectors and their dynamics in the first half of 2024.

According to the factors set out in Section 1, despite reasonably favourable navigation conditions in the first half of 2024, there have been significant changes in the market for passenger traffic on cabin vessels, as well as certain changes in the absolute values and relative proportions of the cargo nomenclature in Upper and Middle Danube traffic.

The Danube Commission continues to work on special coordination activities within the framework of the *EU - Ukraine Danube Solidarity Lanes* initiative adopted in May 2022. The aim of these activities is to make more active use of the transport potential of Danube navigation in order to stabilize traffic to/from the Danube ports of Ukraine and to stabilize the Danube-Black Sea canal connections. In addition, the activities aim to ensure all safety measures for shipping.

The priority actions undertaken by the Danube Commission in the short term to stabilize the market and to ensure the safety of navigation are coordinated with the administrations of Ukraine, Romania, and the Republic of Moldova, as well as with the European Commission.