

# COMMON DANUBE REPORT 2014







Imprint NEWADA duo project consortium Network of Danube Waterway Administrations – data and user orientation Information about the project consortium can be found on pp. 30-31

> Photos: viadonau, NEWADA duo Layout: viadonau



- AIS Automatic Identification System
- AT Austria
- BG Bulgaria
- CCNR Central Commission for Navigation on the Rhine
- **CO-WANDA** Convention for Waste Management for Inland Navigation on the Danube (transnational project co-funded under the EU SEE Programme)
  - **DE** Germany

## EDINNA Education in Inland Navigation (the educational network of inland waterway navigation schools and training institutes)

- **ENC** Electronic Navigation Chart
- **ERI** Electronic Reporting
- EU European Union
- **EUSDR** Strategy of the European Union for the Danube Region **FIS** Fairway Information Services
- FRMMP Fairway Rehabilitation and Maintenance Master Plan
  - HINT Harmonized Inland Navigation Transport through Education and Information Technology (transnational project co-funded under the EU SEE Programme)
    - HR Croatia
    - **HU** Hungary
  - ICPDR International Commission for the Protection of the Danube River
    - NELI Cooperation-Network for logistics and nautical education focusing on Inland Waterway Transport in the Danube corridor supported by innovative solutions (transnational project co-funded under the EU SEE Programme)
- NEWADA Network of Danube Waterway Administrations
- NEWADA Network of Danube Waterway Administrations data and user
  - duo orientation (transnational project co-funded under the EU SEE Programme)
    - NtS Notices to Skippers
    - **RIS** River Information Services
    - **RO** Romania
    - **RS** Serbia
    - SEE South East Europe Transnational Cooperation Programme

#### Programme

- SK Slovakia
- **UA** Ukraine
- VTT Vessel Tracking and Tracing
- WLAN Wireless Local Area Network



1 Scope of the document

The Common Danube Report 2014 is a joint report of Danube waterway administrations. It contains performance indicators for the Danube River related to provision of information on navigation conditions, availability of the Danube fairway and closures of navigation, cargo and passenger transport volume, stakeholders' involvement and partnerships, international initiatives and common transnational projects, as well as plans for the future cooperation of Danube waterway administrations.

The purpose of this document is to raise awareness on the Danube River as an international waterway of great importance for the Danube region by using concrete performance indicators.

TRANSPORT VOLUME 2013	37.7 million tons	1
% CHANGE OVER 2012	+ 1%	

# $2^{\rm Highlights}_{\rm 2013\&2014}$

#### 

FAIRWAY AVAILABILITY	294 days	(81%)
LOCAL CLOSURES	45 days	(12%)
CLOSURES DUE TO ICE	27 days	(7%)

#### 

FAIRWAY AVAILABILITY	323 days	(89%)
LOCAL CLOSURES	42 days	(11%)
CLOSURES DUE TO ICE	o days	(0%)



3 Sharing a common vision

Dear users of the Danube waterway,

After the successful finalization of the NEWADA duo project implemented between 2012-2014, the Network of Danube Waterway Administrations continues to cooperate in order to preserve achieved results and generate new impulses towards better Danube navigation. Our common vision is still our guiding reference. We stay directed towards customer-oriented waterway management as our stronghold.

Thursday, 6 November 2014 marked the historically important day when the Danube Waterway Management directors signed a Cooperation Agreement on future cooperation beyond the NEWADA and NEWADA duo project lifetime. This is the guarantee that the Network of Danube Waterway Administrations (NEWADA) will continue to work together, for the benefit of the whole Danube navigation community.

The report you have in front of you is a result of the joint efforts of Danube waterway administrations and is a part of our customer-oriented waterway management system with clear performance indicators - a system which we have jointly introduced.

The Danube River is one waterway. It has a value for waterway transport only if it is observed and treated as such: unique and full of potential for cooperation and utilization of business opportunities.

In the hope that we are coming closer to meeting your expectations,

Sincerely, The NEWADA Board of Directors Common vision of Danube waterway administrations: "We, the Danube waterway administrations, want to achieve a common level of availability and harmonized level of services for clients of the Danube waterway, in order to make it a sustainable part of the transport and logistic chains at the Europe wide level."



The total volume of inland waterway transport on the Danube River amounted to 37.7 million tons in 2013, which represents a slight increase compared to the 37.2 million tons reached in 2012. For the last 3 years, there have been no major changes in the volume of cargo transported on the Danube River (Figure 1).



FIGURE 1: DANUBE CARGOTRANSPORT VOLUME FOR THE PERIOD 2007-2013

Note 1: Data in million tons Note 2: Data for 2013 are the latest transport volume data available for all countries Source: National statistics offices, aggregation and graph by the NEWADA team



FIGURE 2: DANUBE CARGOTRANSPORT VOLUME IN 2013

Note: Data in million tons Source: National statistics offices, table prepared by the NEWADA team

	DE	AT	SK	HU	HR	RS	RO	BG	MD	UA
Transit	3.62	3.04	5.76	3.04	5.39	4.83	1.52	1.52	0.00	0.00
Domestic	0.09	0.70	0.02	0.03	0.04	2.55	6.42	1.19	0.00	0.02
Export	1.05	1.99	2.18	3.39	0.27	2.74	3.46	1.26	0.04	2.96
Import	2.29	5.46	0.19	2.05	0.24	2.25	5.52	1.51	0.17	0.09
Total	7.05	11.19	8.15	8.51	5.94	12.37	16.92	5.48	0.21	3.07

TABLE 1: DANUBE TRANSPORT VOLUME PER COUNTRY IN

2013

The disposition of the transport volumes per country and per type (export, import, transit, and domestic) is presented in Figure 2.

The largest overall transport volume was measured in Romania (16.9 million tons), Serbia (12.4 million tons) and Austria (11.2 million tons).

The largest share of exports among Danube riparian countries was recorded in Romania (3.5 million tons), Hungary (3.4 million tons) and Ukraine (3.0 million tons), while in import the biggest figures were achieved by Romania (5.5 million tons), Austria (5.5 million tons) and Germany (2.3 million tons). The largest volume in transit transport was recorded in Slovakia (5.8 million tons), Croatia (5.4 million tons) and Serbia (4.8 million tons). The biggest volume of domestic transport was identified in Romania (6.4 million tons), Serbia (2.6 million tons) and Bulgaria (1.2 million tons). Detailed data on transport per country is shown in Table 1.





The trend showing an increase in passenger traffic on the Danube River continued in 2014. The popularity of cruise journeys in the present year has contributed to the expansion of overall passenger transport. This includes daily line-transport as well.

For example, 23 newly built cabin vessels were navigating the Upper Danube in 2014, adding up to 151 cruise vessels in total. **5** Danube passenger transport shows positive trends

# 6 Closures of navigation in 2014

Source: National navigation authorities, aggregation and chart prepared by the NEWADA team Closures of navigation in 2014 had a local character and were mostly related to unfavorable meteorological conditions (such as fog on 44 occasions, mostly on the Danube-Black Sea Canal, and wind on 27 occasions). In additon there were 24 occasional events (such as fireworks and sport manifestations) and 1 accident. These closures lasted in total 42 days, with an average duration of less than 1 day and were limited to small stretches, not influencing navigation on the rest of the Danube River.

For the rest of the 323 days (89%) in 2014, the whole Danube fairway was available for navigation.



FIGURE 3: AVAILABILITY OF THE DANUBE FAIRWAY IN 2014

Fairway parameters availability in 2013 & 2014





In tables 2 and 3, data on the number of days which achieved the level of service in terms of available fairway parameters are presented, per stretch of the Danube River and for the years 2013 and 2014 respectively.

Levels of service with regard to fairway depth and width have been introduced by the Danube waterway administrations in order to present the continuity of the whole fairway with relevant fairway depth, even sometimes with reduced fairway width.

f the year) with rway width (m)	40	calulated		calulated				364	%66	346	95%	365	100%					365	100%
days (and % o) specific fai	60	not		not				314	86%	317	87%	365	100%					350	96%
Number of	80	359	98%	315	86%	365	100%	310	85%	312	85%	355	97%					330	90%
	100	t calulated		t calulated		283	78%	304	83%	287	78%	318	87%	365	100%	234	64%	306	84%
	120	ou		ou		283	78%	260	71%	278	76%	131	36%	313	86%	228	62%	265	73%
	150	N/A		N/A				192	52%	270	74%	106	29%	284	78%	213	58%	195	53%
	200/180	N/A		N/A				98	27%	230	63%	17	21%	189	52%	199	55%	144	39%
	rkm - rkm	2038.0 - 1998.0		1921.0 - 1872.7		1796.3 - 1795.8		1735.5 - 1733.7		1567.3 - 1566.1		1558.5 - 1557.5		1408.2 - 1400.0		1267.4 - 1261.6		569.0 - 567.0	
	River stretch	Melk – Krems (Wachau)		Vienna – AT/SK border		Vének		Nyergesújfalu (Hungarian data)		Kisapostag		Solt		Apatin		Futog		Milka island	

						Number of day:	s (and % of th specific fairwa	e year) with y width (m)
River stretch	rkm - rkm	200/180	150	120	100	80	60	40
Coundour island	563.0 - 560.0	151	287	317	322	348	352	365
		41%	79%	87%	88%	95%	96%	100%
Vardim island	544.0 - 541.0	37	175	343	365	365	365	365
		10%	48%	94%	100%	100%	100%	100%
Batin island	525.0 - 522.0	28	183	296	298	328	364	365
		8%	50%	81%	82%	%06	100%	100%
Salcia	823.0 - 820.0	322	340	362	365			
		88%	93%	%66	100%			
Dobrina	761.0 - 759.0	0	283	340	365			
		0%0	78%	93%	100%			
Bechet	678.0 - 676.0	249	319	331	365			
		60%	87%	91%	100%			
Corabia	629.0 - 628.0	227	335	365	365			
		62%	92%	100%	100%			
Cernavoda	297.0 - 296.0	264	285	340	365			
		72%	78%	93%	100%			
Seimeni	290.0 - 289.0	0	0	278	333	365		
		%0	%0	76%	91%	100%		
Albanesti	276.0 - 275.0	278	362	365	365			
		72%	94%	100%	100%			
				7	ABLE 2: AVAILA	ABILITY OF 2.5 WIDTH ON C	M DEPTH AN	D SELECTED ORS IN 2013

	rkm - rkm	200/180 N/A	150 N/A	120 Not calcula	100 tad	80 80	pecific fairw 60 Not ca	ay wiath (m) 40 Iciilatad
203	8.0 - 1998.0	N/A	A/A	Not calcula	ited	352	Not ca	lculated
						96%		
19:	21.0 - 1872.7	N/A	N/A	Not calculated		222	Not ca	lculated
						61%		
179	96.6 - 1795.8		322	322	322	322	359	
			88%	88%	88%	88%	98%	
173	35.5 - 1733.7	33	53	130	251	268	307	365
		9%6	14%	36%	69%	73%	84%	100%
15	67.3 - 1566.1	162	176	186	242	246	297	314
		44%	48%	51%	66%	67%	81%	86%
15	58.5 - 1557.5	27	39	54	232	340	360	365
		7%	<b>%11</b>	15%	64%	93%	%66	100%
14	08.2 - 1400.0	77	268	365	365	365		
		21%	73%	100%	100%	100%		
12	67.4 - 1261.6	182	222	337	365	365		
		50%	61%	92%	100%	100%		
56	9.0 - 567.0	13	134	267	329	337	365	365
		4%	37%	73%	%06	92%	100%	100%

Number of days (and % of the year) with specific fairway width (m)

18

TY OF 2.5 DTH ON C	ABLE3: AVAILABILI Wi	T.				
	100%	100%				
	365	365	0	0	276.0 - 275.0	Albanesti
100%						
365	0	0	0	0	290.0 - 289.0	Seimeni
	100%	89%	64%	25%		
	365	326	234	91	297.0 - 296.0	Cernavoda
	100%	100%	100%	93%		
	365	365	365	341	629.0 - 628.0	Corabia
	100%	100%	100%	94%		
	365	365	365	344	678.0 - 676.0	Bechet
	100%	100%	100%	0%0		
	365	365	365	0	761.0 - 759.0	Dobrina
	100%	100%	100%	100%		
	365	365	365	365	823.0 - 820.0	Salcia
96%	92%	82%	81%	4%		
352	337	298	297	13	525.0 - 522.0	Batin island
100%	100%	%66	88%	8%		
365	365	360	321	28	544.0 - 541.0	Vardim island
100%	100%	%66	47%	0%		
365	365	360	171	0	563.0 - 560.0	Coundour island
80	100	120	150	200/180	rkm - rkm	River stretch
ber of day.	Num					
	ber of day 86 365 365 365 352 96% 96% 365 365 100%	Number of day   100 80   365 365   100% 100%   365 365   100% 100%   337 352   337 352   337 352   337 352   337 352   337 352   355 365   100% 100%   365 100%   365 100%   365 100%   365 100%   365 100%   365 100%   365 100%   365 100%   365 100%	120   100   80     360   365   365     360   365   365     99%   100%   100%     360   365   365     360   365   365     360   365   365     360   365   365     360   365   365     100%   100%   100%     365   365   365     100%   100%   100%     365   365   365     365   365   365     365   365   365     365   365   365     365   365   365     365   365   365     366   365   365     365   365   365     366   365   365     366   365   365     366   365   365     365   365   365     366   365   365     366   365   365     365   365	IJ50   120   100   80     171   360   365   365     171   360   365   365     171   360   365   365     171   360   365   365     171   360   365   365     171   360   365   365     171   360   365   365     171   360   365   365     100%   100%   100%   100%     100%   100%   100%   100%     100%   100%   100%   365     365   365   365   365     365   365   365   365     365   365   365   365     365   365   365   365     365   365   365   365     366   365   365   365     365   365   365   365     366   365   365   365     366   365   365   365     365	200/180   150   120   100   80     200/180   171   360   365   365     0%   77%   99%   100%   100%     0%   77%   99%   100%   100%     130   321   360   365   365     131   297   298   365   365     132   297   298   365   365     133   297   298   365   365     134   81%   82%   92%   365     100%   100%   100%   100%   96%     100%   100%   100%   100%   100%     141   365   365   365   365     141   365   365   365   365     141   365   365   365   365     100%   100%   100%   100%   365     101   100%   100%   100%   365     101   100%   100%   100%   100%     100   100%   100%	Itmberafady       Itmberafady       Itmberafady       Itmberafady       Itmberafady       Itmberafady       1tmberafady       1tmbera

The Danube waterway administrations are continuously developing and improving the Fairway Information Services (FIS) web portal, as one unique window for all Danube navigation related data (water levels, forecasts, navigation depth at critical sectors, active Notices to Skippers, data on waterway infrastructure, electronic navigational charts, atlas of berths, contacts of relevant national navigation authorities). 8 Fairway information services

New paper navigational charts and atlas of berths for different Danube riparian countries can be downloaded from the Danube FIS portal, as well as up-to-date status of the marking system.



The Danube FIS portal was developed within the NEWADA and NEWADA duo projects, co-funded under the EU South East Europe Transnational Cooperation Programme. The portal is available in English as well as in German, Slovakian, Hungarian, Croatian, Serbian, Romanian and Bulgarian at <u>www.danubeportal.com</u>.



FIGURE 6: WiFi hotspots were implemented in various projects

The WLAN network which has been established along the Danube River is maintained and improved, providing a necessary link to up-todate dynamic information on navigation conditions.

River Information Services (RIS) are either implemented or under implementation in all Danube countries. Soon, usage of RIS will be mandatory all along the Danube River. This will improve the safety of navigation by provision of accurate and real-time information on navigation conditions and improve traffic management system. The current status of implementation and availability of RIS services along the Danube River is summarized in Table 4.

BG	100%	Yes	Yes	Yes	Yes	No locks	Pending	Pending	
RO	100%	Yes	Yes	Yes	Yes	Yes	Yes	Pending	
RS	100%	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
ЯH	100%	Yes	Yes	Yes	Yes	No locks	Pending	Pending	
ΡH	100%	Yes	Yes	Yes	Parti- ally	No locks	Yes	Yes	
SK	100%	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
АТ	100%	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Service	AIS coverage	TTV	ENCs	NtS	ERI	Electronic lock management system	Hull database	Is RIS obligatory?	

TABLE 4: AVAILABILITY OF RIS SERVICES ALONG THE DANUBE RIVER

### 9 Utilizing ideas through projects and initiatives

At the operational core of the EU Strategy for the Danube Region lies an Action Plan defining fields of action and respective measures for all priority areas. As far as inland waterways are concerned, the following five objectives agreed upon between the Danube riparian states and the European Commission should be achieved:

- Increase cargo transport on the river by 20% by 2020 compared to 2010.
- Solve obstacles to navigability, taking into account the specific characteristics of each section of the Danube and its navigable tributaries and establish effective waterway infrastructure management by 2015.
- Develop efficient multimodal terminals at river ports along the Danube and its navigable tributaries to connect inland waterways with rail and road transport by 2020.
- Implement harmonized River Information Services (RIS) on the Danube and its navigable tributaries and ensure the international exchange of RIS data preferably by 2015.
- Solve the shortage of qualified personnel and harmonized education standards in inland navigation in the Danube region by 2020, taking duly into account the social dimension of the respective measures.

#### 9.1. Fairway Rehabilitation and Maintenance Master Plan

The "Fairway Rehabilitation and Maintenance Master Plan for the Danube and its navigable tributaries" was finalised at the end of 2014. It was elaborated within the EU Strategy for the Danube Region (EUSDR) in close cooperation with the NEWADA duo project, all riparian states, waterway administrations and involved river commissions. The Master Plan document identifies the most critical locations in the waterway network and - more importantly - draws up the required short-term measures to ensure proper fairway rehabilitation and maintenance. All ministers of transport of the Danube Region (except for Hungary) reaffirmed their commitment towards proper waterway maintenance in their respective countries by signing joint conclusions. During a Transport Council meeting on 3 December 2014, the vast majority of the Danube Region transport ministers therefore adopted the Master Plan. In addition, the Master Plan finds broad support by the operators of Danube waterway transport services.

#### 9.2. National roadmaps for coordinated rehabilitation and maintenance measures

Based on this stock-taking exercise, the Priority Area 1a Coordinators invited regular users of the Danube waterway to provide feedback on the identified critical locations. 24 major waterway transport operators responded to this request. In sum, 11 stretches clearly stand out from the remaining critical locations, which had been identified in the Master Plan. From the user perspective, these locations and stretches cause the biggest navigational problems and should consequently be treated with the highest priority. The Master Plan document provides a solid analysis and knowledge basis in order to take the next implementation steps in line with the user priorities.

## 9.3. FAIRway – a new approach towards fairway maintenance

Based on the accepted Fairway Rehabilitation and Maintenance Master Plan (FRMMP) the EU-Partner waterway administrations prepared a new project to help to reach the aims of the Master Plan. The proposed project "FAIRway"





aims at preparing the harmonized rehabilitation of the Danube and its navigable tributaries. Within the multi-applicant CEF-study the following activities are planned between 07/2015 and 06/2020:

- Elaborate coordinated national roadmaps and define pilots for the implementation of the Master Plan
- Procure the necessary equipment to carry out the pilots for hydrological services
- Execute and evaluate pilots in order to
  - Collect harmonized basic data on all critical sections
  - Implement a coherent monitoring scheme for the navigational status
  - Harmonize water level models and prognosis
  - Identify the potential of fairway relocation and floating ship data
- Develop innovative approaches in the area of aerial monitoring, modern Aids to Navigation etc.
- Prepare the necessary documentation for future implementation projects of Master Plan



Photo by the HINT team

## 9.4. HINT – education and training in inland navigation

Guided by the previous projects which laid the foundations for further progress, as well as with the support of the objectives of the EU Strategy for the Danube Region, various projects and workshops have been implemented.

Regarding education and training in inland navigation in the Danube region, the HINT project was successfully completed in December 2014 following the previous project NELI with the same objectives. Transnational-based harmonisation actions were supported and promoted in accordance with European initiatives and in cooperation with international organisations (i.e. CCNR, EDINNA) leading to common standards of training and certification of inland nautical personnel. In addition, Danube-wide common future concepts for on-board and simulator training were executed by involving all relevant national sectors (inland navigation, education and training and responsible authorities). In this context, the concept of a future Danube School Ship was elaborated based on the requirements of the addressed stakeholders. Beyond, promotion of inland navigation and transport via the four Information and Training Centres established in Romania (InfoDanube), Austria (Infocenter Danube), Croatia (RIS Centre) and Hungary (DUNAPROMO) has been improved for making inland navigation better visible and accessible to future employees and students.

## 9.5. Project CO-WANDA – developing modern ship waste management along the Danube

Inland navigation is an environmentally friendly transport system, still there is the need to handle the negative side effects caused by incorrect disposal or illegal dumping of ship waste. Supported by the European Unions's South East Europe Transnational Cooperation Programme, 12 partners from Austria, Slovakia, Hungary, Croatia, Serbia, Rumania, Bulgaria, Moldova and the Ukraine implemented the project CO-WANDA - "COnvention for WAste management for inland Navigation on the Danube" from 2012 – 2014.

CO-WANDA's centerpiece was the elaboration of an International Danube Ship Waste Convention (IDSWC), providing harmonised rules for inland vessels navigating the Danube River, related business operators, as well as the participating states, who shall install a sufficient dense network of waste reception facilities and enforce compliance of waterway users.

The IDSWC has been complemented with concepts for waste prevention, infrastructure analysis suggesting network-variants for reception facilities, a financing mechanism as well as comprehensive pilot tests. User-friendly, cost-efficient and state of the art facilities as well as close cooperation of the states, including the operation of an Electronic Vignette System for waste fee collection are suggested to install a transnational ship waste system along the Danube. The project has now reached the finishing line; nevertheless continued common efforts, international cooperation and commitment of the states are thus now more than ever indispensable requirements for triggering negotiations and entering it into force.

#### 9.6. Further information

Danube Strategy

- www.danube-navigation.eu
- www.danube-region.eu

River Commissions:

- www.danubecommission.org
- www.savacommission.org
- www.icpdr.org

Projects:

- www.naiades.info/platina
- www.newada-duo.eu
- www.iris-europe.net
- www.hintproject.net
- www.co-wandaproject.eu

## 10<sup>Towards</sup> navigation conditions

The network of Danube Waterway Administrations is well developed and provides a general framework for common work. Institutions gathered under the NEWADA umbrella are natural partners, sharing the same challenges, but also the same vision.

We have managed to harmonize a number of services for navigation along the Danube River in the past years. Now, it is a challenge to preserve achieved results and prove that they can be sustainable, before we enter a new chapter of cooperation and development of new customer oriented services.

We stay devoted to the NEWADA mission - to reach a common level of service, where users of the waterway will not see/feel much difference between Danube riparian countries.



Photo © NEWADA



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Romania	ACN – Administration of the Navigabile Canals SH
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Bulgaria	EAEMDR – Executive Agency for Exploration and Main- tenance of the Danube River
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Bulgaria	и-Поддържане-на-река-Дунав/195695143811050



# viadonau 📚















