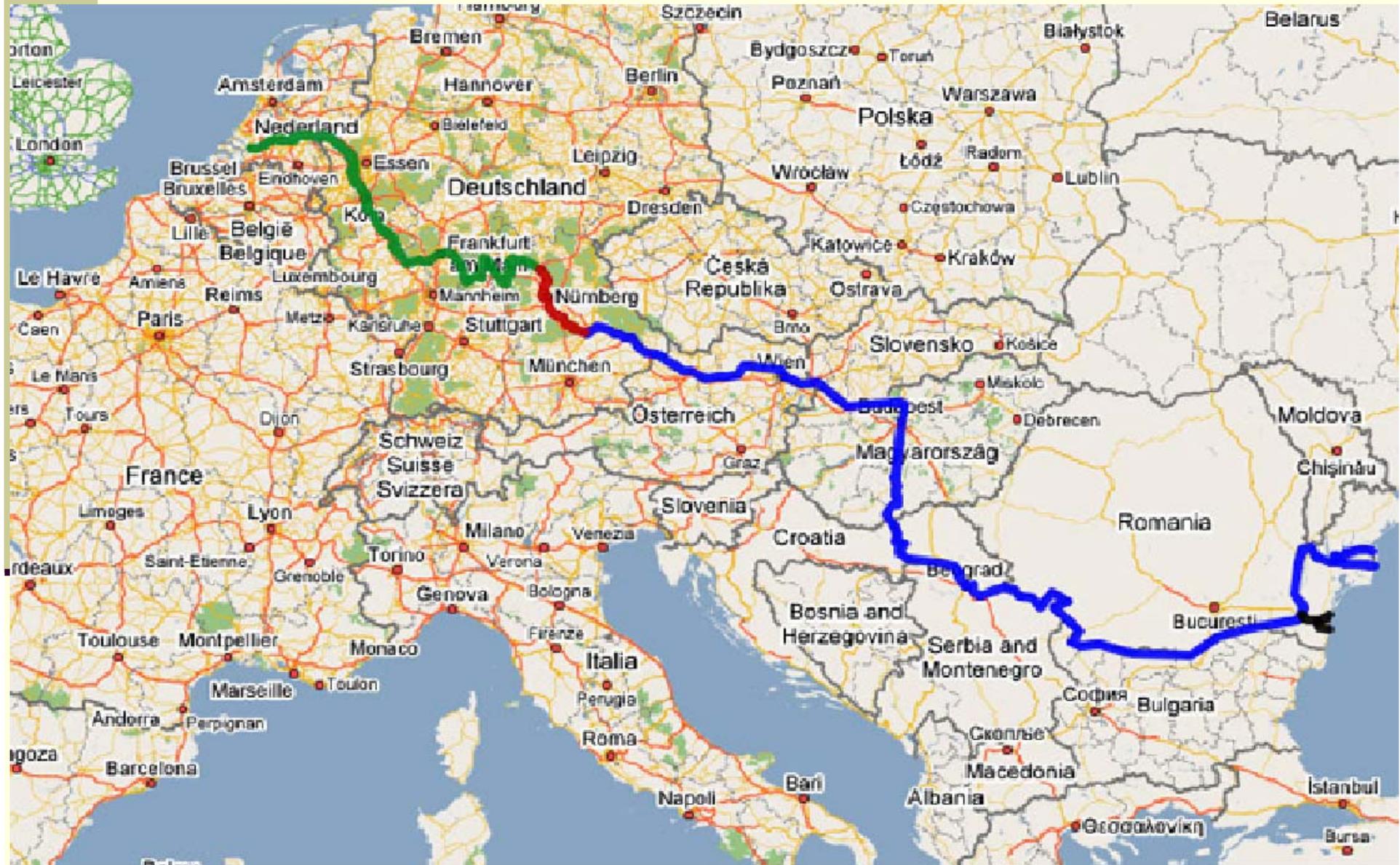


# Like the Benedictines

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# European Inland Waterways (DMR)



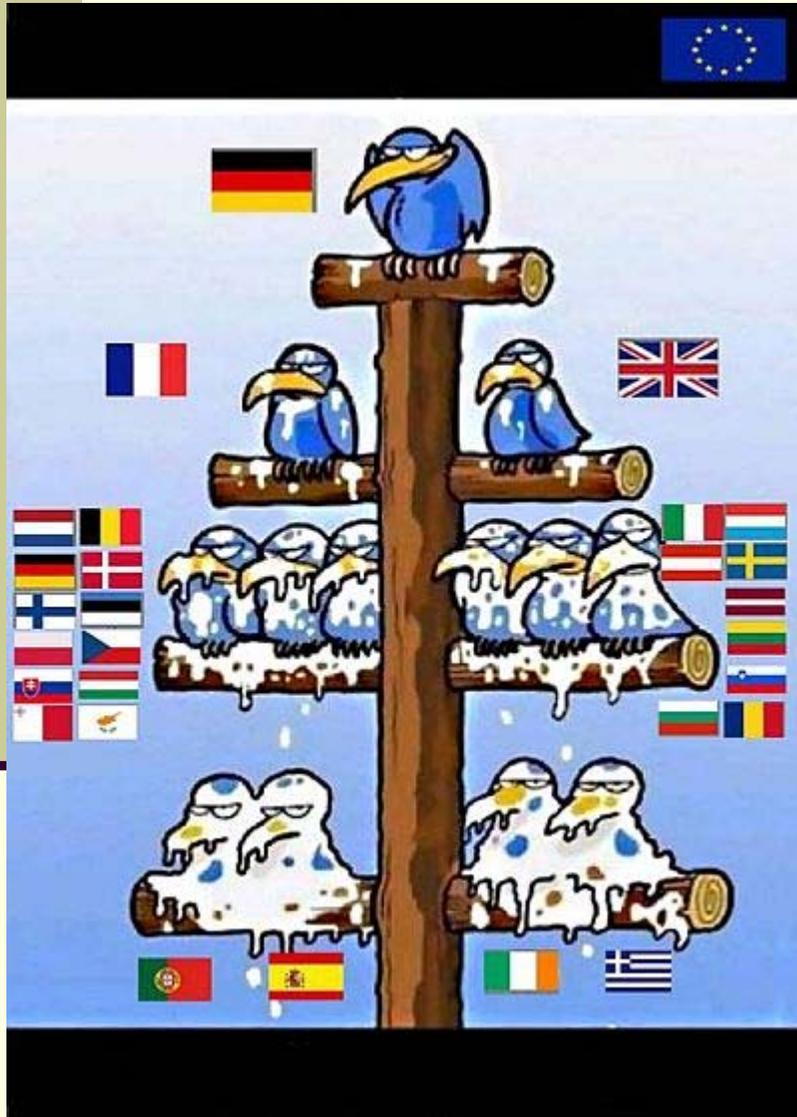
# Key-figures / Market

## Inland Navigation in Europe

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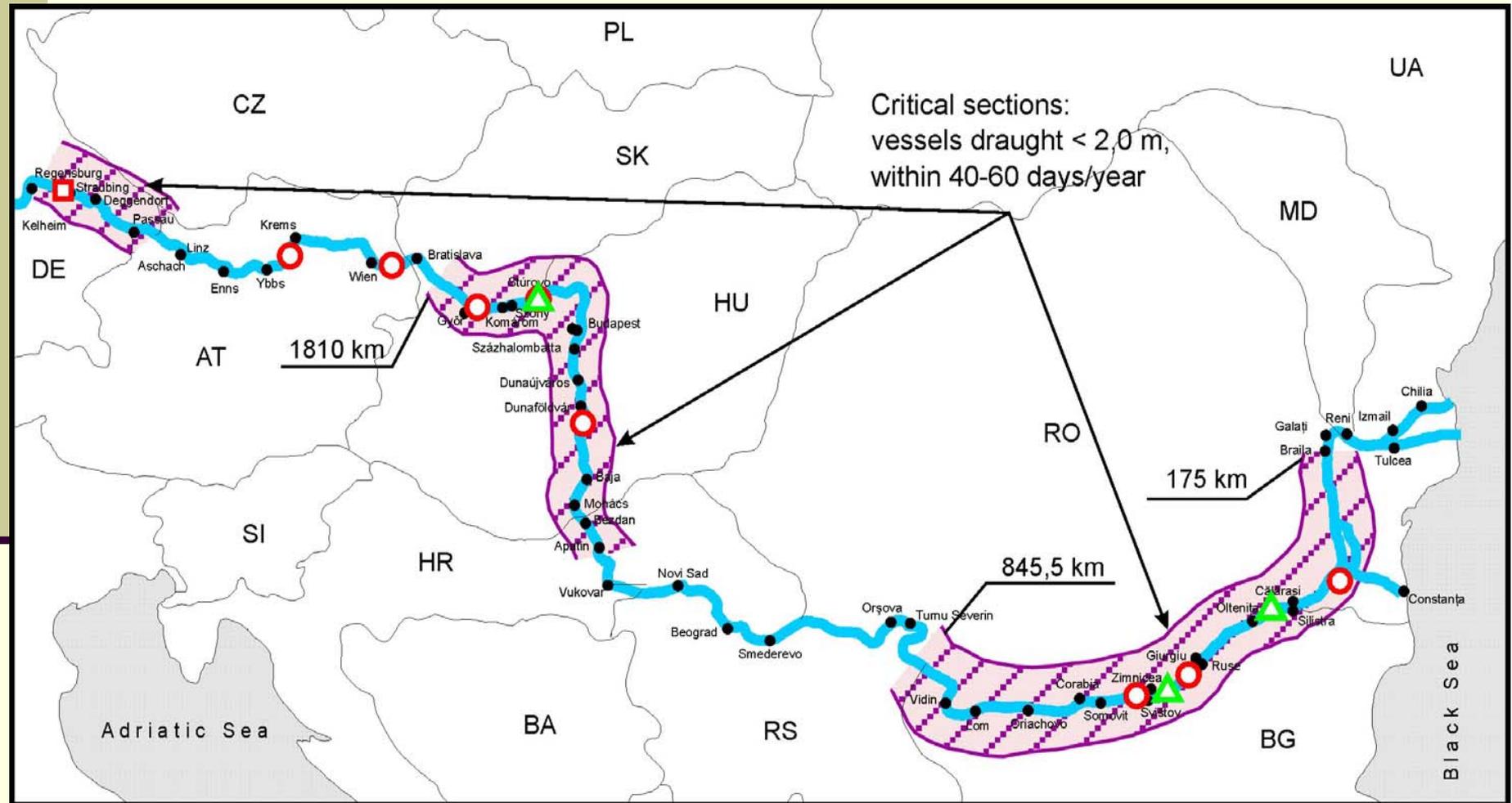
1. 130 billion tkms
2. 500 million t
3. 5,6 % of the total freight transport in EU-25  
(Some member states have much higher figures)  
**Belgium and Germany 14 %, Netherlands 44 %)**

# Today's feeling

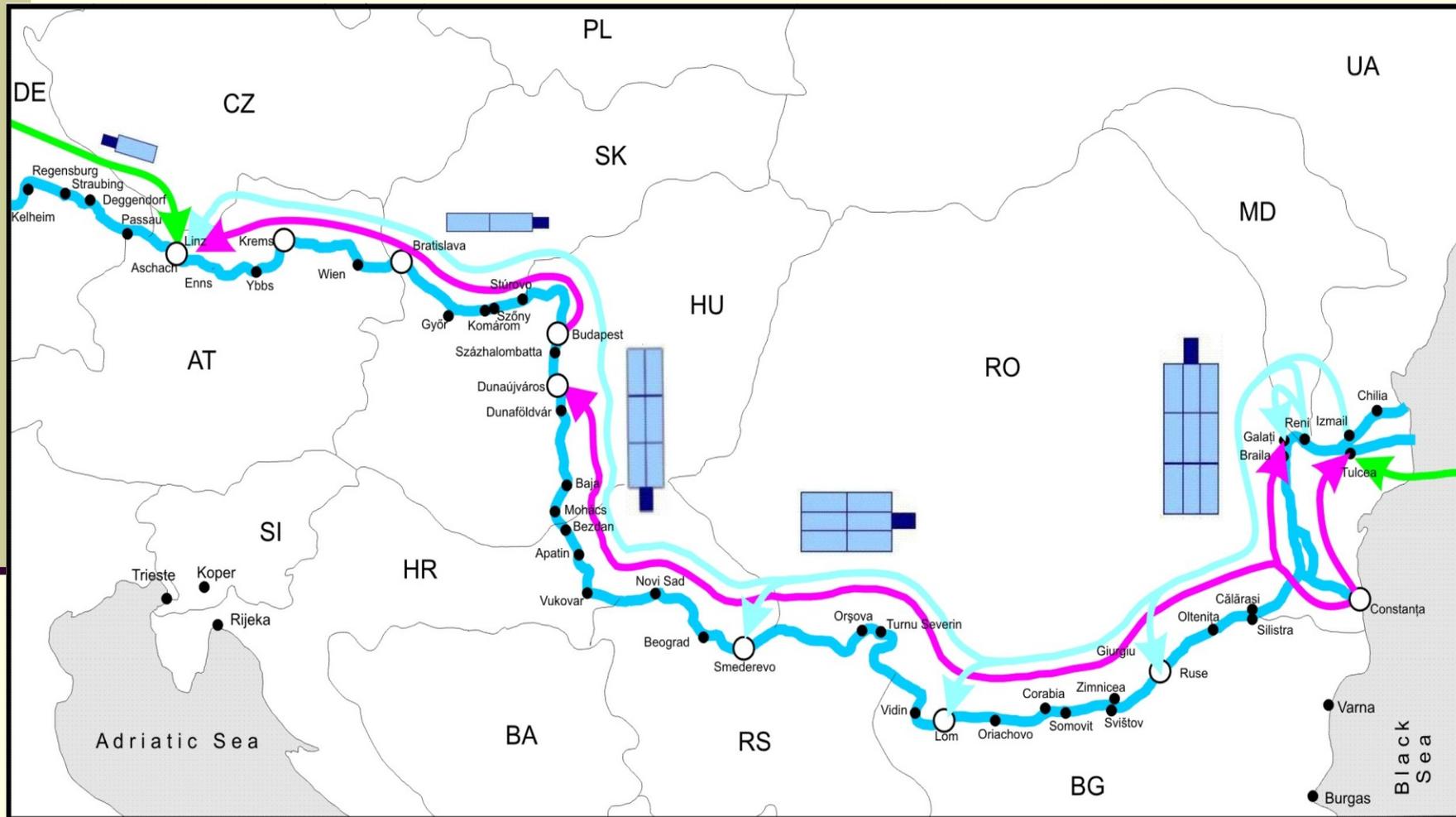


NO duck face on 9GAG.COM

# Scheme of critical" bottlenecks", limiting navigation on the Danube



# Schemes of principal lines for iron ore and coal transport



## **Danube minimum standards for waterway infrastructure according to UN/ECE AGN have to be implemented**

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- Efficiency of Danube transport suffers extremely from reduced draught at shallow water sections
- Guaranteed minimum standards for infrastructure are needed as:

**Fairway minimum draught of 2.5 m  
at least on 300-320 days on  
average per year**

## CLASSIFICATION OF EUROPEAN INLAND WATERWAYS OF INTERNATIONAL IMPORTANCE <sup>3/</sup>

Type of inland waterway	Classes of navigable waterways	Motor vessels and barges					Pushed convoys					Minimum height under bridges <sup>2/</sup>	Graphical symbols on maps
		Type of vessel: General characteristics					Type of convoy: General characteristics						
		Designation	Maximum length L (m)	Maximum beam B (m)	Draught <sup>3/</sup> d (m)	Tonnage T (t)		Length L (m)	Beam B (m)	Draught <sup>6/</sup> d (m)	Tonnage T (t)		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
OF INTERNATIONAL IMPORTANCE	IV	Johann Welker	80-85	9.5	2.50	1,000-1,500		85	9.5 <sup>5/</sup>	2.50-2.80	1,250-1,450	5.25 or 7.00 <sup>4/</sup>	
	Va	Large Rhine vessels	95-110	11.4	2.50-2.80	1,500-3,000		95-110 <sup>1/</sup>	11.4	2.50-4.50	1,600-3,000	5.25 or 7.00 or 9.10 <sup>4/</sup>	
	Vb							172-185 <sup>1/</sup>	11.4	2.50-4.50	3,200-6,000		
	Vla							95-110 <sup>1/</sup>	22.8	2.50-4.50	3,200-6,000	7.00 or 9.10 <sup>4/</sup>	
	Vlb	<sup>3/</sup>	140	15.0	3.90			185-195 <sup>1/</sup>	22.8	2.50-4.50	6,400-12,000	7.00 or 9.10 <sup>4/</sup>	
	Vlc							270-280 <sup>1/</sup>	22.8	2.50-4.50	9,600-18,000	9.10 <sup>4/</sup>	
								195-200 <sup>1/</sup>	33.0-34.2 <sup>1/</sup>	2.50-4.50	9,600-18,000		
VII								275-285 <sup>7/</sup>	33.0-34.2 <sup>1/</sup>	2.50-4.50	14,500-27,000	9.10 <sup>4/</sup>	

# Infrastructure is the backbone of transport

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## **The DMR is the same for Europe!**

- The European backbone = Maintained and workable IW System
- IWT needs a dedicated long-term development program ensuring EU coordination, cross-border cooperation and ample EU funding with own budget and adequate staffing on European level
- Europe's navigable waterways are core assets for an efficient European transport system
- Removal of strategic bottlenecks according TEN-T priority project No.18 (Rhine/Meuse – Main – Danube)

# Magic words

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- Guidelines
- Implementation
- Sustainability
- Environmental friendly
- Improve
- Development
- Promote
- Modernize
- Harmonize

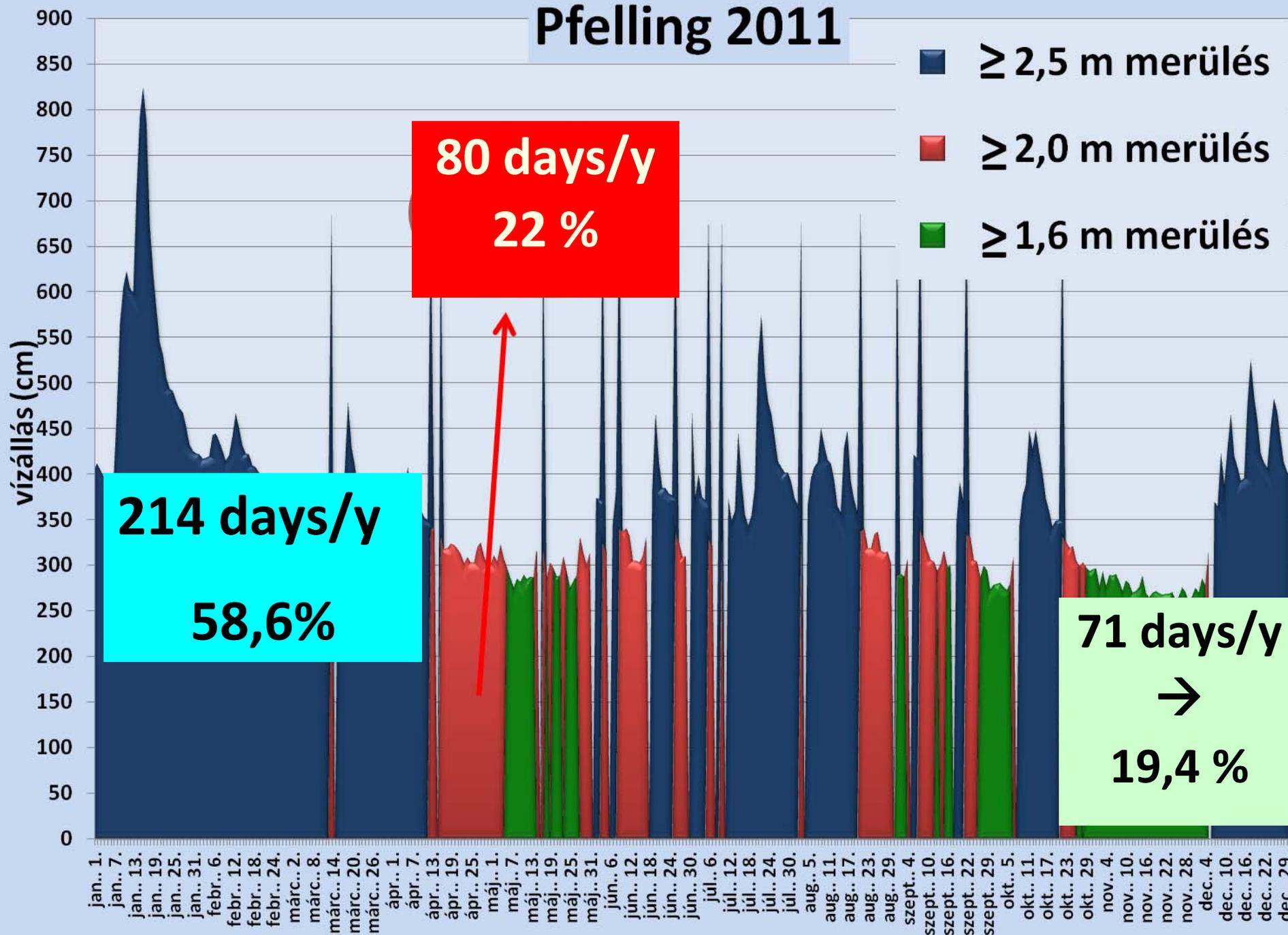
**Work professionally and use your brain**

# Danube Strategy = EU Strategy for the Danube region

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1. Increase the cargo transport on the river by 20% by 2020 compared to 2010.
2. 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. *To invest in waterway infrastructure of Danube*
3. Development of efficient multimodal terminals at Danube river ports and dry ports to connect inland waterways with rail and road transport by 2020. *„To develop ports in the Danube river basin into multimodal logistics centres”*
4. Implement harmonized River Information Services (RIS) on the Danube and its navigable tributaries and ensure the international exchange of RIS data preferably by 2015. *What about Germany and Holland?*
5. Solve the shortage of qualified personnel and harmonize education standards in inland navigation in the Danube region by 2020. *The main and real danger!*
6. To modernize the Danube Fleet in order to improve environmental and economic performance. *In order to work properly for the clients, and can fight fair with competitors*

# Pfelling 2011



# Pfelling and the consequences in 2011

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1. **Less than 200 cm draft**  
80 days/y = 21,9 % of the year  
Capacity utilization  $\approx$  71%
2. **Less than 160 cm draft**  
71 days/y = 19,4 % of the year  
Capacity utilization  $\approx$  48 %
3. **151 days/y = 41,3% of the year**  
Capacity utilization  $\approx$  60%-os

# Fact for greens

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**100% = 24 t**

**60 % = 14,4 t**

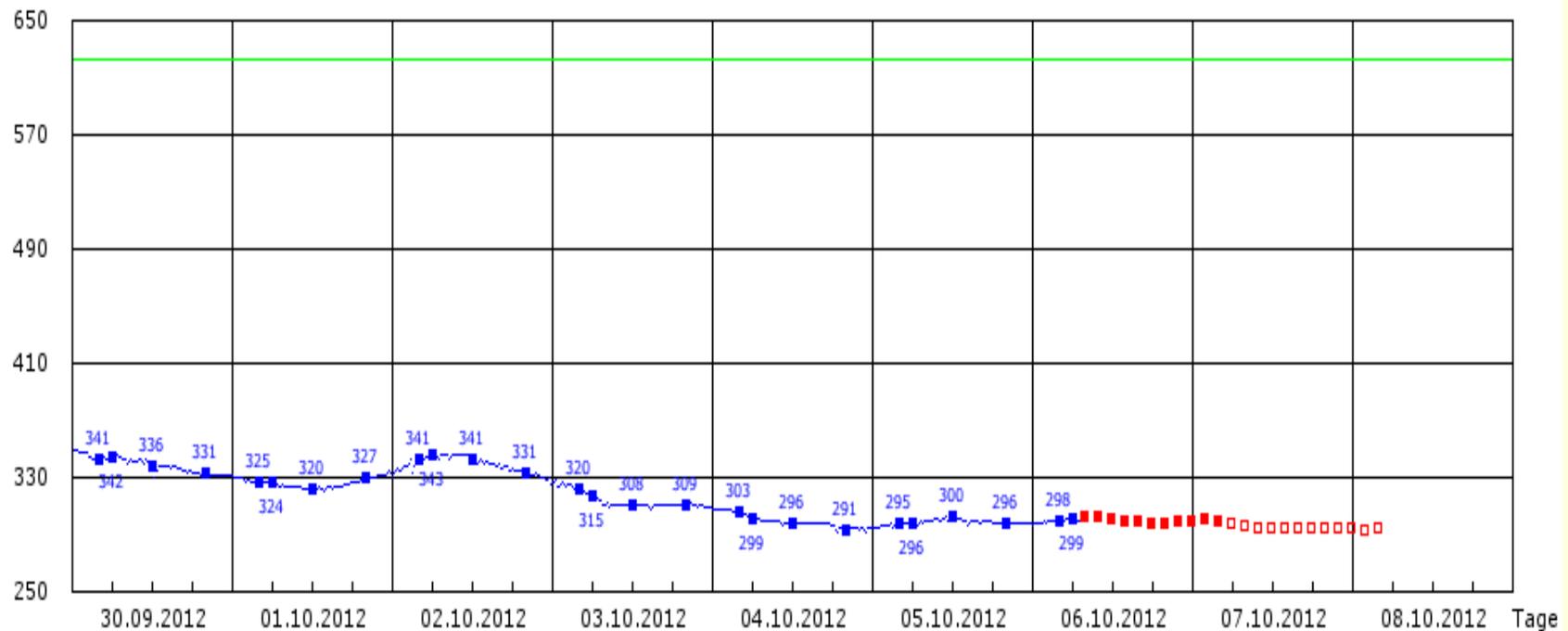


# Water level standard (gauge)

## PFELLING

Wasserstände der vergangenen 7 Tage und Wasserstandsvorhersage am 06.10.2012 09:45 Uhr

Wasserstand in cm

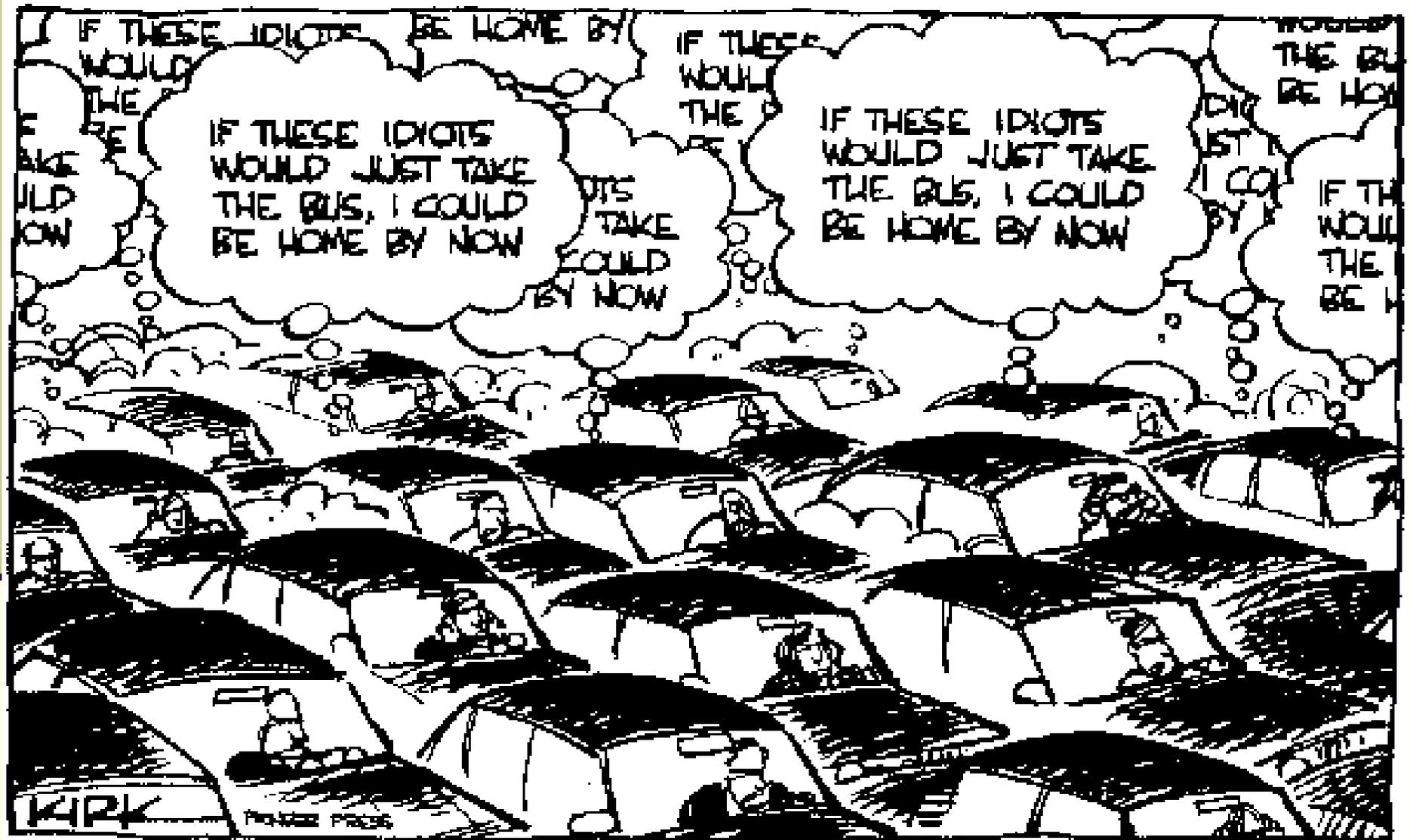


MEZ-Daten erhoben durch WSD Sued, Wuerzburg Tel.: (09 31) 41 05 - 423

Vorhersagen und Abschätzungen vom: 06.10.2012 um 04:00, Quelle: Bundesanstalt für Gewässerkunde

Weitere Informationen zur Unterscheidung von Vorhersage und Abschätzung finden Sie auf den Seiten der Bundesanstalt für Gewässerkunde

# The screamers



# Main ports on the RMD waterways



# DaHar

## Overall project aim and objectives

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The overall aim of DaHar is to contribute to the **better integration** of inland navigation within the transport logistical chain by focusing on the multi-modal and **logistical development** of ports and port areas in small and medium-sized South East European (SEE) cities along the Danube.

This contributes to these cities taking their appropriate share of the SEE **economic development** and playing a pivotal role in “priority networks” on TEN-T.

# DaHar - Thematic areas and groups

TGs	Leader	Participants
<b>TG 1: Logistical infrastructure of ports, port operation models</b>	<b>Bay-Logi</b>	<b>Dunaújváros Vidin Vukovar Ennshafen</b>
<b>TG 2: Hinterland connections - transport linkages with road and rail</b>	<b>Mun. Galati</b>	<b>APDF Mun. Giurgiu Silistra Bay-Logi</b>
<b>TG 3: Integration of ports in the development of container and ro-ro liner services (feeder services)</b>	<b>Ennshafen</b>	<b>APDM via donau Vukovar Vidin</b>
<b>TG 4: RIS related to cargo transport management</b>	<b>University of Novi Sad</b>	<b>Port NS, via Donau, APDF, Dunaújváros, Public Ports</b>
<b>TG 5: Navigability and environmental protection</b>	<b>Dunaújváros</b>	<b>Public Ports, Silistra</b>

# Future expansion ?

## Caspian Sea – Black Sea routes



# Caspian Sea – Baltic Sea route Volga river

## Volga river

Longest navigable river in Europe  
Length: 3692 km (2 294 nm)  
Navigable depth: over 3 m

Connected to

- Caspian Sea – Black Sea Through Volga Don Canal
- Baltic Sea through Volga-Baltic waterway

Ship locks dimensions: 290 x 30 meters  
For three months of the year the river is frozen for most of its length.



# Caspian Sea – Black Sea route Volga-Don canal

The Volga-Don Canal from the Volga River (Caspian Sea) to the Don River, through the Sea of Azov, and into the Black Sea.

The dimensions of locks on the Volga-Don canal are 145 m x 17-18 m.  
The depth limitations is between 3,50 m - 3,60 m

The Canal closes to commercial traffic around the first of November and does not reopen until April

Passage on the internal waters of Russia under a foreign flag is forbidden



# Final message (for greens as well)

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**Shipping is often sick, but never dies!**