

A company of the Federal Ministry for Transport, Innovation and Technology

DANUBE NAVIGATION IN AUSTRIA







A project of the National Action Plan Danube Navigation

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KEY DATA ON DANUBE NAVIGATION 2010

Changes from 2009 are given as percentages in brackets

11.1 million tons (+18.6%)	Import: 6.2 million tons (+25.4%)
	Export: 1.7 million tons (+5.5%)
	Transit: 2.7 million tons (+10.6%)
	Domestic: 0.5 million tons (+38.6%)
TRANSPORT PERFORMANCE	
11.5 billion tkm (+19.4%)	Within Austria: 2.4 billion tkm (+18.6%)
10,391 loaded journeys (+7.5%)	Outside Austria: 9.1 billion tkm (+19.7%)
WATER TRANSHIPMENT AT AUSTRIAN POR	ETS AND TRANSHIPMENT SITES
8.8 million tons (+22.2%)	Ores and metal waste: 3.5 million tons (+27.1%)
	Petroleum products: 2.3 million tons (+16.0%)
	Fertilisers: 0.8 million tons (+40.5%)
	Metal products: 0.6 million tons (+19.0%)
	Agricultural and forestry products: 0.5 million tons (+50.6%)
	Other goods: 1.1 million tons (+11.0%)
VESSEL UNITS LOCKED THROUGH AT AUS	TRIAN DANUBE LOCKS
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Closure due to ice: 0 days

Source: Statistics Austria; Supreme Navigation Authority at the Federal Ministry for Transport, Innovation and Technology; Federal Office of Transport; diverse companies active in passenger transport

15-year average: 359 days

CONTENTS

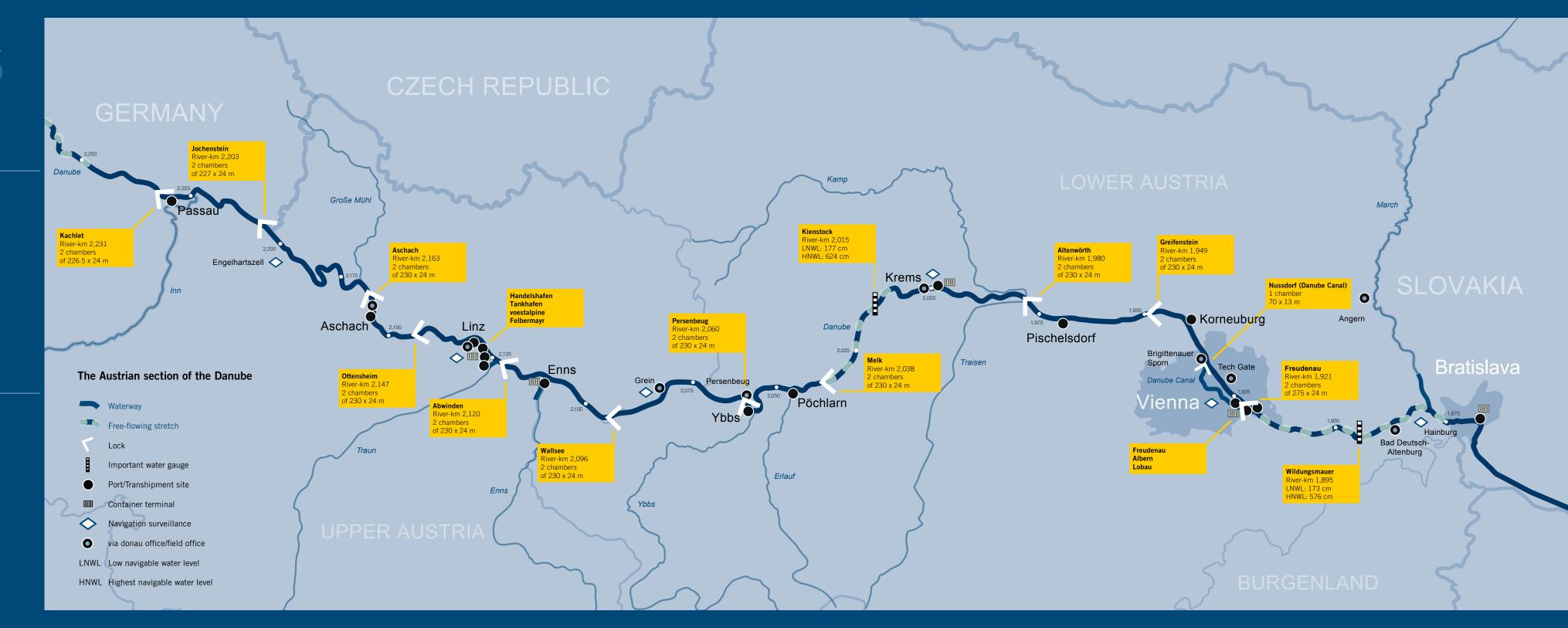
Foreword	04–05

FACTS AND FIGURES

Transport volume	06–07
Port transhipment	08–09
Transport volume by commodity groups	10–11
Passenger transport	12–13
Availability of the waterway	14–15
Fairway conditions	16–17
Transport intensity	18–19
Locked-through vessel units	20–21
Modal split	22–23

PROJECTS AND ACTIVITIES

Danube region	26–27
Waterway	28–29
Environment	30–33
Safety	34–35
Commorco	36 37



OPENING UP NEW HORIZONS A STRATEGY FOR THE DANUBE REGION

via donau – Österreichische Wasserstraßen-Gesellschaft mbH considers it an important task to provide political and economic decision-makers, as well as interested members of the general public, with current data on the Danube waterway. The fourth of its kind, this annual report is intended to present a comprehensive overview of the Danube waterway and its function as a major transport route. Naturally, it also refers to topics such as the environment and safety, themes that are inextricably linked with Danube navigation. For Danube waterway transport, 2010 was clearly marked by two highlights: first of all, inland navigation embarked on the road to economic recovery and secondly, a European Strategy for the Danube Region was set out, based on an Action Plan that consists of concrete measures for the areas of transport, energy, environment and the respective socio-economic framework conditions. In cooperation with the Austrian Federal Ministry for Transport, Innovation and Technology (bmvit), via donau made a major contribution to the Action Plan. Furthermore, it has been assigned the role of coordinator for the field of Danube navigation together with the Romanian Ministry of Transport. Once fully implemented, the Action Plan's various measures are designed to enhance the attractiveness of Danube navigation thus providing Austria's industry and commerce with a more efficient and environmentally friendly mode of transport to South-East Europe.

Hosenlik le

HANS-PETER
HASENBICHLER
Managing Director
of via donau

Managing Directo of via donau

THINGS ARE GETTING BETTER **DANUBE NAVIGATION OVERCOMES CRISIS**

Danube navigation is an environmentally friendly mode of transport, which is promoted by my Ministry along with railway transport. After the global economic crisis sent transport volumes on the Danube plummeting in 2009 by nearly 17% in comparison to the previous year, 2010 witnessed a clear upswing, with more than 11 million tons of goods being transported again on the Austrian stretch of the Danube. This marked an increase of nearly 19%, reaching almost exactly the same level as in 2008. This annual report is intended to provide you with an overview of facts, figures and initiatives in the field of Danube navigation. It also illustrates the enormous economic relevance of the environmentally friendly transport mode of inland navigation for Austria as a business location. Together with via donau my ministry is therefore working towards further enhancing the utilisation of the Danube as a transport route in an environmentally compatible way.

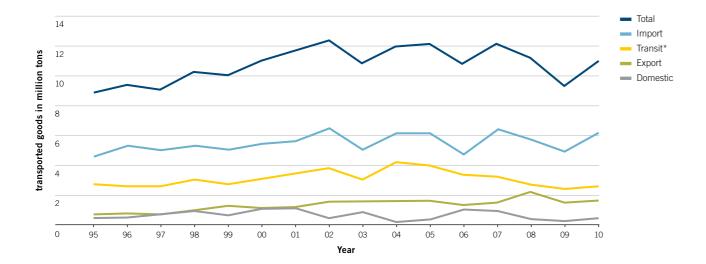
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Federal Minister for Transport, Innovation and Technology

and Technology

FREIGHT TRANSPORT ON THE AUSTRIAN DANUBE 1995-2010



TRANSPORT VOLUME (TONS)	Import	Export	Transit*)	Domestic	Total
2010	6,199,870	1,667,805	2,727,772	456,632	11,052,080
2009	4,945,292	1,581,387	2,465,668	329,463	9,321,810
2008	5,730,621	2,166,354	2,809,508	502,228	11,208,711
2007	6,264,069	1,547,234	3,323,081	972,156	12,106,540
2006	4,813,237	1,440,795	3,453,555	1,136,577	10,844,164

*) Due to a lack of statutory resources, there are no complete records for transit data for the years 2004 and 2005. Since June 2005 figures have been extrapolated by Statistics Austria.

Source: Statistics Austria; chart and table created by via donau

TRANSPORT VOLUME

CLEAR RECOVERY AFTER THE CRISIS TRANSPORT VOLUMES AT 2008 LEVEL

The upswing in cargo transport on the Austrian section of the Danube, which began in the second half of 2009, continued in 2010. In almost all goods segments, transport volumes increased in comparison to 2009, nearly reaching the level of 2008: In 2010, a total of 11.1 million tons of goods were carried on the Austrian Danube, which is equivalent to an increase of 18.6% or 1.7 million tons more than in the crisis year 2009. This result falls short by only 1.4% or 156,631 tons compared to the figures for 2008.

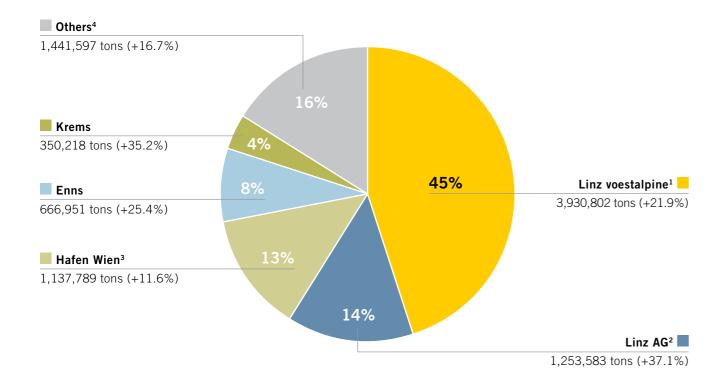
Consequently, transport performance on the Danube within Austria increased by 18.6% to 2.4 billion ton-kilometres over 2009 and the overall transport performance by 19.4% to 11.5 billion ton-kilometres. The number of loaded journeys undertaken on the Austrian section of the Danube rose by 7.5% to 10,391.

In the **import sector**, the transport volume amounted to 6.2 million tons, showing an increase of 25.4% or 1,254,578 tons compared to 2009. About 76% of the imported goods entered Austria from the east. Close to 58% of this increase was due to the intensified import of ores by the voestalpine in Linz. Furthermore, the import of petroleum products, agricultural and

forestry products, fertilisers and building materials increased between 100,000 and 200,000 tons in comparison to the reference year of 2009. In the **export sector**, 1.7 million tons of goods were transported by inland vessels, which is equivalent to an increase of 5.5% or 86,418 tons more than in 2009. In this transport segment, 50% of the goods crossed the eastern border and 50% crossed the western border of the Austrian territory. The volume of **transit transport** rose by 10.6% or 262,104 tons to 2.7 million tons. In transit, 84% of the goods were carried upstream, 16% downstream. The transport volume reported for transit traffic constitutes an extrapolated figure since Statistics Austria uses an estimation model to compensate for the existing under coverage of transit transport. Finally, domestic traffic on the Austrian section of the Danube waterway

increased by 38.6% or 127,169 tons to 456,632 tons.

The shares of the individual transport segments in total waterway freight transport in 2010 are specified below (changes in comparison to 2009 are indicated as percentages in brackets): 56.1% import (+3.1%), 24.7% transit (-1,8%), 15.1% export (-1.9%) and 4.1% domestic traffic (+0.6%).



TOTAL: 8,780,940 tons

Source: Statistics Austria; chart prepared by via donau

PORT TRANSHIPMENT

AUSTRIAN DANUBE PORTS ON THE UPSWING **INCREASE OF 1.6 MILLION TONS**

After the crisis-related economic downturn in 2009, waterborne cargo transhipment on the Danube has witnessed a favourable development. In 2010, the Austrian Danube ports and transhipment sites succeeded in recovering nearly all of the losses of the previous year: Overall, in 2010, close to 8.8 million tons of goods were handled by the ports and transhipment sites on the Austrian Danube. This is equivalent to an increase of 22.2% or 1.6 million tons more than in 2009. While in 2010 all Danube ports and transhipment sites recorded a clear increase compared to the previous year, they did not fully reach the level of 2008.

With 3.9 million tons of goods and a share of 45% in the total water transhipment volume of all Danube ports and transhipment sites, the private port of voestalpine in Linz remained the most important Austrian Danube port for the water-side handling of goods. Compared to 2009, this represents an increase of 21.9% or 705,454 tons.

Two ports recorded exceptional figures in 2010: The ports of Linz AG registered a water transhipment volume of close to 1.3 million tons (+37.1% or 339,265 tons), while the port of **Enns-Ennsdorf** reported 666,951 tons (+25.4% or 134,927 tons). In 2010, these ports even managed to surpass their balance for 2008.

With an increase of 11.6% or 117,994 tons over 2009, the port of Vienna managed to achieve an overall water transhipment volume of more than 1.1 million tons. At the port of **Krems**, 350,218 tons of goods (+91,197 tons) were handled on the water-side, which amounts to an increase of 35.2% over 2009

The other Austrian ports and transhipment sites (including Aschach, the heavy cargo port of Linz, Mauthausen, Wallsee, Ardagger, Ybbs, Pöchlarn, Pischelsdorf and Korneuburg) were able to continue the positive trend of 2008 and recorded an increase of 16.7% or 206,497 tons, making a total of more than 1.4 million tons of goods in 2010. Due to data protection legislation, the water transhipment volumes of these ports and transhipment sites cannot be presented in more detail.

In addition to the 45% share of the port of voestalpine Linz in the total water transhipment volume recorded by the Austrian Danube ports and transhipment sites, the quantitative shares accounted for by the other ports and transhipment sites are as follows: 16% others, 14% Linz AG, 13% Hafen Wien, 8% Enns-Ennsdorf and 4% Krems.

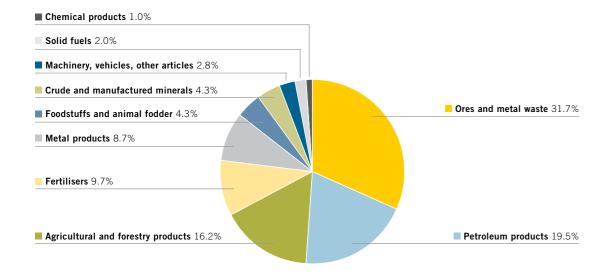
¹⁾ Including water transhipment in the transhipment hall at Industrie Logistik Linz GmbH.

²⁾ The figures for Linz combine the transhipment volumes of the commercial and the oil port.

³⁾ The figures for Vienna combine the transhipment volumes of the three ports of Freudenau, Albern and Lobau oil port.

⁴⁾ Other ports and transhipment sites: Aschach, heavy cargo port Linz, Mauthausen, Wallsee, Ardagger, Ybbs, Pöchlarn, Pischelsdorf, Korneuburg.

Classification of commodities by NST/R*	Domestic	Import	Export	Transit	Total 2010	Change over 2009
			Transport volu	umes in tons		
O Agricultural and forestry products	8,257	347,989	110,427	1,318,631	1,785,305	+12.7%
1 Foodstuffs and animal fodder	-	346,294	30,291	101,498	478,083	-8.1%
2 Solid fuels	-	149,049	-	67,518	216,567	-42.0%
3 Petroleum products	333,724	1,154,131	449,844	215,590	2,153,288	+12.8%
4 Ores and metal waste	-	3,457,119	36,904	8,506	3,502,529	+27.3%
5 Metal products	51,230	213,630	300,931	349,245	960,036	+26.4%
6 Crude and manufactured minerals, building materials	58,478	224,680	108,389	81,143	472,690	+47.2%
7 Fertilisers	2,497	214,012	600,437	253,186	1,070,133	+40.4%
8 Chemical products	2,066	72,761	9,217	23,532	107,576	+146.8%
9 Machinery, vehicles, other articles	380	20,203	21,366	263,923	305,873	+2.9%
Total	456,632	6,199,868	1,667,806	2,682,772	11,052,080	+18.6%



*) NST/R = Standard Goods Classification for Transport Statistics/Revised

Source: Statistics Austria: table and chart created by via donau

TRANSPORT VOLUME BY COMMODITY GROUPS

ORES AND METAL WASTE TAKE THE LEAD FERTILISERS SHOW STRONG INCREASE

On the whole, many NST/R commodity groups showed considerable growth in 2010, compensating for nearly all of the losses incurred in the crisis year of 2009. The group of agricultural and forestry products, for which an increase in volumes was already registered in 2009, recorded an increase of 12.7% or 201,300 tons in 2010, equalling close to 1.8 million tons. Thus, this commodity group alone accounted for more than 16% of the total volume of goods carried on the Austrian section of the Danube. The commodity accounting for the major part of these transport operations was grain from Hungary, which was transported through Austria to the west. With a share of close to 32% or more than 3.5 million tons, the NST/R group of ores and metal waste once again accounted for the largest cargo volume transported on the Austrian Danube in 2010. These products not only showed an increase in transport volumes of 27.3% or 750.770 tons in comparison to 2009, but also 7% more ores and metal waste than in 2008. Significant increases in terms of percentages in the total amount of goods carried were recorded for the commodity groups chemical products (+146.8% or +63,987 tons), crude and manufactured minerals (+47.2% or +151.576 tons) as well as **fertilisers** (+40.4% or +308.097 tons). With more than 1.6 million tons of goods, these commodities taken together accounted for about 15% of the entire transport volume transported on the Austrian Danube in 2010.

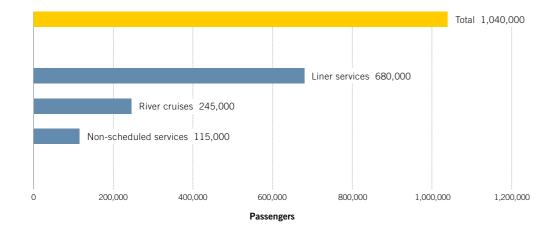
Metal products also saw substantial growth with 200,521 tons of goods more being carried on the Austrian Danube than in 2009, which is equivalent to an increase of 26.4% to 960,036 tons.

Due to an increase of 12.8% or 244.379 tons to 2.2 million tons in 2010. petroleum products almost reached their 2008 level, which amounted to 2.3 million tons. With close to 20%, this commodity group showed the second-largest share in the overall transport volume on the Austrian section of the Danube with only ores and metal waste turning in a better

Compared to 2009, the volume of the commodity group of machinery, vehicles and other articles increased by 2.9% or 8,673 tons to 305,873 tons in 2010, but remained below the level of 2008. This NST/R group also includes container and roll-on-roll-off cargo of which about 2,500 TEU – mainly empty containers – were transhipped water-side at public Danube ports.

Despite this positive trend, two NST/R commodity groups suffered declines in comparison to 2009. While foodstuffs and animal fodder showed a decrease of only 8.1% or 42,151 tons, the volume of solid fuels declined by 42.0% or 156,882 tons to 216,567 tons.

PASSENGERS ON THE AUSTRIAN DANUBE 2010



NUMBER OF LANDINGS AND PASSENGERS AT VIENNA PASSENGER PORT*	Vessel landings	% over previous year	Passengers handled	% over previous year
2010	3,641	-9.1	362,655	+2.8
2009	4,007	-9.6	352,793	-7.3
2008	4,434	+1.4	380,529	+24.8
2007	4,371	-6.6	304,836	+15.0
2006	4,681	+27.8	265,099	+47.3

*) Landing stages at Handelskai, Nussdorf and Danube Canal, incl. cabin vessels and Twin City Liner

Source: Central Danube Region Marketing & Development GmbH, DDSG Blue Danube Schiffahrt GmbH, Donauschiffahrt Wurm + Köck GmbH & Co. OHG, Donau-Touristik GmbH, MAHART Passnave Passenger Shipping Ltd., MS-Schiff Tulln, Nostalgie Tours Wachau, schiffART Linz-Donau, Slovak Shipping and Ports – Passenger Shipping JSC (SPaP-LOD, a.s.), via donau, Viennese Danube Space Land and Shores Operating and Development Company

PASSENGER TRANSPORT

BOOM IN DANUBE TOURISM ONE MILLION PASSENGERS ONCE AGAIN

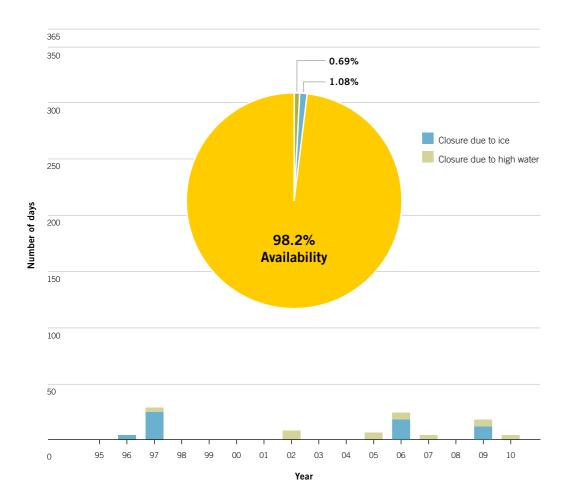
As in the two previous years, in 2010 a total of more than **one million passengers** were carried by passenger vessels on the Austrian Danube. The majority was accounted for by the approximately 680,000 passengers travelling on liner services (+1.4% over 2009). Cabin vessels carried about 245,000 cruise passengers (+8.9%) and approximately 115,000 people were transported on non-scheduled services such as theme, special and charter trips (-8.0%).

In 2010, a total of **112 different cabin vessels** with a capacity of 17,500 passenger places operated on the Austrian section of the Danube - a decrease of 3.5%, or four vessels, compared to 2009. On the one hand five newly built cabin vessels were put into service, while on the other hand nine vessels shifted their operating routes to Western European waterways. Although the number of passenger cabin vessels declined, the total number of kilometres travelled increased. From a total of 3,319 journeys (+3.4% over 2009) some 245,000 cruise passengers were transported in 2010. When making a long-term comparison with 2002, this figure indicates an increase in passenger numbers of an impressive 106%. Being the most important place of departure and arrival for river cruises, the Bavarian Danube port of Passau recorded 1,742 landings by 111 cabin vessels and 220,000 handled passengers (+6.5% over 2009). In 2010, liner services on the Austrian Danube were operated by a total of 27 vessels with a capacity of 8,900 passenger places. DDSG Blue Danube reported 206,000 passengers (+2.5% over 2009) travelling on its liner services in the Wachau region and in Vienna. The two Twin City

Liners carried 125,725 passengers (-3.4%) on the route between Vienna and Bratislava. Donau-Touristik transported 50,805 passengers on its liner services (+19.5%). Departing from Tulln, 3,002 passengers travelled on the MS Stadt Wien. The Slovakian and Hungarian hydrofoils, operating on the routes Bratislava–Vienna–Bratislava and Budapest–Vienna–Budapest, recorded 41,253 passengers (+0.8%). Finally, the Bavarian operator Wurm + Köck carried a total of 35,000 passengers (-7.9%) on its liner services on the routes Linz–Schlögen–Linz and Linz–Wien–Linz.

Non-scheduled services were provided by 42 passenger vessels (including vessels primarily operated on liner services) with a total capacity of about 12,000 passenger places. DDSG Blue Danube carried 65,000 passengers (-20.7%) on non-scheduled services. Other operators of non-scheduled services included schiffART Linz~Donau with 13.000 passengers. Donau-Touristik (Linz) with 9,557 passengers, Nostalgie Tours Wachau (Krems) with 2,756 passengers and the MS Stadt Wien (Tulln) with 1,300 passengers carried. Finally, the Slovakian and Hungarian hydrofoils recorded 2,597 passengers travelling on non-scheduled services on the Austrian Danube in 2010. Other companies operating liner or non-scheduled services on the Austrian Danube have not provided their figures for the period under review. Due to a change in legislation, passenger transport data on the Danube in Austria ceased to be statistically recorded in 2003. The abovementioned figures for liner and non-scheduled services therefore also include estimates which are based on an average capacity utilisation of 40% for trips on passenger vessels.

NAVIGATION CLOSURES DUE TO HIGH WATER AND ICE 1995–2010



Source: Supreme Navigation Authority at the Federal Ministry for Transport, Innovation and Technology; via donau

AVAILABILITY OF THE WATERWAY

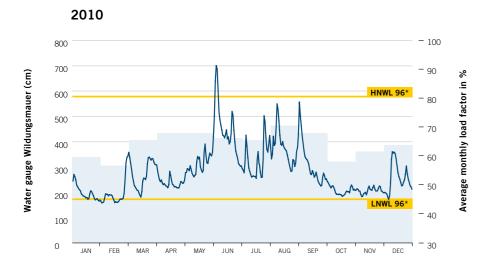
361 DAYS/YEAR OPEN TO NAVIGATION 98.2% LONG-TIME AVAILABILITY

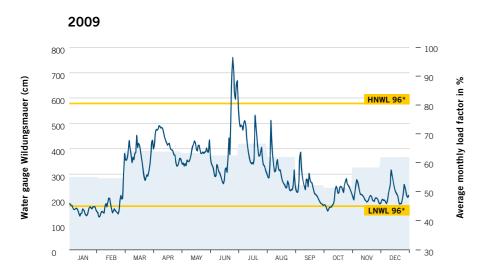
As a general rule, weather-related closures of the Danube waterway are either the result of extensive ice formation or serious high water conditions. Extensive formation of ice may result from sustained temperatures well below freezing point. Ice impedes navigation mainly during the months of January and February. High water conditions are the result of snow melting rapidly or heavy rainfall and mostly occur at the beginning of spring or in midsummer. During these official weather-related closures, navigation on the Danube is prohibited.

In 2010, the Austrian section of the Danube waterway was open to navigation on **361 days** or for **98.9% of the year**. In this year, due to high water levels at the beginning of June, parts of the Austrian Danube had to be closed for a period of up to four days. However, 2010 did not witness any significant ice formation on the Danube. Using the long-term annual average from 1995 to 2010, the Austrian section of the Danube waterway was open to navigation on **98.2% of days**, or on **359 days per year**.

Low water events do not require the waterway to be closed to navigation. However, in such cases the utilisation of the waterway for freight transport is restricted in terms of efficiency. The relationship between the potential capacity utilisation of cargo vessels and the available fairway depths is described in greater detail in the following chapter «Fairway Conditions». Transport to and from the west not only depends on the Austrian and German sections of the Danube waterway, but also relies heavily on the availability of the **Main-Danube Canal**, linking the Danube with the Main and Rhine. A closer examination reveals that the availability of this waterway link is not quite as good as that of the Danube waterway. Although there are normally no closures due to high water on the Main-Danube Canal, ice-related closures occur more often than on the Danube. In addition, maintenance and modification works are periodically undertaken which last for approximately two weeks and necessitate the closure of the canal.

In the first quarter of 2010, the Main-Danube Canal was closed to navigation for 35 days due to icing (from 26 January to 1 March). An analysis of the closures that occurred during the last 15 years shows an average annual availability of the Main-Danube Canal of **344 days** or **94.2% of the year**.





Water levels Actual average load factor for loaded journeys

*) LNWL 96 (low navigable water level): This value represents the water level exceeded on 94% of days/ year during ice-free periods with reference to a 30-year observation period (1961-1990). The current LNWL value for the water gauge Wildungsmauer has been 173 cm since 22 January 2004.

HNWL 96 (highest navigable water level): This value represents the water level which corresponds to the discharge exceeded on 1% of days in a year with reference to a 30-year observation period (1961-1990) At Wildungsmauer the highest navigable water level is currently 576 cm.

Source: Statistics Austria, charts created by via donau

FAIRWAY CONDITIONS

GOOD CONDITIONS HIGHEST LOAD FACTOR FOR YEARS

In 2010, the fairway conditions in the free-flowing stretches of the Austrian Danube (Wachau and east of Vienna) slightly exceeded the longterm statistical average.

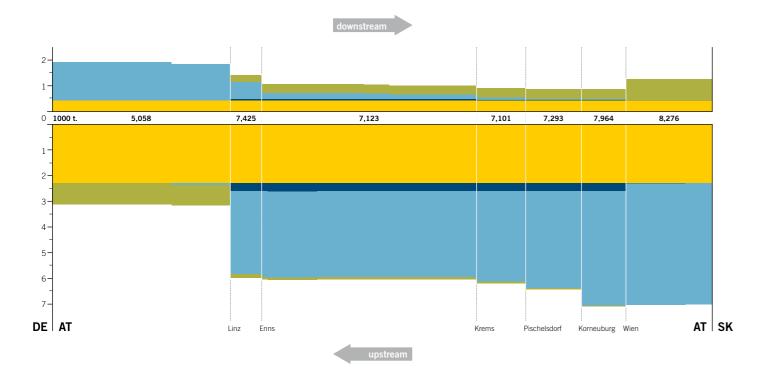
From March to September, fairway conditions were generally very good, whereby the water levels at the Wildungsmauer water gauge (the reference water gauge for the section east of Vienna) exceeded average water level (AWL) on nearly 50% of days.

As in 2009, the months of January and February were characterised by low water levels, however in 2010 the average daily water levels at Wildungsmauer exceeded those of 2009 by 2.4 dm. In 2010, water levels on the Danube were below low navigable water level (LNWL 96) on 16 days in these two months, compared to a total of 39 days in 2009.

The comparison of the generally low water levels of the Danube in the months of October to December in 2010 and 2009 reveals that the average daily water levels at the Wildungsmauer reference gauge were, on average, slightly above 220 cm in both years (2009: 222 cm; 2010: 225 cm). Over the whole of 2010, the average monthly load factor of cargo vessels was 64.2%, which is significantly higher than in the previous years (2009: 60.0%; 2008: 61.3%). The load factors recorded for 2010 ranged from 56.7% in February to 70.5% in August. Data collected for 2010 relating to the average load factor for cargo vessels reflects the Danube's low discharge in January and February as well as in October and November. During these months, the load factor ran to an average of slightly less than 59% (2009: 55%).

With inland waterway transport, the available fairway depths determine the **draught loaded** of a vessel and hence the possible loading quantity. When loading their vessels, operators sometimes have to estimate fairway conditions for the individual sections of a river several days in advance before actually passing a critical section. This is done by assessing the development of water levels at so-called gauges of reference. The Wildungsmauer water gauge shown in the charts is the decisive indicator for the fairway conditions in the free-flowing stretch of the Austrian Danube between Vienna and Bratislava.

Fairway conditions and the load factor of vessels are directly related to each other. The general rule is that if relatively high draughts loaded are possible, the average load factor of vessels increases and vessel operators require fewer trips to transport the same volume of goods. These correlations become very clear when comparing the two charts for 2009 and 2010. Larger cargo volumes per vessel, or convoy, improves the ratio of freight revenues to costs, which in turn improves the **competitive position** of Danube navigation. This again makes navigation as a transport mode more attractive to the manufacturing industry and leads to an increase in the overall volume of goods carried on the Austrian Danube.



SEGMENT	Length km	Imp	ort	Ехр	ort	Dome	estic	Tran	sit	Tot	al	Grand total
		upstream	down- stream									
DE/AT border – Linz	94.51	81	1,423	827	0	0	0	2,293	434	3,201	1,857	5,058
Linz – Enns	16.87	3,260	694	138	258	296	52	2,293	434	5,987	1,438	7,425
Enns – Krems	113.83	3,365	240	92	334	307	58	2,293	434	6,057	1,066	7,123
Krems – Pischelsdorf	26.30	3,534	111	67	354	300	8	2,293	434	6,194	907	7,101
Pischelsdorf – Korneuburg	29.60	3,800	41	42	384	299	0	2,293	434	6,434	859	7,293
Korneuburg – Wien	23.64	4,474	40	37	384	302	0	2,293	434	7,106	858	7,964
Wien – AT/SK border	45.76	4,709	0	0	837	3	0	2,293	434	7,005	1,271	8,276

Transport volumes in 1.000 tons

Source: Statistics Austria; chart and table created by via donau

TRANSPORT INTENSITY

350 KILOMETRES WATERWAY MORE THAN 11 MILLION TONS OF GOODS

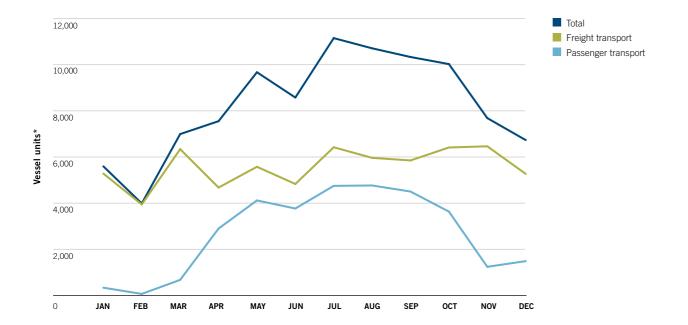
In 2010, a total of 11.1 million tons of goods were carried on the Austrian section of the Danube waterway, which has an overall length of 350.51 km. Total transport volumes in the individual segments ranged from 5.06 million tons in the Upper Austrian segment between the German-Austrian border and Linz, to 8.28 million tons in the free-flowing stretch downstream from Vienna to the Austro-Slovakian border. Because it has by far the largest water transhipment location on the Austrian Danube, the industrial port of the voestalpine steelworks, Linz stands out among other ports and transhipment sites for the quantity of transported goods. Statistics for **imports** reveal that voestalpine obtained 2.78 million tons of ores from Eastern Europe in 2010, mainly from the Ukraine (ports of Izmail and Reni) and Slovakia (port of Bratislava). The largest quantities imported from Western Europe were recorded at the ports of Linz (voestalpine and Linz AG) with 0.73 million tons and at the port of Enns with 0.44 million tons. The Danube section upstream from Linz to the Austro-German border therefore showed a significantly lower freight traffic density than the section downstream from Linz to the Austro-Slovakian border.

Exports were again dominated by the ports of Linz (voestalpine and Linz AG), 0.68 million tons were transported upstream and 0.26 million tons transported downstream from these ports, while 0.45 million tons of goods were transported from Vienna (Port Lobau) downstream. With regard to **transit transport**, the comparison of transport flow by transport direction showed a ratio of 5.3:1 (upstream/downstream). In 2008 this ratio amounted to 3.6:1 and in 2009 it was 6.3:1. On the section from Linz to the Austro-German border, transit transport accounted for 54% of the overall transport volume (-1.1% over 2009).

The volume of transported goods per day for all cross sections amounted to 19,408 tons (+17.5% or +3,404 tons more than in 2009). In the most heavily used cross section of the free-flowing stretch east of Vienna, an average of **22,670 tons of goods** were transported **per day** in 2010, which is equivalent to a full load of 907 lorries (25 net tons) or 567 railway wagons (40 net tons) or close to 30 block trains.

Over the overall length of the Austrian section of the Danube, an average of **19,379 tons of goods** were carried **per kilometre** in 2010 (+15.6% or +3.029 tons more than in 2009).

VESSEL UNITS* IN FREIGHT AND PASSENGER TRANSPORT LOCKED THROUGH AT AUSTRIAN DANUBE LOCKS 2010



YEAR	Freight transport	% over previous year	Passenger transport	% over previous year	Total	% over previous year
2010	67,114	+4.5	32,153	+1.3	99,267	+3.5
2009	64,220	-6.1	31,728	+2.2	95,948	-3.5
2008	68,388	-7.3	31,057	+2.6	99,445	-4.4
2007	73,769	+6.6	30,284	+0.8	104,053	+4.9
2006	69,184	-10.9	30,048	+4.8	99,232	-6.6

*) Vessel units in freight transport comprise convoys (pushers, motor cargo vessels or motor tankers with cargo and tank lighters or barges) and individual vessels (motor cargo vessels and motor tankers or individual pushers and tugs). Passenger vessels comprise day-trip vessels and cabin vessels.

Source: via donau

LOCKED-THROUGH VESSEL UNITS

MORE THAN 99,000 LOCKAGES HIGHER INCREASE IN FREIGHT TRAFFIC

In 2010, a total of **99,267 vessel units** were locked through upstream and downstream at the nine Austrian Danube locks (excluding the Jochenstein power station on the Austro-German border). 45,046 of these units were motor cargo vessels and motor tankers (+7.8% compared to 2009), 22,068 were pushers (-1.6%) and 32,153 were passenger vessels (+1.3%). 52,261 cargo and tank lighters or barges (+7.1%) were locked through as part of convoys.

Compared to 2009, the number of **cargo vessel units** that passed through the locks on the Austrian section of the Danube increased by 4.5%, while the number of locked-through **passenger vessels** rose by 1.3%.

On average, this marks an increase of 3.5% in the total number of all locked-through vessel units in 2010. Freight traffic accounted for 67.6% (+0.7% over 2009) and passenger traffic for 32.4% (-0.7%) of the total vessel volume. The lower number of vessel movements in June can be attributed to the fact that individual stretches of the Austrian Danube waterway had to be closed to navigation for a period of up to four days due to high water at the beginning of the month. Freight transport traffic to and from the Main and Rhine was interrupted in February because of the ice-related closure of the Main-Danube Canal. In general, the volume of passenger transport is considerably lower during the winter months of November to March, particularly in January and February.

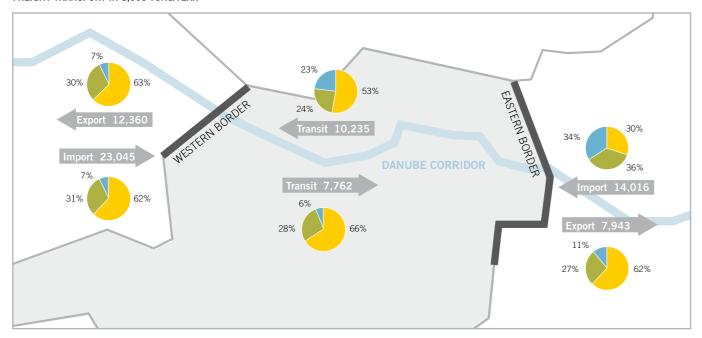
Over the whole of 2010, an average of 11,030 convoys and individual vessels passed through locks on the Austrian Danube (an increase of 369 vessel units compared to 2009). This amounts to 919 (+31) shipping movements per month and an average of almost 30 locked-through units per day per lock.

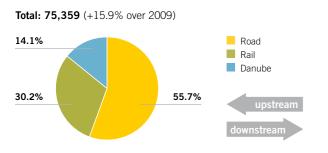
The **highest shipping volume** in 2010 was again recorded at the Freudenau lock in Vienna with 14,016 vessel units passing through (+4.7% over 2009), followed by the Greifenstein lock with 11,295 units (+4.6%). The lowest volume was again reported by the Aschach lock, the most westerly Danube lock in Austria, with 9,701 units (-0.7%).

As far as **vessel configurations** were concerned, freight transport passing through the Freudenau lock in 2010 showed a ratio of 47% to 53% between trips of individual vessels and convoys. The ratio for the overall size of the vessel units (number of cargo carrying units) was 30% to 70% (individual vessels to convoys).

The major part of the locked-through **pushed convoys** (pusher + lighters) were 2-unit convoys (70%); 18% of the pushed convoys included one lighter, 8% comprised four lighters and 4% consisted of 3 lighters. The figures for **coupled formations** (motor cargo vessel or motor tanker + lighters) show 88% travelled with one lighter, 8% with three lighters and 4% with two lighters.

FREIGHT TRANSPORT IN 1,000 TONS/YEAR





Western border

Danube: PassauRoad: Suben, Neuhaus, Simbach

Rail: Passau

Eastern border

Danube: Hainburg

Road: Berg, Kittsee, Nickelsdorf, Klingenbach, Deutschkreutz

: Marchegg, Kittsee, Hegyeshalom,

Sopron, Deutschkreutz

MODAL SPLIT

56% ROAD SHARE

DANUBE STRONG ON THE EASTERN BORDER

Transport volumes in the **Austrian Danube corridor** have increased rapidly since the mid-1990s. In 2010, they exceeded 75 million tons, which is equivalent to a massive growth of 113% since 1995 (official data on road transport for 2010 is based on estimations by the Austrian Institute for Regional Studies and Spatial Planning and is still pending). Compared to the crisis year 2009, transport volume in the corridor in 2010 increased by 15.9% or 10.4 million tons but, with a total amount of 75.4 million tons, did not reach the volume of goods transported in 2008 which totalled 78.9 million tons.

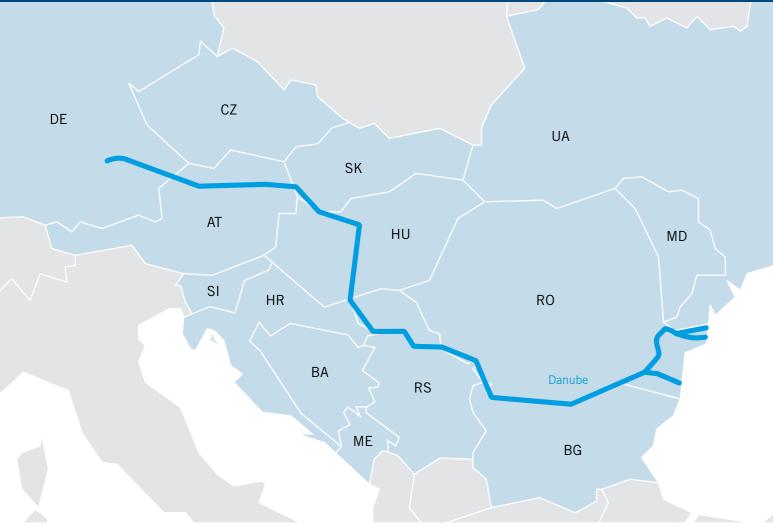
The chart shows the cross-border **transport volumes** (net tons) for the three transport modes of rail, road and waterway in the Danube corridor according to traffic mode (import, export and transit) in 2010. A look at the figures for all transport modes reveals that the quantity of **goods transported to and from the west** was significantly higher than the volume of goods crossing the eastern border of Austria. At 57.4 million tons, the level of **bilateral transport** (western and eastern borders taken together) was still considerably higher than **transit transport** at 18.0 million tons. However, transit transport has increased massively over the past few years and today the volume is nearly 2.2 times higher than in 1995. Transit road transport has even increased by a factor of approximately 5.3.

Road transport dominated the modal split in the Danube corridor at close to 56%, meaning that the quantity of goods transported on the road was higher than the volume of goods carried by the other two transport modes combined. Between 2008 and 2010, a clear shift of transport volume from rail to road in downstream exports could be seen, whereas Danube navigation was able to more or less retain its share. Conversely, rail transport was able to slightly increase its share of imports crossing the western border at the expense of road transport.

Despite the dominance of road transport, **Danube navigation** constitutes an important mode of transport in the corridor. Its significance is particularly reflected in **upstream transport volumes**. In the import sector, Danube navigation showed a significant share of slightly more than a third of the modal split in 2010. In transit transport its share amounted to 23%, meaning that in this traffic direction inland navigation had almost the same share as road transport in import traffic and rail transport in transit traffic. Both at the eastern border and in transit transport the Danube accounted for a share of slightly less than a third of total transport volume. A decrease in the significance of waterway transport was only seen in the import and export of goods on the western border as well as in transit traffic downstream – here road transport clearly dominated with a share of more than 60%.

Source: Austrian Institute for Regional Studies and Spatial Planning (ÖIR); chart created by via donau







UNDER THE EU STRATEGY FOR THE DANUBE REGION, AUSTRIA IS GOING TO COORDINATE THE FIELD OF DANUBE NAVIGATION TOGETHER WITH ROMANIA IN THE UPCOMING YEARS

DANUBE REGION

14 DANUBE COUNTRIES STRATEGIES FOR THE DANUBE REGION

region under the direction of the Directorate General for Regional Policy headed by the Austrian Commissioner Dr. Johannes Hahn. The key element of the Danube Region Strategy is an Action Plan which proposes concrete measures in terms of transport, energy, environment and socio-economic framework conditions. Together with the Austrian Federal Ministry for Transport, Innovation and Technology, via donau has played an essential part in drawing up this Action Plan. via donau has also been assigned the role of coordinator for Danube navigation in cooperation with the Romanian transport ministry. The implementation of the defined measures aims to make Danube navigation more attractive and hence provide the Austrian industry and economy with an even more efficient and low-cost transport route towards South-East Europe. Within the sphere of transnational cooperation in the Danube region, several EU projects (co-funded in the South-East Europe Programme) in which via donau is involved yielded positive results in 2010. As part of the NEWADA project, waterway administrations cooperate successfully to solve questions and problems concerning the waterway infrastructure on the river Danube, while the NELI project undertakes activities in the fields of education, training and knowledge transfer. In the WANDA project, strategies and concepts are devised regarding the collection and disposal of ship-borne waste. All these projects receive EU funding, are carried out together with partners from the Danube riparian countries and are an

integral part of the Strategy for the Danube Region.

In 2009 and 2010, the European Commission, together with the 14 Dan-

ube countries, developed a strategy for the development of the Danube

The European Commission has recently published a progress report on the implementation of the **European Action Programme for Inland Waterway Transport** (NAIADES). In this report, the EC particularly emphasizes the vital role played by the PLATINA project (Platform for the Implementation of NAIADES, coordinated by via donau) in shaping a European inland navigation policy. In 2010, for example, a European research agenda for inland navigation and a useful manual for the sustainable development of waterway infrastructure were published. The «Barge to Business» event was also organized as part of the PLATINA project. The attendance of more than 600 participants from the fields of economy, politics and other special interest groups was an impressive confirmation of the significant interest in issues relating to inland navigation.

In the area of **River Information Services** (RIS), the IRIS Europe II project continued the activities which it began in January 2009 concerning the geographical and functional extensions of RIS with the aim of increasing the efficiency and safety of transport on European waterways. Within this context several new services will enter the pilot phase in 2011. The project is set to run until the end of 2011.

FURTHER INFORMATION

- ec.europa.eu/regional_policy/cooperation/danube
- www.newada.eu
- www.neliproject.eu
- www.wandaproject.eu
- www.naiades.info
- www.bargetobusiness.eu

▲ MULTI-BEAM BATHYMETRIC IMAGE OF THE WEISSEN-KIRCHEN FORD IN THE WACHAU REGION **▼ THE NEW ROAD BRIDGE AT** TRAISMAUER IN THE ELEC-TRONIC NAVIGATIONAL CHART ► ADAPTATION OF THE FAIR-WAY COURSE ON THE SECTION

EAST OF VIENNA

WATERWAY

MODERN INFRASTRUCTURE MANAGEMENT CUSTOMER-ORIENTED SERVICES

In 2010, further improvements were made within the framework of via donau's **Customer-Oriented Waterway Management** (KWSM) project. The overriding aim of this project is to optimise waterway infrastructure management in order that the Danube may serve as an optimal waterway to shipping companies and entrepreneurs.

Additionally in 2010 via donau reached a new three-year **framework agreement on maintenance dredging** with the relevant companies. via donau also started to develop an optimised dredging strategy which is planned for implementation in autumn 2011. The objective of this strategy is to provide shipping with the best possible fairway conditions in low-water periods.

The **shallow section reports** published on the DoRIS website were extended with detailed graphical depth data available for download in PDF format for all critical fords and lateral accumulations of gravel (so-called «Haufenränder») in the free-flowing sections of the Austrian Danube.

There are also instructions available on how to interpret the depth data plans offering a user-friendly explanation of the correct calculation of current fairway depths at a particular shallow section.

Shallow sections in the Danube are now measured more frequently so as to supply the navigation sector with depth data which is as current as possible. In November 2010, water depths in the entire **Wachau** section were measured for the first time with a newly acquired multi-beam bathymetric system. In the critical areas of the **free-flowing sections** the single-beam cross profiles are now measured at intervals of 25 metres as opposed to the former 50 metres.

In 2010, information on the course of the **fairway in the Austrian electronic navigational charts** was updated in cooperation with the Supreme

Navigation Authority at the Austrian Federal Ministry for Transport, Innovation and Technology (bmvit). It is planned to harmonise the fairway in the border sections of the waterway in cooperation with Germany and Slovakia, two of Austria's neighbouring countries.

Apart from activities within the KWSM project, several other measures were initiated in 2010 with the aim of optimising infrastructure. Among other things, a number of significant improvements were made to the electronic navigational charts (the so-called Inland ENCs) published by via donau. The six-monthly depth data on the two free-flowing sections (east of Vienna and in the Wachau valley) were integrated into the charts and depth data for the backwater section at Ottensheim was published for the first time. In addition, water gauges were adjusted to meet the current Inland ECDIS standard. Information on the new Traismauer road bridge (which reduces the fairway width from 150 to 120 metres), the new Freudenau railway bridge, the marinas and the Obermühl-Kolbling ferry was also integrated. Finally, information on the area supervised by the navigational surveillance bodies and radio transmission areas at locks obtained from waterway police data (provided by the Supreme Navigation Authority at the Austrian Federal Ministry for Transport, Innovation and Technology) were also integrated into via donau data.

FURTHER INFORMATION

www.doris.bmvit.gv.at/en/water_levels_low_sectionswww.doris.bmvit.gv.at/en/inland_ecdis



- ▲ IN SEVERAL RIVER ENGINEERING PROJECTS VIA DONAU IS ENDEAVOURING TO CREATE NEAR-NATURAL RIVERBANKS ALONG THE DANUBE
- WASTE COLLECTION SYSTEM AT THE GREIFEN-STEIN LOCK
- ► VIA DONAU RECEIVES THE ENERGY GLOBE AWARD 2010 IN THE WATER CATEGORY



ENVIRONMENT

AN INTEGRATED APPROACH PROTECTING THE DANUBE HABITAT

The principal aim of the Bad Deutsch-Altenburg pilot project east of Vienna, which is co-financed by the EU, is to achieve new insights into the field of ecologically-oriented river engineering. As part of this project, riverengineering measures and structural engineering procedures will be tested and assessment procedures (monitoring) optimised. Furthermore, insights will also be acquired into the required approval and award procedures. For the first time, granulometric riverbed improvement will be implemented to counteract the current erosion of the Danube riverbed to the east of Vienna. In order to improve fairway conditions for navigation, low-water regulation will be optimised. Existing groynes will be lowered or removed and replaced with fewer structures with increased efficiency. On the right bank stone reinforcements will be removed over a distance of more than one kilometre. On the left bank, bank structures will be lowered over a distance of more than 200 metres thereby enabling water to flow freely into the meadows and floodplains of the Danube-Auen at higher water levels. These structural measures will naturally entail temporary encroachment into the strictly protected Danube-Auen National Park. However, experience has shown that the long-term ecological improvements it will bring to the area far outweigh the short-term disruption caused during this one-off event. The protection of flora and fauna has been taken into consideration both during the planning phase and the execution of the construction work. Certain areas of the park deserving particular protection have been completely excluded from the project. The scheme is the sixth and so far most extensive pilot project within the Integrated River Engineering Project on the Danube to the East of Vienna. The preparations for it are largely finished and implementation of the construction work is planned for the 2011/2012 low-water periods.

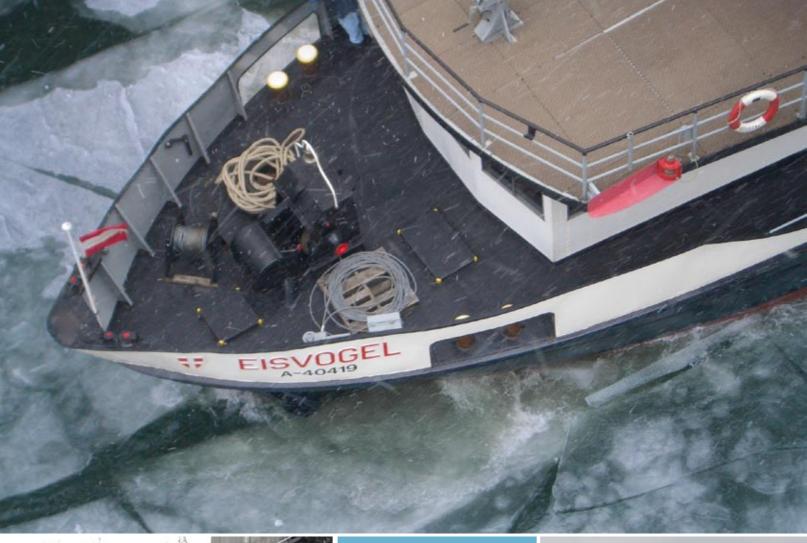
Between October 2006 and December 2010, new gravel formations were created in the Danube as part of the **Wachau Riverbank Restructuring** project. During this period more than 500,000 m³ of gravel from maintenance dredging was introduced. The volume of a gravel bank created under the **Rührsdorf-Rossatz sidearm reconnection project** had been significantly reduced as a result of serious floods in recent years. Gravel has now been redeposited to refill the structure in the form of a gravel bank with a bay area. The newly created extensive shallow water zones offer ideal breeding conditions for fish.

To facilitate the **separation of waste in freight traffic**, via donau has developed a set of uniform symbols and labelling to identify the containers for collecting recyclables and residual waste along the Austrian Danube. A guide available in five languages provides information on issues such as the correct separation of waste and the location of all waste acceptance facilities. This information is also available from a telephone hotline, on the internet and via the DoRIS navigation information system. via donau was awarded **the Energy Globe Award 2010** in the water category to honour the introduction of this waste separation system. This award is proof that the collection of 15 tons of ship's waste per year is not only an efficient service for Danube vessels but also receives considerable recognition from outside the inland waterway transport sector.

FURTHER INFORMATION

www.donauauen.at

www.doris.bmvit.gv.at/en/services/disposal_of_ship_wastes





WHAT ARE THE EFFECTS OF CLIMATE CHANGE AND EX-TREME WEATHER EVENTS ON INLAND NAVIGATION? IN ORDER TO ANSWER THIS QUESTION, VIA DONAU IS PARTICIPATING IN SEVERAL INTERNATIONAL RESEARCH PROJECTS



ENVIRONMENT

THE CHANGING CLIMATE RESEARCH FOR INLAND NAVIGATION

Apart from enhancing the environmental performance of inland navigation, coming to grips with climate change within the framework of international research projects is an important concern for via donau. Climate change could possibly affect the Danube's discharge regime and thus the waterway infrastructure, flood control system as well as the river's ecosystem. Initial investigations concerning the Austrian section of the river indicate that climate change could well have a beneficial effect on inland navigation by favourably balancing the river's discharge conditions throughout the year. However, no scientific findings have been made so far relating to the impact of climate change on extreme flooding incidents. Launched in 2010, the ECCONET project is investigating the impact of climate change on inland navigation in Europe with the focus placed on the Rhine-Main-Danube corridor. The project involves both the evaluation of already existing research data and the carrying out of new meteorological, as well as hydrological calculations and trend analyses. Based on their results, appropriate adaptation measures are being investigated and identified in the fields of vessel operation, vessel technology, river engineering and methods for forecasting water conditions.

The EWENT project, which began in 2009, is studying the **consequences of extreme weather conditions for the EU's transport system**. Its objectives are to identify potential weather-related risks and consequences for the transport sector and estimate their cost effects. Measures for improved management of extreme weather events are being designed and courses of action recommended to decision-makers in the fields of commerce, infrastructure operations and politics.

The purpose of the SUPERGREEN project is to analyse a number of representative European transport corridors in terms of measures intended to improve the environmental friendliness of the European transport system.

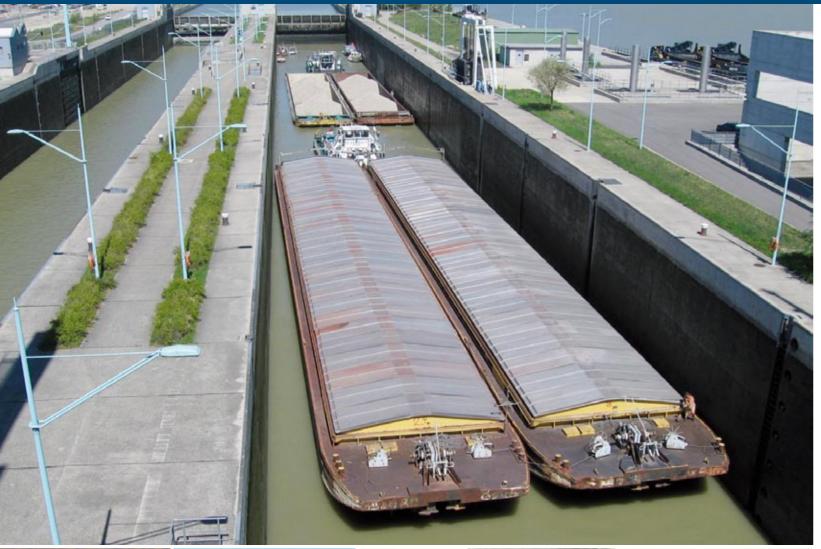
The selected corridors – including the Danube corridor – are subjected to a benchmarking analysis which addresses environmental aspects, infrastructure parameters, exhaust gas emissions as well as external and internal costs. Eventually, the application of «green» technologies within the selected transport corridors will be analysed in greater detail. For a more detailed description of the ECCONET, EWENT and SUPERGREEN projects, as well as initial project results please visit the respective project websites. The LDS-LNG Propulsion for Danube Inland Navigation project, which

was developed in cooperation with via donau, the Technical University of Vienna and Salzburg AG, is virtually complete. The project has investigated the sustainable reduction of carbon dioxide, particulate matter and nitrogen dioxide emissions via the use of LNG (liquefied natural methane and biomethane) for Danube river shipping. The final project results will be available as of May 2011.

As part of its policy of making inland navigation an integral part of Austria's climate change policy, via donau is actively participating in the development of a **national Climate Change Adaptation Strategy** with via donau specialising in the area of transport infrastructure.

FURTHER INFORMATION

- virtual.vtt.fi/virtual/ewent/index.htm
- www.supergreenproject.eu
- www.supergreenproject.eu
- www.via-donau.org/en/company/projects





ACCORDING TO ACCIDENT STATISTICS, INLAND NAVIGATION IS BY FAR THE SAFEST TRANSPORT MODE - EVEN BETTER THOUGH, SAFETY IS STILL ON THE RISE THANKS TO THE USE OF INNOVATIVE TECHNO-LOGIES



SAFETY

A SAFER TRANSPORT MODE FOR COMMERCE AND THE ENVIRONMENT

The European Union has made it one of its primary targets to promote modes of transport that excel in terms of low energy intensity, environmental friendliness and safety. Its strong performance with regard to all these criteria therefore makes inland waterway transport the ideal candidate for support.

Overall accident figures clearly show that navigation is by far the safest mode of inland transport. In the course of 2010, a mere 20 traffic accidents involving damage occurred on the Austrian section of the Danube. Of these, 15 cases involved cargo vessels and 10 involved passenger ships. While two people suffered slight injuries in one of these accidents, 2010 once again did not see any casualties on the Austrian part of the river. When split into accident types, 9 accidents were vessel collisions and the remaining 11 accidents involved damage to river bank, facilities or vessels running aground. With the aim of making a significant contribution to the modernisation of the existing inland waterway fleet thus raising transport safety on the European waterways, via donau submitted the MoVe IT! project (Modernisation of Vessels for Inland Waterway Freight Transport) to the EU's Seventh Framework Programme for Research and was subsequently granted approval for its realisation. The project focuses, amongst other things, on the adaptation of existing inland vessels to the requirements of dangerous goods transport (as stipulated in the ADN - European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways). The project also focuses on improving inland waterway transport in terms of energy efficiency, environmental friendliness, the use of alternative fuels to diesel and the opening up of new markets. The project will commence in 2012 and run for a duration of three years.

In the course of enhancing existing **River Information Services**, via donau has striven to further increase waterway transport safety by continuing its 2009 activities and carrying on the IRIS Europe II project which is cofunded by the EU. As part of this project, via donau has already carried out several studies on topics such as the use of more cost-efficient ship compasses for the exact determination of a vessel's orientation, along with preparation for the pilot operation phases for improvements to the current accident reporting system and the specification of safety-related information via the AIS infrastructure.

In addition, via donau is participating in several national and European projects focusing on the development of safety-related features in **navigation systems** as well as the examination of already implemented safety functions. Such projects include a concept study for a navigation support system that will help ship's crews when navigating in critical sections of a waterway (NAVWAT) as well as the conception of a system for collision avoidance using 3D modelling of vessel dimensions and risk zones (ARIADNA). Using innovative technology, both systems are designed to facilitate the safe and efficient handling of typical navigation situations on inland waterways.

FURTHER INFORMATION

versa.bmvit.gv.at
www.iris-europe.net
www.teleconsult-austria.at/navwat
www.ariadna-fp7.eu



- Leittle Leittl
- ◀ ▲ VIA DONAU PROVIDES
 BUSINESSES WITH WELL
 INFORMED NEUTRAL CONSULTATION ON ALL ASPECTS OF
 INLAND WATERWAY LOGISTICS

 INLAN
- ► E-LEARNING WITH INES DANUBE MAKES THE SYSTEM OF DANUBE NAVIGATION EASY TO UNDERSTAND



COMMERCE

CONSULTING, PROMOTING, NETWORKING SHIP AHOY FOR COMMERCE

via donau furnishes businesses with all the necessary basic information and the right contacts for **transporting goods on the Danube** and in doing so serves as a neutral one-stop services provider. As in previous years, this offer was keenly taken up by manufacturing industries, logistics service providers and other clients. In 2010, via donau recorded more than 300 enquiries regarding the issue of inland waterway logistics, with half of the consulting services being provided to Austrian enterprises.

As part of its new **focus on high & heavy transport operations**, via donau held two workshops with selected experts in the transport of heavy and oversized cargo. One of the goals of this initiative is to develop a catalogue of measures to promote the transfer of such transport operations to the Danube waterway.

In 2010, via donau and the special interest group for Austrian public ports (Interessensgemeinschaft Öffentlicher Donauhäfen Österreich – IGÖD) initiated a joint lobbying paper aimed at **promoting business setups on the Austrian Danube**. The guidelines contained in this paper are directed at policy-makers and planning officials from politics and administration, inviting them to jointly participate in the further development of the Austrian Danube ports into multimodal logistics centres.

The programme for **promoting intermodal transport on the Danube** constitutes an important measure for the financial support of innovative services on the Austrian section of the Danube. The programme will run until 2013 and can be taken advantage of by all companies based in Austria. Applications must be submitted to the Federal Ministry for Transport, Innovation and Technology with information on the programme being provided by via donau.

At the initiative of via donau, the annual **Marco Polo Conference** in 2010 was held for the first time in a European land-locked country on the Danube. More than 180 experts from the transport and logistics sectors gathered to obtain information on the EU's funding programme. This biennial Danube Summit introduced a new, innovative feature: Danube River Dating which acts as a new platform for initiating business transactions on the Danube. Brief meeting sessions planned in advance provide a good opportunity to meet several potential customers in one place.

The provision of knowledge on the system of **Danube navigation and**

intermodality to future decision-makers from the sphere of commerce is an essential aspect of education and training activities. Since the summer of 2010, the multimedia e-learning platform INeS Danube has been available online free of charge in German, English and Romanian. In the field of River Information Services (RIS), the RISING project, which is co-funded by the EU, investigates which services could be of commercial use to key-players in the transport and logistics sectors. In the project year 2010, a large number of RIS-based transport logistics services were specified by companies and experts and successfully tested using demonstrators for implementation in 2011.

FURTHER INFORMATION

www.ines-danube.infowww.rising.eu

