

Danube STREAM

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Key project objective

Harmonized, innovative and pro-active waterway management along the Danube and its navigable tributaries





Key project objectives



Agreeing on common approaches for waterway management

- Danube STREAM will further contribute to the overall performance of the Danube waterway by raising the effectiveness of waterway management in the corridor.
- Establishing waterway management tools and by assuring environmentally sound waterway management, which will result in a better and more reliable infrastructure quality.
- Consequently, transport services on the river can be planned more accurately in terms of time reliability and available draught. The ecological footprint of the transport system in the Danube region will be reduced as an important side effect.



Key project objectives



Making required information easily accessible along the entire Danube

- Faced with varying and dynamic fairway conditions, commercial users of the Danube waterway rely on upto-date and topical information on the fairway for their logistics planning processes.
- Danube STREAM will provide improved user information services by means of transnational web portals and tools, including information on water levels, fairway depth and width, information on shallow water sections, etc.
- These improved information services will result in a better exploitation of the opportunities the Danube waterway offers.



Danube STREAM

KEY PROJECT DATA





Project partners

Partner no.	Partner name	Short name	Country
LP	via donau - Austrian Waterways Company	VIA	AT
ERDF PP1	Slovak Water Management Enterprise	SVP	SK
ERDF PP2	General Directorate of Water Management	OVF	HU
ERDF PP3	National Association of Radio Distress-Signalling and Infocommunication	RSOE	HU
ERDF PP4	Agency for Inland Waterways	AVP	HR
ERDF PP5	River Administration of the Lower Danube Galati	AFDJ	RO
ERDF PP6	Administration of Navigable Canals S.H.	ACN	RO
ERDF PP7	Executive Agency for Exploration and Maintenance of the Danube River	EAEMDR	BG
IPA PP1	Ministry of Construction, Transport and Infrastructure - Directorate for Inland Waterways	Plovput	RS



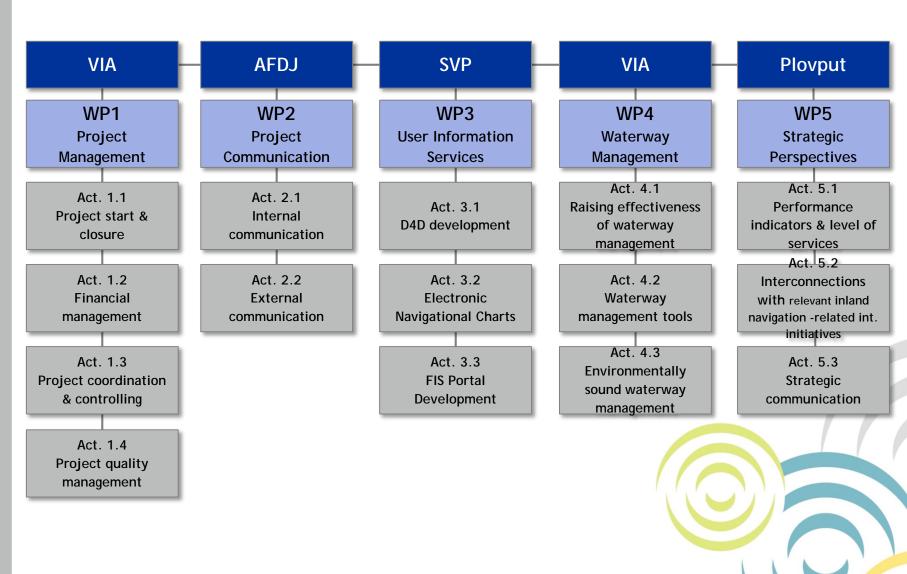
Associated Strategic Partners

No.	Name Of associated strategic partner	Short name	Country
ASP 1	German Federal Ministry of Transport and Digital Infrastructure	BMVI	DE
ASP 2	Danube Commission	DC	HU
ASP 3	International Sava River Basin Commission	ISRBC	HR
ASP 4	DANUBEPARKS - Danube River Network of Protected Areas	DANUBEPARKS	AT





WP breakdown structure





Danube STREAM

PLANNED ACTIVITIES DURING PROJECT LIFETIME (SELECTION)



User Information Services

- D4D development
- Electronic Navigational Charts
- FIS portal development

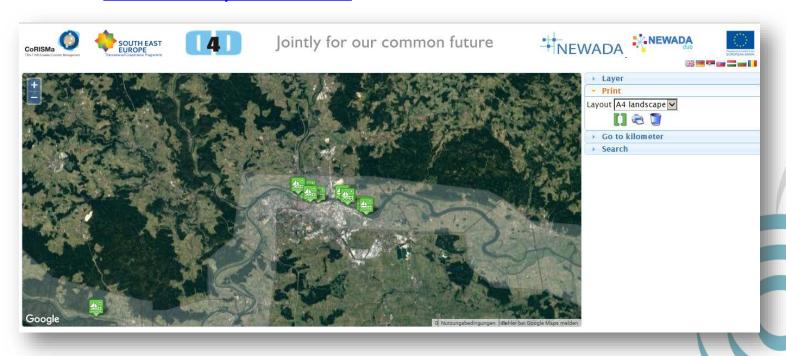
WP Leader: SVP/Stefan Polhorsky





D4D development

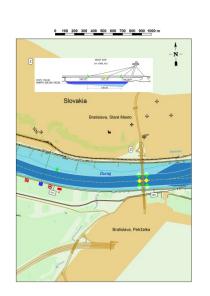
- D4D infrastructure improvements necessary
 - Updated and improved D4D infrastructure, improved D4D web portal, maintenance portal, new structure inside
 - www.d4d-portal.info

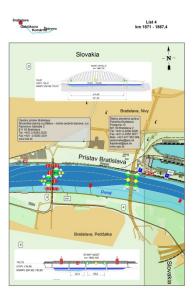




D4D development

- Paper charts NEWADA duo tool developed and implemented
 - Updating and providing of the paper charts for entire Danube
 - Carte de pilotage of DC in future









Activity 3.1 D4D development

- Berth occupation
 - Updating of Atlas of berths for whole stretch
 - Atlas of berths tool development and implementation



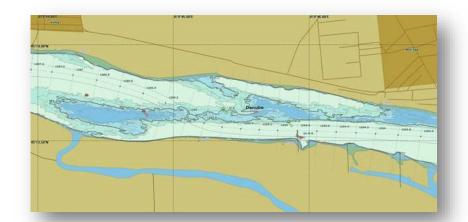
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nterreg Activity 3.2 Electronic Navigational Charts

- IENC latest valid IE standard (IE 2.3) entry
 - IENC charts with depth information
- Depth information
 - for all critical sectors

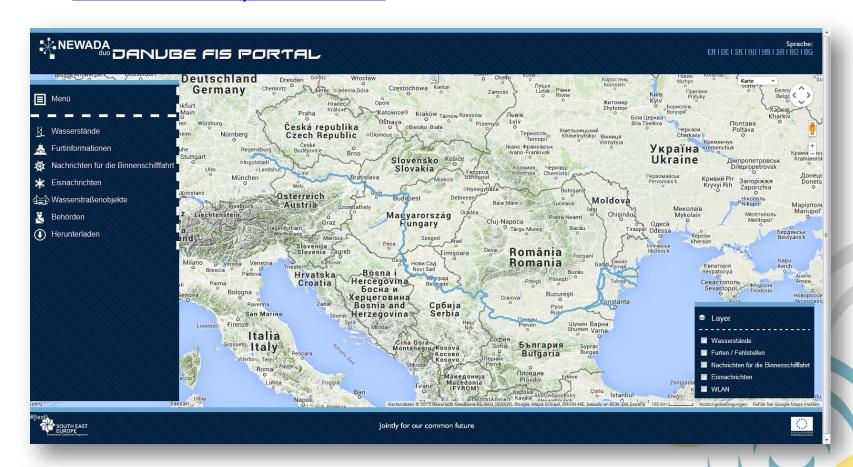


Uploading of the IENC to the D4D web portal



Activity 3.3 FIS portal development

- Fairway Information Service portal
 - www.danubeportal.com





Activity 3.3 FIS portal development

Planned improvements

- Backend
 - Implementation of NtS standard latest version
 - cooperation with national RIS providers
 - NtS interconnection with FIS portal
 - Harmonisation of content of NtS and minimum dataset for message
 - Automatic monitoring
- Mobile App/version of FIS portal
 - Technical specification, design and development



Activity 3.3 FIS portal development

- Planned improvements
 - Frontend
 - Bottleneck information
 - automatization
 - harmonisation and improvement
 - Restructuring of the welcome map
 - IFNC inclusion





Waterway Management

- Raising the effectiveness of waterway management
- Waterway management tools
- Environmentally sound waterway management

WP Leader: viadonau/Gert-Jan Muilerman





Raising the effectiveness of waterway management

- 1. What is the problem?
- Different data sets and sources
- Collecting data and keeping them up to date is timeconsuming
- 2. Where do we stand today?
- Basic set of Performance
 Indicators already developed
 in NEWADA duo





Raising the effectiveness of waterway management

3. What do we intend to improve in Danube STREAM?

- Review and update of Levels of Service and waterway management related performance indicators (incl. RIS related indicators)
- Specification of quality management device to automatically generate performance indicators
- Best practices in
 - waterway maintenance procedures
 - contracting of maintenance services
 - environmental assessments





Waterway management tools

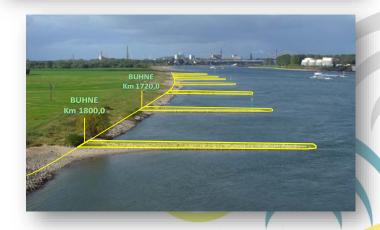
1. What is the problem?

- Vertical clearance measurements not up to date/accurate
- Data on fairway marking available only in HR, RS, RO, BG
- Status of river training works largely unknown

2. Where do we stand today?

- Working marking database for Lower Danube (HR, RS, RO, BG)
- Databases on river training works in their infancy







Waterway management tools

3. What do we intend to improve in Danube STREAM?

- Pilot on vertical clearance measurement (RS+RO)
- Enhance marking application (HU+SK)
- Specify GIS database for river training works (Danube)
- Establish interconnections with international waterway asset management system, as developed in FAIRway Danube project (RS)





Environmentally sound waterway

management

1. What is the problem?

- Waterway projects have to be in line with Water Framework Directives and other relevant environmental law
- Environmental requirements are sometimes inhibitive

2. Where do we stand today?

- Joint Statement / planning guidelines for integrative approach
- Several good practice documents available
- Existing cooperation with Danube Parks





Environmentally sound waterway management

3. What do we intend to improve in Danube STREAM?

- Continued meetings/exchanges between waterway administrations and protected areas on national level
- Learn from best practices in Western Europe
- Preparation of report on environmentally sound waterway management
- Intersectoral conferences (to be jointly organised with DANUBEparksCONNECTED)