Interreg
Danube Transnational Programme
Danube STREAM

COMMON DANUBE REPORT 2018

Project co-funded by European Union funds (ERDF, IPA)

Imprint
Danube STREAM consortium

Photos: viadonau/Danube STREAM
project team, Haslinger, Zinner
Layout: viadonau

Project co-funded by European Union funds (ERDF, IPA)

Table of contents

Project co-funded by European Union funds (ERDF, IPA)

LIST OF ABBREVIATIONS

AIS	Automatic Identification System
AT	Austria
BG	Bulgaria
CEF	Connecting Europe Facility
Danube STREAM	Smart, Integrated and Harmonized Waterway Management (Interreg DTP)
DE	Germany
DTP	Danube Transnational Programme
ENC	Electronic Navigational Chart
ERDMS	European Reference Data Management System
ERI	Electronic Reporting International
EU	European Union
FAIRway Danube	Coordinated deployment of the Fairway Rehabilitation & Maintenance Master Plan for the Danube and its Navigable Tributaries (CEF project)
FAST DANUBE	Technical Assistance for Revising and Complementing the Feasibility Study Regarding the Improvement of Navigation Conditions on the Romanian-Bulgarian Common Sector of the Danube and Complementary Studies (CEF project)
FIS	Fairway Information Services
HR	Croatia
HU	Hungary
NEWADA	Network of Danube Waterway Administrations
NEWADA duo	Network of Danube Waterway Administrations – data and user orientation (transnational project co-funded under the EU SEE Programme)
NTS	Notices to Skippers
PROMINENT	Promoting Innovation in the Inland Waterways Transport Sector (Horizon 2020 programme)
RIS	River Information Services
RIS COMEX	RIS Corridor Management Execution
RO	Romania
RS	Serbia
SEE PROGRAMME	South East Europe Transnational Cooperation Programme
SK	Slovakia
UA	Ukraine
VTT	Vessel Tracking and Tracing

1 Scope of document

The Common Danube Report originates from the period of cooperation between project partners in the international project NEWADA duo (Network of Danube Waterway Administrations – data and user orientation), 2012-2014, under the South East Europe Transnational Cooperation Programme, on which basis the Danube STREAM project has continued.

The Common Danube Report 2018 is the third edition of this report published within the Danube STREAM project. The purpose of this document is to familiarize the reader with key performance indicators related to navigation on the Danube River.

The Report consists of several chapters concerning Danube freight transport volume, passenger transport, closures of navigation on the entire Danube River as well as fairway availability parameters. Furthermore, locks statistics for the following countries are contained in the Report: Republic of Austria, Slovak Republic, Republic of Serbia and Romania.

Likewise data regarding Fairway Information Services is also included. Moreover, the Common Danube Report 2018 informs on ongoing projects and initiatives in the Danube Region.

The Danube River is treated in a corridor manner - as a **unique entity** regardless of national borders: this is the only way that an international waterway can make use of its full potential.

If you wish to read a previous edition of the Common Danube Report, please follow the link: http://www.interreg-danube.eu/approved-projects/danube-stream/outputs

The Danube STREAM - Smart, Integrated and Harmonized Waterway Management – project is co-funded within the first call of the EU Danube Transnational Programme (Interreg Danube Transnational Programme). It started on the 01st of January 2017 and will end on 30th September 2019.

For more information, please visit the following link: www.interreg-danube.eu/approved-projects/danube-stream

2 Highlights

Transport	2017	2016
Transport volume	39.3 million tons	39.6 million tons
% Change compared to the previous year	-0.8%	+3.2%

Fairway	2018	2017
Fairway availability	268 days (73%)	262 days (72%)
Local closures of navigation	97 days (27%)	63 days (17%)
Longest continuous local closure	-	20 days

Locks (in total)	2018	2017
Number of locked vessels	173,135	190,254
Number of lockages	101,652	103,177

SOURCE: DANUBE STREAM PROJECT TEAM

3 Sharing a common vision

Dear Danube waterway users,

The publication you have in front of you is a result of the multiannual and joint work of waterway administrations of the Danube River. Their cooperation has started several yearsago, striving to provide better service and information on Danube-related topics – first of all on navigation conditions. Therefore, an annual overview, now for the year 2018, is compiled among the administrations illustrating their activities during the year and the outputs of natural processes of the Danube itself.

The Common Danube Report, as usually said among the waterway administrators, represents a bridge between waterway administrations and users. It provides information on the results of our work in several fields, aiming to provide a Good Navigation Status. Therefore, the Board of Directors has actively engaged in the creation of the Common Danube report, providing the relevant contents since 2012 with the purpose to make the navigation highlights reach the relevant users.

Sincerely,
The Danube STREAM Board of Directors

4 Cargo transport in Danube countries

The most current available figures regarding the volume of freight transport on inland waterways in the Danube region are from the year 2017. That year, 39.3 million tons of goods were transported on the Danube waterway and its tributaries – a minor decrease of 0.8% or around 300,000 tons less than in 2016 (Figure 1).

Since the records have been made, 2007 was the year with the greatest value of cargo transport (51.7 million tons), followed by the year 2008 (51 million tons). The lowest volume was recorded in 2009 (35.6 million tons) according to the global development occurrences.

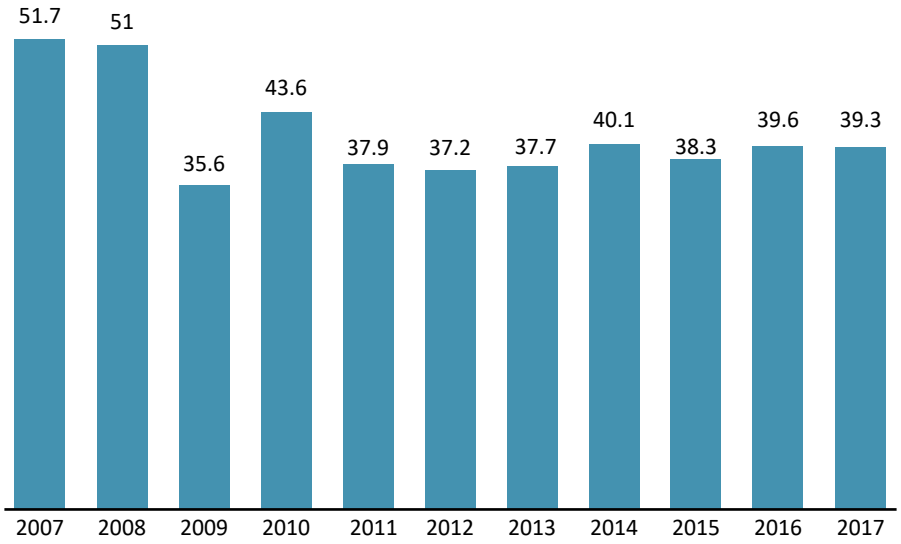


FIGURE 1: DANUBE CARGO TRANSPORT VOLUME FOR THE PERIOD 2007-2017

Note 1: Data in million tons
Note 2: Data for 2017 are the latest cargo transport volume data available for all countries
Source: National statistics offices, aggregation and graph by the Danube STREAM team

Looking separately at traffic on the Danube and its tributaries between countries in the Danube region on the one hand and at river-sea traffic on the maritime stretch of the Danube on the other hand, the development of the amount of goods transported compared to 2016 turns out to be different. Cross-border traffic between Danube countries decreased by 5.6% or nearly two million tons compared to 2016, whereas maritime traffic on the Lower Danube showed a notable increase from 4.2 to 5.8 million tons – a plus of 40.2% or nearly 1.7 million tons.

The decrease in cross-border traffic between Danube riparian countries compared to 2016 is the result of an average decrease of 9.3% in freight transport on inland vessels in Central and Lower Danube countries downstream of Hungary. In contrast, the amount of goods transported on the Upper Danube and in Hungary showed an increase of 4.7% on average.

Table 1 and Figure 2 depict data on Danube cargo volume transported in the course of 2017, divided by the type of transport.

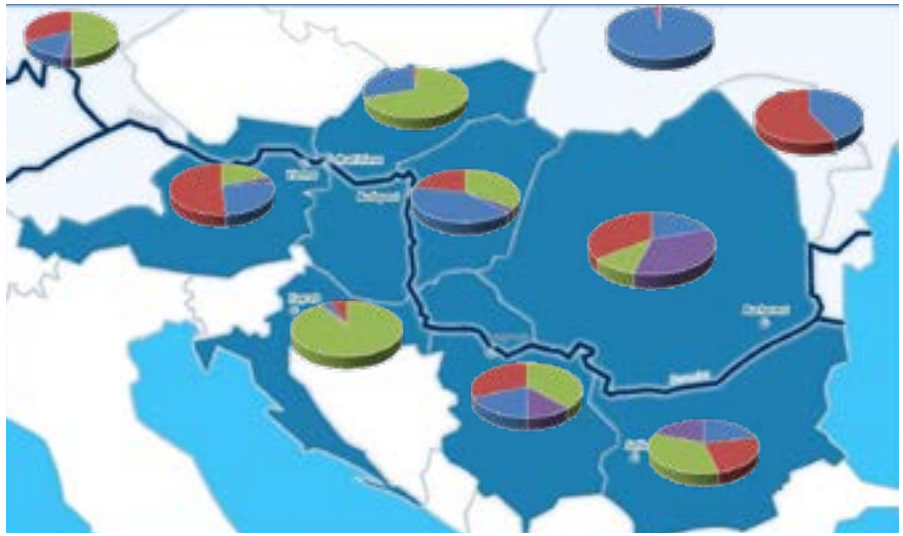


FIGURE 2: DANUBE CARGO TRANSPORT VOLUME IN 2017

Source: National statistics offices, graph prepared by the Danube STREAM team

As in previous years, the by far largest transport volume in the Danube region was achieved by Romania, amounting to just under 19 million tons, followed by Serbia with 12.5 million tons and Austria with 9.5 million tons.

With 4.2 million tons of goods shipped (+1.9%), Romania was once again the largest exporter on the Danube in 2017, followed by the Ukraine with 3.7 million tons (–13.0%) and Hungary with 3.5 million tons (+2.6%).

The largest volume of imports on the Danube was also handled by Romania with 5.4 million tons (-23.8%). The second strongest import country on the Danube was Austria (+10.6% or 4.8 million tons), followed by Serbia (–2.0% or 4.0 million tons).

Romania also had the largest amount in domestic transport, surpassing other countries many times over (7.32 million tons).The transit segment showed the largest volume in Croatia (5.67 million tons), followed by Slovakia and Serbia.

	DE	AT	SK	HU	HR	RS	RO	BG	MD	UA
Transit	2.78	1.84	5.01	2.92	5.67	4.76	2.20	2.20	0.00	0.00
Domestic	0.18	0.39	0.01	0.24	0.06	1.44	7.32	1.09	0.00	0.01
Export	0.84	2.40	2.09	3.50	0.19	2.30	4.21	1.11	0.10	3.67
Import	1.81	4.82	0.10	1.81	0.33	3.96	5.40	1.73	0.32	0.15
Total	5.61	9.45	7.21	8.47	6.25	12.46	19.13	6.13	0.42	3.83

TABLE 1: DANUBE CARGO TRANSPORT VOLUME PER COUNTRY IN 2017

Note: Data in million tons
Source: National statistics offices, table prepared by the Danube STREAM team
Explanatory note: Data on cargo volume per country are filtered and adjusted in order to avoid overlapping and double counting

On the Romanian Danube-Black Sea Canal (including its side channel), a total of 13.8 million tons were transported in 2017. This number includes river-sea-traffic with a volume of 57,000 tons. Compared to 2016, this signifies a decrease of 4.9% or around 0.7 million tons of goods less.

The majority of maritime transport on the Danube by river-sea vessels or by sea-going vessels, some 4.3 million tons of goods occurred on the Romanian Sulina Canal (+14.4% compared to 2016). 1.5 million tons were shipped via the Ukrainian Kilia/Bystroe arm of the Danube – an exceptional increase of 462% compared to 2016.

5 Explore the Danube as a touristic destination

The largest river in the European Union, links ten countries, features picturesque ports, and hosts a plethora of cruises. Cruise routes are varying, offering cruise tours that last from one hour to several days.

The Danube offers a natural transport route with a great amount of natural values and the possibility to visit numerous sites of cultural heritage along the river banks. The Danube is a river where cruises are becoming increasingly popular both for domestic and foreign tourists, which proves its high attractiveness. Not only being popular for tourists' cruises, the Danube River also provides opportunities for different sports activities and events.

SOURCE: DANUBE STREAM PROJECT TEAM

The raising effectiveness of waterway management, interconnections with other relevant activities on the international level, enhancements of the Danube-related information services and management tools are leading to a number of projects aiming in the improvement of the Danube waterway infrastructure and thus the improvement of touristic potential as well.

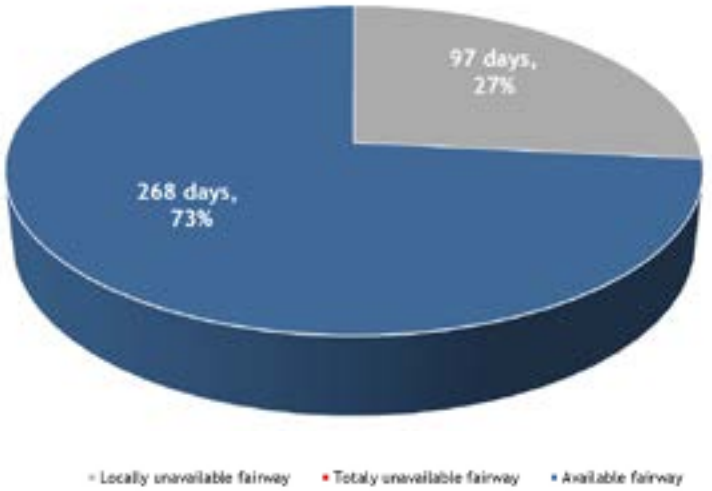
6 Danube navigation accessibility in 2018

The Danube is the most international river basin in the world, so enabling its accessibility along the entire length and during the whole year is a complex task. For that reason, Danube navigation accessibility was monitored by all Danube waterway administrations during 2018.

Many activities are being performed in order to maintain adequate navigation conditions along the national stretches and consequently enable continuous navigation on the Danube. However, some of those works or some natural conditions could interrupt navigation at specific sectors, mainly as temporary closures. The most common reasons for navigation closures along the Danube are unfavourable meteorological or hydrological conditions - low or high-water levels, wind periods, fog, heavy winter or ice conditions.

During 2018, there were several local closures in all Danube riparian countries (except in Croatia, along the common stretch with the Republic of Serbia). Navigation was then temporarily closed for 97 days (27%) as illustrated in Figure 3. Closures lasting no more than an hour were also recorded during several months at different parts of the Danube, but those occasional closures did not impede the re-establishment of good navigation conditions on the same day.

Different events were also among the principal reasons for daily closures of navigation at some points of the Danube River. On these occasions, navigation was forbidden for some vessel types, rarely for all vessels. When applicable, alternative navigable routes were defined, allowing for continuity of navigation.

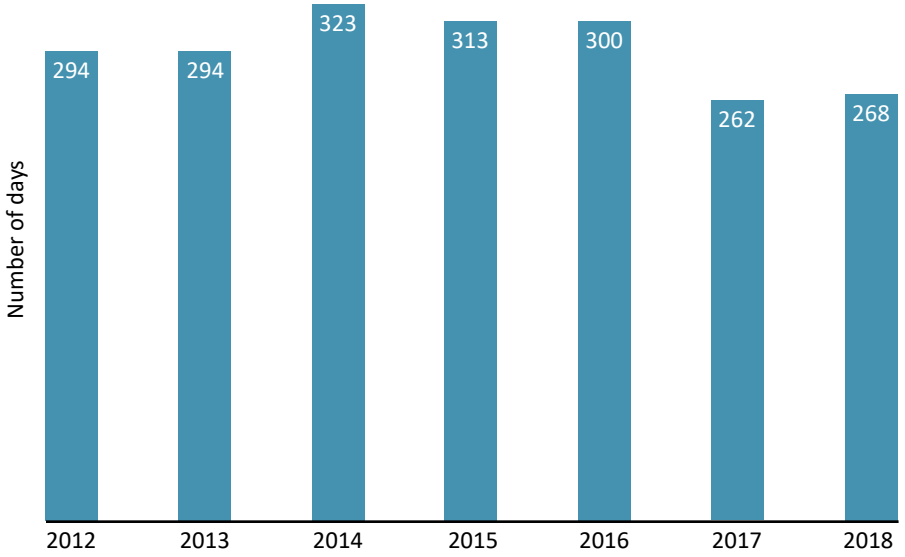


Source: National navigation authorities, aggregation and chart prepared by the Danube STREAM team

FIGURE 3: AVAILABILITY OF THE DANUBE FAIRWAY IN 2018

The track of the Danube fairway availability has been kept by the waterway administrations annually. Figure 4 illustrates the availability of the Danube fairway in the period between 2012 and 2018.

During the last seven years, between 2012 and 2018, there were various reasons for navigation closures on the Danube. In fact, the least number of days of available Danube fairway was noticed in the last two years, 2017 and 2018 . Within this timeframe the Danube was available for approximately 300 days per year, that means the number of 268 days without navigation closures notified at the end of 2018 is under average. However, there were no records during 2018 of the Danube fairway being totally unavailable for navigation, as it was the case in the winter months (or which month?) in 2017.



Source: National navigation authorities, aggregation and chart prepared by the Danube STREAM team

FIGURE 4: NUMBER OF DAYS OF AVAILABLE DANUBE FAIRWAY (2012-2018)

7 Fairway availability parameters in 2017 and 2018

The Danube STREAM project is a follow-up of the NEWADA duo project (2012 – 2014) that gathered the managing directors of the Danube waterway infrastructure operators represented in the Network of Danube Waterway Administrations (NEWADA), to identify and discuss common performance indicators for inland waterway transport on the Danube, with a strong focus on waterway infrastructure maintenance. Since the end of the NEWADA duo project, a set of key performance indicators has been reported by the involved waterway administrations on an annual basis, and is being published in the annual Common Danube Report.

The Danube STREAM project team has prepared the updated set of key performance indicators during the project lifetime and the levels of service defined are to be fulfilled on all national stretches of the Danube. Different levels of service are established for various waterway stretches of the Danube River. Levels of service indicate the recommended fairway depth and width that all waterway administrations should aim to achieve during the whole year. In Table 2 and Table 3, performance parameters for those levels of service are presented for each of the Danube riparian countries: for the relevant fairway widths for selected stretches, the number of days equal or above 2.5m fairway depth is given.

Fairway widths relevant for selected stretches (m)

		200/180	150	120	100	80	60	40
River stretch	Rkm-rkm	Number of days (and % of the year) with guaranteed fairway width						
Melk-Krems (Wachau)	2038.0 - 1998.0	n/a	n/a	Not calculated		342 - 94%		
Vienna – AT/SK border	1921.0 - 1872.7	n/a	n/a	Not calculated		317 - 87%		
Nyergesújfalu (HU data)	1735.5 - 1733.7	n/a	n/a	n/a	304 - 83%		327 - 86%	
Lower-Dömös	1699.3 - 1698.2	n/a	n/a	290 - 79%	290 - 79%	290 - 79%	290 - 79%	290 - 79%
Solt	1558.5 - 1557.5	7 - 2%	22 - 6%	39 - 11%	284 - 78%	318 - 87%	330 - 90%	365 - 100%
Apatin	1408.2 - 1400.0	257 - 70%	365 - 100%	365 - 100%	365 - 100%	n/a	n/a	n/a
Futog	1267.4 - 1261.6	86 - 23%	267 - 73%	329 - 90%	329 - 90%	354 - 97%	n/a	n/a
Belene, Kondur island	566.0 – 560.0					220 - 60%		
Guska island	541.0 - 537.0	38 - 10%	92 - 25%	247 - 67%	333 - 91%	337 - 92%	365 - 100%	365 - 100%
Batin island	525.0 - 522.0	29 - 8%	127 - 35%	230 - 63%	250 - 68%	288 - 79%	365 - 100%	365 - 100%
Brashlyan island	458.0 - 455.0	120 - 33%	204 - 56%	255 - 69%	334 - 91%	263 - 72%	365 - 100%	365 - 100%
Garvan island (Popina)	407.0 - 402.0	23 - 6%	75 - 20%	155 - 42%	209 - 57%	269 - 74%	365 - 100%	365 - 100%
Salcia	823.0 - 820.0	365 - 100%	365 - 100%	365 - 100%	365 - 100%	n/a	n/a	n/a
Bogdan Secian	785.0 - 783.0	21 - 6%	0 - 0%	365 - 100%	366 - 100%	n/a	n/a	n/a
Dobrina	761.0 - 759.0	0 - 0%	365 - 100%	365 - 100%	365 - 100%	n/a	n/a	n/a
Bechet	678.0 - 676.0	0 - 0%	357 - 98%	357 - 98%	357 - 98%	n/a	n/a	n/a
Corabia	629.0 - 628.0	355 - 97%	355 - 97%	355 - 97%	355 - 97%	n/a	n/a	n/a
Turcescu	345.0 - 344.0	0 - 0%	312 - 85%	312 - 85%	312 - 85%	n/a	n/a	n/a
Cochirleni	309.0 - 308.0	0 - 0%	0 - 0%	0 - 0%	0 - 0%	200 - 55%	n/a	n/a
Seimeni	290.0 - 289.0	0 - 0%	0 - 0%	0 - 0%	352 - 96%	n/a	n/a	n/a
Albanesti	276.0 - 275.0	69 - 19%	166 - 45%	302 - 82%	366 - 100%	n/a	n/a	n/a

TABLE 3: AVAILABILITY OF 2.5 M DEPTH AND SELECTED WIDTH ON CRITICAL SECTORS IN 2017
(TABLE BY THE DANUBE STREAM TEAM)

Project co-funded by European Union funds (ERDF, IPA)

Fairway widths relevant for selected stretches (m)

		200/180	150	120	100	80	60	40
River stretch	Rkm-rkm	Number of days (and % of the year) with guaranteed fairway width						
Melk-Krems (Wachau)	2038.0 - 1998.0	n/a	n/a	Not calculated		294	Not calculated	
						80%		
Vienna – AT/SK border	1921.0 - 1872.7	n/a	n/a	Not calculated		258	Not calculated	
						71%		
Nyergesújfalu (HU data)	1735.5 - 1733.7	n/a*	n/a*	n/a*	215	225	245	245
					59%	62%	64%	67%
Upper-Dunaföldvár	1560.8 - 1560.6	n/a	n/a	218	n/a	n/a	n/a	n/a
				60%				
Solt	1558.5 - 1557.5	9	20	36	208	236	254	365
		2%	5%	10%	57%	65%	70%	100%
Apatin	1408.2 - 1400.0	111	365	365	365	n/a	n/a	n/a
		30%	100%	100%	100%			
Futog	1267.4 - 1261.7	147	271	271	291	291	n/a	n/a
		40%	74%	74%	80%	80%		
Belene	566.0 – 564.0	0	205	222	269	280	326	365
		0%	56%	61%	74%	77%	89%	100%
Coundour island	563.0 - 560.0	204	365	365	365	365	365	365
		56%	100%	100%	100%	100%	100%	100%
Guska island	541.0 - 537.0	180	221	221	221	289	365	365
		49%	61%	61%	61%	79%	100%	100%
Batin island	525.0 - 522.0	45	137	285	285	285	365	365
		12%	38%	78%	78%	78%	100%	100%
Brashlyan island	458.0 – 455.0	169	227	251	251	297	365	365
		46%	62%	69%	69%	81%	100%	100%
Garvan island (Popina)	407.0 – 402.0	113	167	237	293	293	365	365
		31%	46%	65%	80%	80%	100%	100%
Bechet	678.0 - 676.0	n/a	n/a	n/a	317	n/a	n/a	n/a
					87%			
Corabia	629.0 - 628.0	n/a	n/a	n/a	317	n/a	n/a	n/a
					87%			
Turcescu	345.0 – 344.0	n/a	n/a	n/a	253	n/a	n/a	n/a
					69%			
Cochirleni	309.0 – 308.0	n/a	n/a	n/a	n/a	201	n/a	n/a
						55%		
Seimeni	290.0 - 289.0	n/a	n/a	n/a	339	n/a	n/a	n/a
					93%			

*Due to riverbed morphology, marking is always adjusted to 100 m fairway width.

TABLE 3: AVAILABILITY OF 2.5 M DEPTH AND SELECTED WIDTH ON CRITICAL SECTORS IN 2018
(TABLE BY THE DANUBE STREAM TEAM)

Project co-funded by European Union funds (ERDF, IPA)

8 Locks in numbers

There are 16 locks situated on the Danube from Austria to Romania, which are functional during the whole year. This chapter is dedicated to the lock statistics for the Austrian (Aschach, Ottensheim, Abwinden, Wallsee, Ybbs-Persenbeug, Melk, Altenwörth, Greifenstein and Freudenau), Slovakian (Gabčíkovo), Serbian (Iron Gate I and Iron Gate II) and Romanian (Agigea, Cernavodă, Ovidiu and Năvodari) locks.

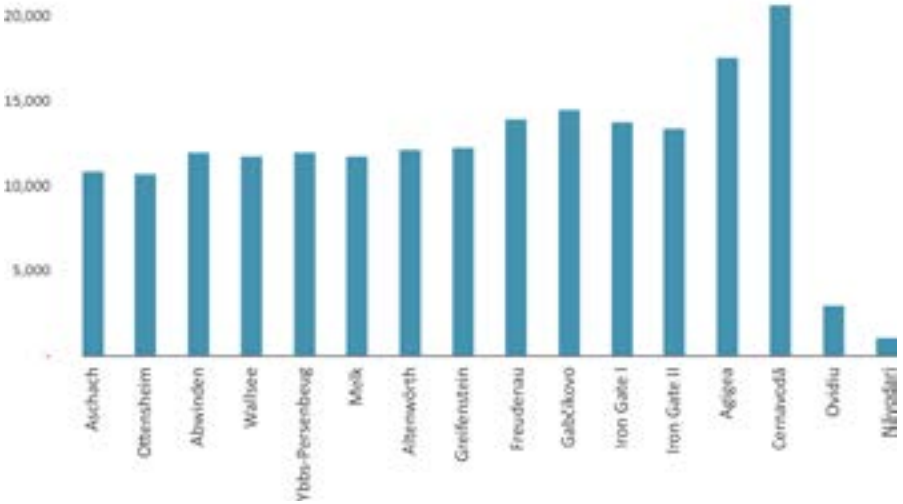


FIGURE 5: NUMBER OF LOCKED VESSELS PER LOCK IN 2018 (FIGURE PREPARED BY DANUBE STREAM TEAM)

The frequency of use of the Danube River lock facilities can vary among the years. Nevertheless, the Cernavodă lock maintains the leading position on the annual number of locked vessels, achieving the number of 21,248 during 2018, almost a thousand more than in 2017. A considerable amount was reached by Agigea lock as well, having 18,070 vessels locked and as such exceeding the 2017 records.

The other most significant locks have locked a slightly reduced number of vessels during 2018: Gabčikovo 13,361 (14,461 locked vessels in 2017), Freudenau 11,972 (13,932 locked vessels in 2017) and Iron Gate I 13,363 (13,742 locked vessels 2017). Having in mind the recently launched upgrade and adaptation works of Gabčikovo and Iron Gate I locks, this activity level should be comparably higher upon the completion of the respective projects.

Other locks have locked a similar moderate number of vessels as in 2017. This is particularly visible among the Austrian locks, which lock 9,000 vessels per year on average. The lowest values, as in 2017, were recorded by Ovidiu lock (3,074 locked vessels) and Năvodari lock (950 locked vessels).

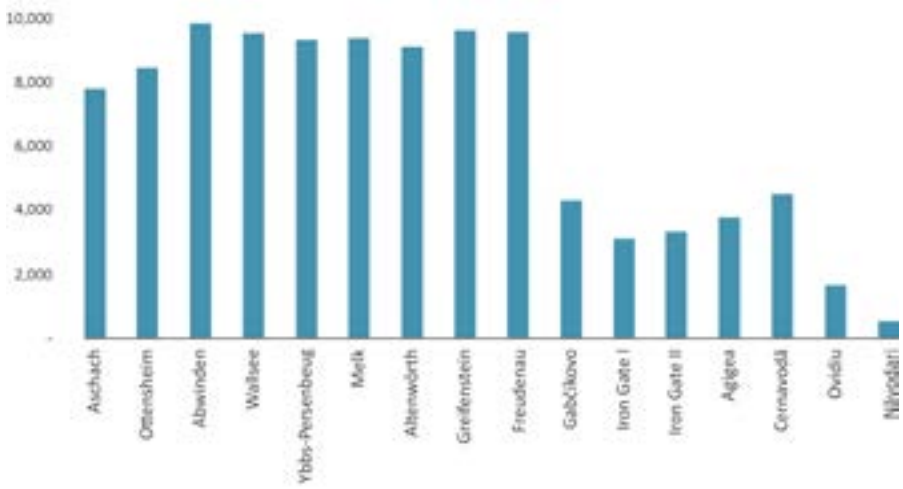


FIGURE 6 ILLUSTRATES THE NUMBER OF LOCKAGES PER LOCK FROM JANUARY TO DECEMBER 2018 (FIGURE PREPARED BY DANUBE STREAM TEAM)

As it can be seen in figure 6, the locks with the highest number of locked vessels are not the ones with the highest number of lockages. Their facilities allow simultaneous lockage of a few vessels, thus reducing the number of lockage activities and still passing through a considerable number of vessels. Hence, Austrian lock Greifenstein recorded the highest value of 9,538 lockages, having this value accompanied by lock Abwinden with 9,485 and Freudenau lock with 9,246 lockages, which keep the leading positions from year to year.

The number of lockages on the Lower Danube varied from 815 at Năvodari to 4.639 at Cernavodă, which in numbers had similar performance as the Slovakian lock Gabčikovo. The Iron Gate I lock, as the hydro power and navigation system with the biggest capacity on the Danube River, had noted less lockages then the Gabčikovo lock, even though locking almost identical number of vessels during 2018.

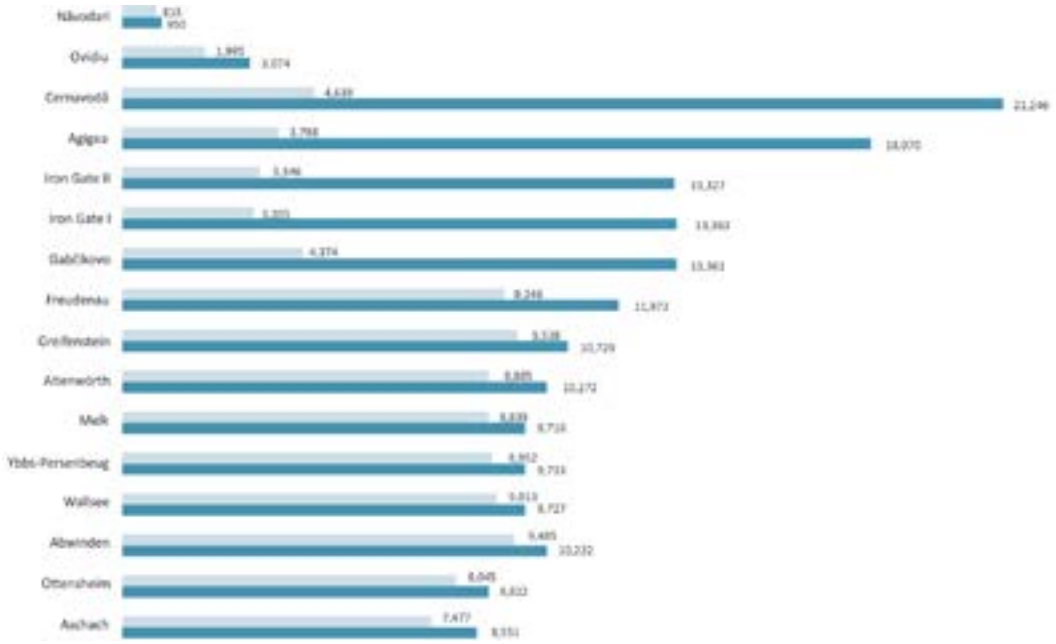


FIGURE 7: NUMBER OF LOCKAGES AND LOCKED VESSELS IN 2018
(FIGURE PREPARED BY DANUBE STREAM TEAM)

Each year, the period from spring to autumn offers favourable navigation conditions. Taking this fact into account, the period between May and October is very busy in terms of locked vessels and lockages.

A peak concerning the number of locked vessels during 2018 was reached in July - 19,698, when also the highest number of lockages was recorded – 11,745 (Figure 8). In comparison to 2017, the peak figures recorded in 2018 show reduced lock activity, having in mind that on a monthly scope 24,191 vessels were locked in August 2017, while the highest number of lockages was remarked also in July, reaching a value of 12,269 lockages. On the other hand, January and February are as usual the months when the performances of locks decline.

FIGURE 8: MONTHLY LOCK STATISTICS IN 2018 (FIGURE PREPARED BY DANUBE STREAM TEAM)

9 Fairway information services

The Fairway Information Services (FIS) portal as the tool for providing information concerning the navigation conditions was developed within the previous projects NEWADA and NEWADA duo. The Danube STREAM project is using the already available services and aims at improving and updating the existing functionalities, enabling a certain guarantee of proper availability of these services – from the technical and information availability perspective.

Danube FIS Portal website is mainly based on measured and estimated figures concerning water levels and bottlenecks including forecasts and contains information about:

- Water level
- Bottlenecks
- Notices to Skippers
- Ice messages
- Waterway objects (bridges, ports, locks, berths, marking system)
- Authorities
- Electronic Navigational Charts and Paper Charts

The FIS portal is available in English, German, Slovak, Hungarian, Croatian, Serbian, Romanian and Bulgarian.

ILLUSTRATION BY THE DANUBE STREAM TEAM

Improvement and updating of the existing FIS portal functionalities have been conducted via a variety of mechanisms related to: monitoring tools, new web service interfaces, the map based fronted and provision of up-to-date bottleneck information. In addition to the Danube FIS portal web application within the Danube STREAM project, the focus has been put on the development of a mobile version of the FIS portal in order to reach a full scope of stakeholders and to meet the needs of waterway users in line with the Common Vision Statement.

As a general river management policy outcome, River Information Services (RIS) are implemented in all Danube countries as information services designed to enhance safety and efficiency of inland waterway transport by optimising traffic and transport processes. RIS real-time information is exchanged between all inland waterway stakeholders. The development of RIS, in combination with cost-effective and environmentally friendly logistics operations, enhances the competitive edge of inland waterway transport in the supply chain.

River Information Services mainly consist of four correlated systems, which are being technically developed by respective expert groups:

- Inland Electronic Chart Display and Information Systems (Inland ECDIS)
- Electronic Reporting International (ERI)
- Notices to Skippers (NtS)
- Vessel Tracking and Tracing (VTT)

Usage of RIS is mandatory in most of the Danube countries and will be mandatory all along the Danube River soon, in order to improve safety of navigation by provision of accurate information on navigation conditions. The current status of implementation and availability of RIS along the Danube River is summarized in Table 4.

SERVICE	AT	SK	HU	HR	RS	RO	BG
AIS COVERAGE	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*
VTT	*YES*	*YES*	*YES*	*YES*	*YES*	*YES*	*YES*
ENC	*YES*	*YES*	*YES*	*YES*	*YES*	*YES*	*YES*
NTS	*YES*	*YES*	*YES*	*YES*	*YES*	*YES*	*YES*
ERI	*YES*	*YES*	*PARTIALLY*	*YES*	*YES*	*YES*	*YES*
ELECTRONIC LOCK MANAGEMENT SYSTEM	*YES*	*YES*	*NO LOCKS*	*NO LOCKS*	*YES*	*YES*	*NO LOCKS*
HULL DATABASE	*YES*	*YES*	*YES*	*PENDING*	*YES*	*YES*	*PENDING*
RIS INDEX IN ERDMS	*YES*	*YES*	*YES*	*NO*	*YES*	*YES*	*YES*
IS RIS OBLIGATORY?	*YES*	*YES*	*YES*	*YES*	*YES*	*YES*	*YES*

TABLE 4: AVAILABILITY OF RIS SERVICES ALONG THE DANUBE RIVER
(TABLE BY DANUBE STREAM TEAM)

10 Ongoing projects and transboundary impact - Danube region

RIS COMEX

The RIS COMEX (RIS Corridor Management Execution) project is a CEF funded multi-beneficiary project aiming at the definition, specification, implementation and sustainable operation of Corridor RIS Services. The project area covers altogether 13 different European countries having 15 partners. Corridor Management is the next step in the development of River Information Services in order to improve safety, efficiency and reliability of inland navigation including positive effects on the protection of the environment.
The RIS COMEX project is organized in 5 Activities reflecting the individual phases of the project whereas those phases must not be considered as classically sequenced. While Activity 1 deals with project management, Activities 2 and 3 are defining, specifying and implementing Corridor River Information Services whose sustainable operation shall be ensured by the results of Activity 4. Additionally, Activity 5 deals in parallel with other challenges related to the project objectives. The project aims specifically at:

- Better planning of inland waterway transports (increased reliability of transport times),
- Reduction of waiting and travel times,
- Increase of efficiency within the execution of inland navigation transports,
- Optimal use of infrastructure (increased utilisation of capacities),
- Reduction of administrative barriers.

The RIS COMEX started in the course of 2016 and will last until the end of 2020.

For more information please visit:
www.riscomex.eu

FAIRway Danube

The Project FAIRway Danube, started in July 2015, supports the waterway administrations in achieving a common level of services for the Danube waterway. The administrations in every country, included in the Danube cooperation programs, are tasked with maintaining and improving the Danube waterway for inland navigation, to deploy and harmonize services in the inland navigation sector and at the same time to preserve and protect the Danube as natural river habitat.
This project refers to several countries that participate as partners or beneficiaries: Austria, Slovakia, Hungary, Croatia, Bulgaria and Romania. Many institutions are included in the project as observers, including the Directorate for Inland Waterways of Serbia, Danube Commission (DC), European Barge Union (EBU), European Federation of Inland Ports (EFIP), European Skippers Association (ESO), International Commission for the Protection of the Danube River (ICPDR) and few more and they constitute the FAIRway Danube Advisory Board, too. Different stakeholders take part in this project: waterway and canal administrations, waterway users (operators of cargo and cruise ships), logistics service-providers (port and terminal operators), lock operators, industry plants located along the Danube, governmental authorities, River Commissions, NGOs. The whole project and its results are supported by the Connecting Europe Facility, which is a key EU funding instrument to promote growth, jobs and competitiveness through targeted infrastructure investment at European level.

Finally, the aims of the project clearly represent its purpose. It will: elaborate coordinated national action plans and define pilots, procure equipment for hydrological services, execute and evaluate pilots (harmonized basic data on critical locations, coherent monitoring of the navigation status, harmonized water level forecast, potential of fairway relocation), develop innovative approaches (aerial monitoring, AtoNs), prepare documentation for future implementation steps and manage project and disseminate results. The national action plans are one of the adopted instruments for reaching these targets.

Finalization of this project is predicted for June 2020.

For more information please visit:
www.fairwaydanube.eu

FAST Danube

Commencing in 2014, this project aims to accelerate the removal of an existing bottleneck along a cross-border section of the Danube (Bulgarian/Romanian common section) as it will identify the works to achieve stable navigation capacity all year round.

The project consists of 4 activities from the completion of the Environmental Impact Assessment and building permits documentation to the drafting of the tender designs for future works: investigating and developing technical solutions to be included in the feasibility study to ensure stable navigation conditions throughout the year, on the Romanian-Bulgarian common sector of the Danube; identification and preliminary design of the necessary works to eliminate the existing difficult points; carrying out the Environmental Impact Assessment and Appropriate Assessment for developing the documentation in order to obtain the Environmental Agreement; completion

of technical specifications for carrying out the works on this sector of the Danube.

Via the implementation several benefits could be achieved: developing an integrated approach on the Danube by increasing traffic, avoiding any adverse impact on the river and the ecological system, improving the waterway infrastructure to develop the river transport on the Romanian-Bulgarian common sector of the Danube and supporting sustainable transport, encouraging the use of inland waterway transport.

The EU is co-financing the project by 85% of means needed and it is estimated to be implemented by the end of 2018.

More information can be found under:
www.fastdanube.eu

Upgrade of Gabčikovo lock and rehabilitation and upgrade of the Iron Gate I navigational lock

The Gabčikovo lock has been used by more than 400 thousand ships. It has been filled more than 100 thousand times. This procedure has resulted in leakages endangering the operation. Currently, the lock is at the end of its life cycle. Therefore, its innovation and modernization are vitally important for the ship transport both in Slovakia and whole Europe. The Work Plan of the European Coordinator for the Rhine-Danube Corridor defines the Gabčíkovo lock as a critical bottleneck for the Corridor´s development as well. The Upgrade of the Gabčíkovo lock CEF project aims at the modernisation of the Gabčíkovo lock and consequently the provision of continuous and stable navigation conditions for the Gabčíkovo lock and to ensure a safe passage through the lock. The project was started in 2016 and its end date is planned for the end of 2020.

More information can be found under:
https://www.danube-navigation.eu/projects/upgrade-of-gabcikovo-locks-1

The Iron Gate navigational lock has been continuously in operation since 1970. Over the past 47 years, no significant works on the overhaul of mechanical or other equipment of the navigation lock have been conducted, due to which the functionality of this navigation lock has been jeopardized, which may potentially lead to catastrophic effects on the overall navigation on the Danube and in Europe, as well as on industry and economy in this region. The project Upgrade of the Iron Gate I Navigational Lock will improve reliability of the navigation lock infrastructure, eliminate and prevent occurrences of long closures, shorten the lockage cycle, reduce waiting time for vessels and reduce O&M costs.

The project is financed from the EIB Framework Loan and the CEF funding with the project implementation deadline in the second half of 2020.

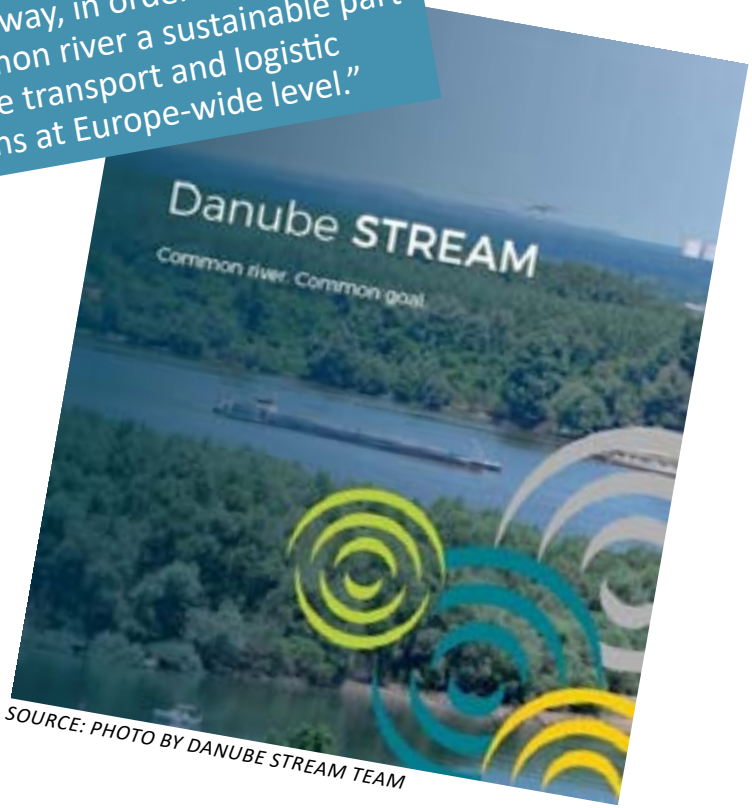
More information can be found under:
https://www.danube-navigation.eu/projects/rehabilitation-and-upgrade-of-the-iron-gate-i-navigational-lock

11 Common river. Common goal.

The waterway administrations within the Danube STREAM project are challenged by the fact that one river is a common issue to tackle – the Danube. They aim at providing the same level of possibilities along the entire river, orienting their own resources and authority on a particular national stretch of the Danube River. Hence, the goal of achieving harmonized level of services and navigation conditions was one of the preconditions of the Danube STREAM project, gathering national Danube waterway stretches into one, as per nature, and their waterway administrations into a consortium.

Following the user-oriented and environmentally friendly approach, the Danube STREAM project has brought together various stakeholders and experts and has resulted with outputs that cover significant areas of Danube waterway sustainable management. Connecting not only with other projects in the Danube Region, but also in coordination with the EU Strategy for the Danube Region (EUSDR), this project has multiplied its impacts on harmonization and dealt with some of the core points of the Danube transboundary network.

"We, the Danube waterway administrations, want to achieve a common level of availability and harmonized level of services for the clients of the Danube waterway, in order to make our common river a sustainable part of the transport and logistic chains at Europe-wide level."



SOURCE: PHOTO BY DANUBE STREAM TEAM

To read more news on activities within Danube STREAM project, please visit the project website www.interreg-danube.eu/approved-projects/danube-stream and its Facebook page.

12 We stay at your disposal

Country	Institution	Headquarters address	Contact info
Austria	via donau – Austrian Waterway Company	Donau-City-Straße 1 A-1220 Vienna Austria	00 43 50 4321 1000 office@viadonau.org www.viadonau.org facebook.com/viadonau youtube.com/user/ViaDonau
Slovakia	SVP - Slovak Water Management Enterprise	Radničné námestie č. 8, 969 55 Banská Štiavnica, Slovakia	00 421 45 6945 111 gr@svp.sk www.svp.sk Media contact (spokesman): +421 45 6945 115 hovorca@svp.sk
Hungary	OVF - General Directorate of Water Management	Márvány u. 1/D 1012 Budapest, Hungary	00 361 225 4400 ovf@ovf.hu www.ovf.hu facebook.com/vizugy
	RSOE - National Association of Radio Distress-signalling and Infocommunications	Elnök u. 1. H-1089 Budapest, Hungary	00 36 1 303 0168 www.rsoe.hu info@rsoe.hu
Croatia	AVP - Agency for Inland Waterways	Parobrodarska 5 32000 Vukovar Republic of Croatia	00 385 32 450 613 Fax: 00 385 32 450 653 www.vodniputovi.hr vodniputovi@vodniputovi.hr
Serbia	Directorate for Inland Waterways Plovput	Francuska 9, 11000 Belgrade, Republic of Serbia	00 381 11 3029 801 office@plovput.gov.rs www.plovput.gov.rs twitter.com/plovput facebook.com/plovput youtube.com/user/Plovput1963 instagram.com/plovput#
Romania	AFDJ – River Administration of the Lower Danube Galati	Portului street, no. 32 800025 Galati, Romania	00 40 236 460812 secretariat@afdj.ro www.afdj.ro
	ACN – Administration of the Navigabile Canals SH	Ecluzei 1 907015 Agigea Romania	00 402 41 702 700 compania@acn.ro www.acn.ro
Bulgaria	EAEMDR – Executive Agency for Exploration and Maintenance of the Danube River	6 Slavyanska Str. 7000, Ruse Republic of Bulgaria	00 359 82823133 appd@appd-bg.org www.appd-bg.org facebook.com/pages/Изпълнителна-Агенция-Проучване-и-Поддържане-на-река-Дунав/195695143811050