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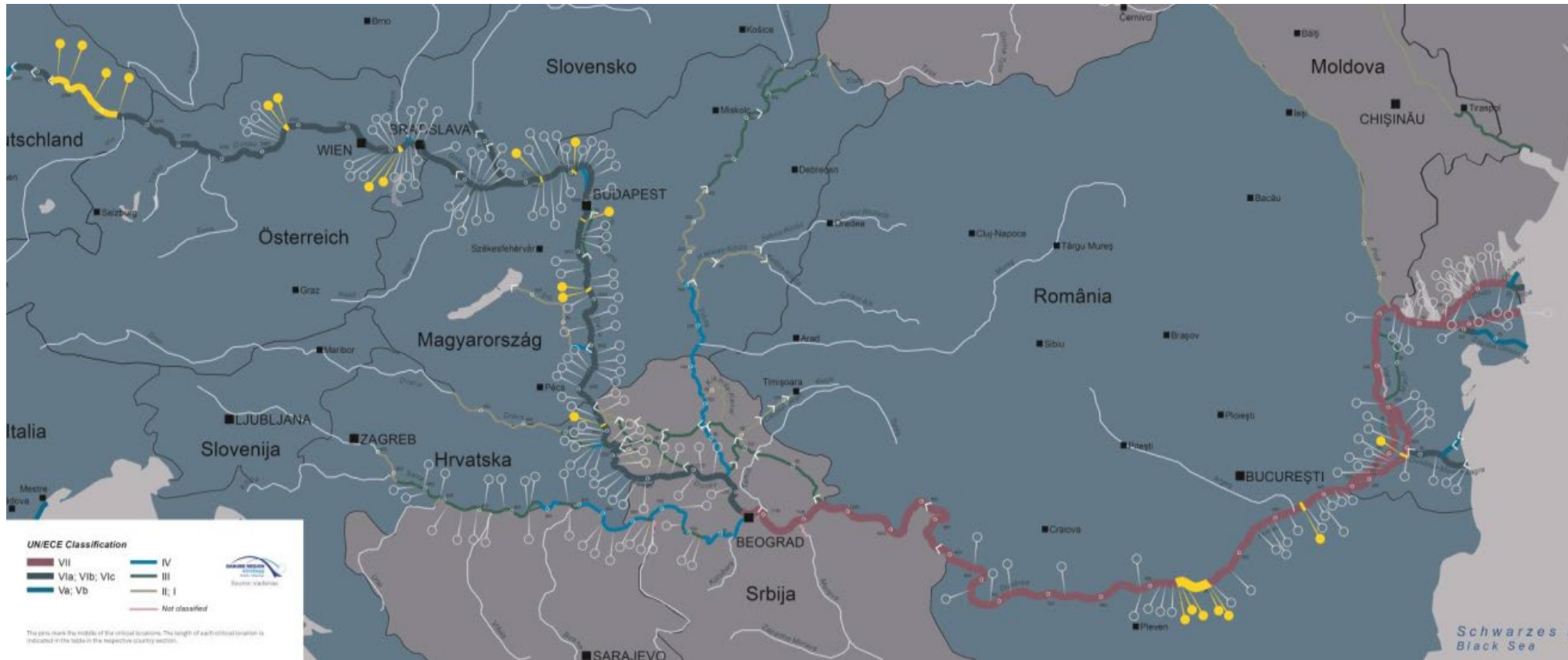
FAIRway Danube II

Report on implementation of CEF2 project

Budapest, Danube Commission on 29 February 2024

Andreas Bäck, viadonau

Fairway Rehabilitation and Maintenance Master Plan (11/2014)



Definition of common service levels (2.5m fairway depth at ENR*)

Overview of critical bottlenecks and measures

*2,0m on German Danube

Fairway Rehabilitation and Maintenance Master Plan (11/2014)



Fairway Rehabilitation and Maintenance Master Plan – Danube and its navigable tributaries

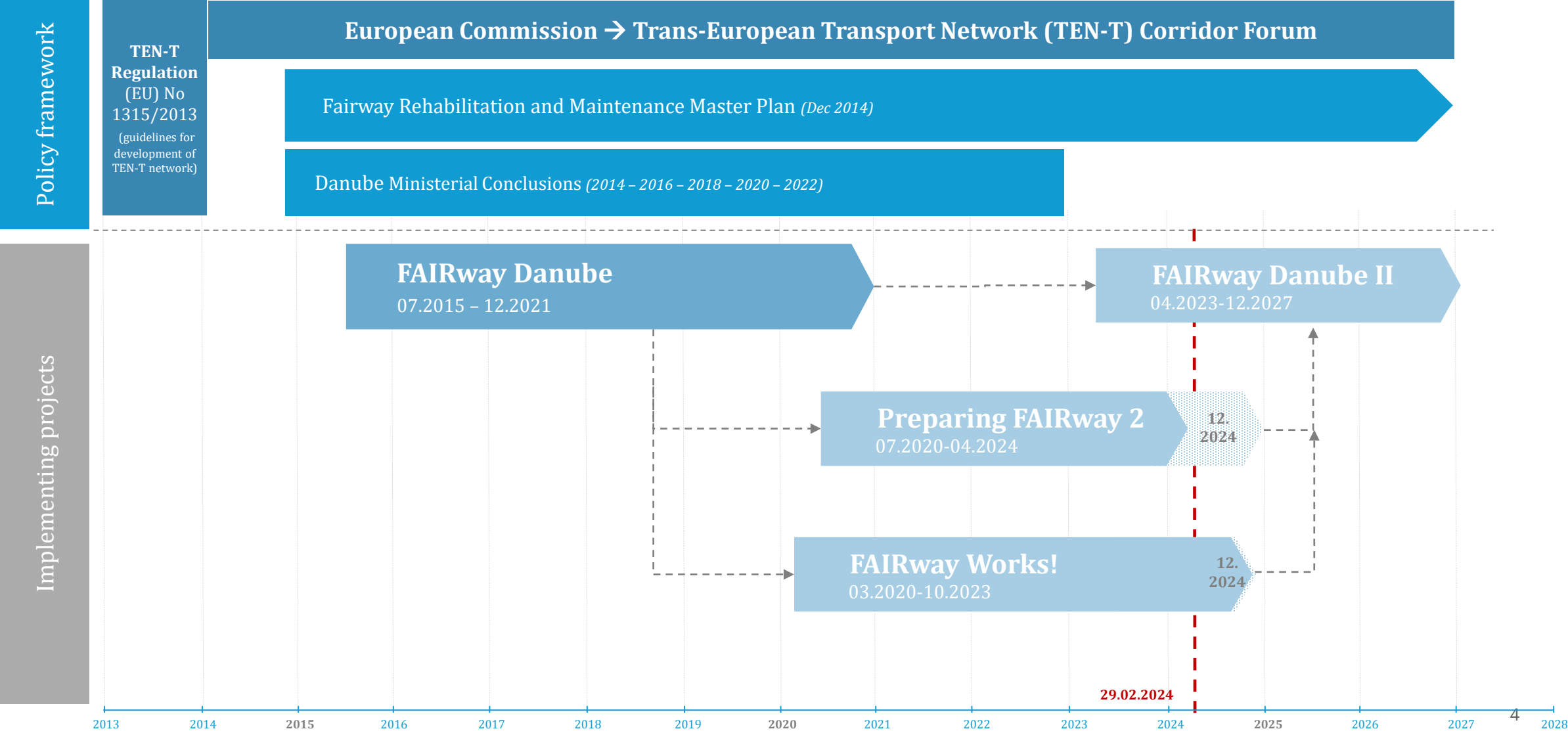
EU Strategy for the Danube Region,
Priority Area 1a – To improve mobility and multimodality: inland waterways

Version 13 November 2014



**Danube Ministerial Conclusions: 2014, 2016, 2018, 2020, 2022,
planned 2024**

Deployment strategy



FAIRway Danube (07/2015-12/2021)

First step to deploy the Master Plan - Main achievements



FAIRway Works! (03/2020 – 12/2024)

Key activities

- Upgrade Serbian Iron Gate 2 lock - Djerdap II (07/2023 – 07/2024)
- Upgrade Austrian mooring places in Linz, Wildungsmauer finalized and Vienna – Brigittenau II (forthcoming in 07/2024)
- Marking equipment in Austria
- 100 AIS AtoNs for Sava delivered (02/2024)
- Marking and surveying equipment in Serbia (forthcoming)

Budget: 42,6 Mil.€ (17 Mil.€ CEF-funding)

- Beneficiaries:



www.fairwayworks.org



Preparing FAIRway 2 Works! (07/2020 – 04/2024)



Key activities

- Investigate on possible integrated river engineering measures on common Croatian/Serbian Danube stretch considering input of a multidisciplinary stakeholder forum
- Elaborate specification of transnational Waterway Monitoring System (WAMOS 2.0)
- Develop effective stakeholder coordination
- Prepare upgrade of mooring places in Austria, Serbia and Croatia



Beneficiaries:



www.preparingfairway2.org



FAIRway Danube II (04/2023-12/2027)

Next steps towards Good Navigation Status on the Danube - Main activities:

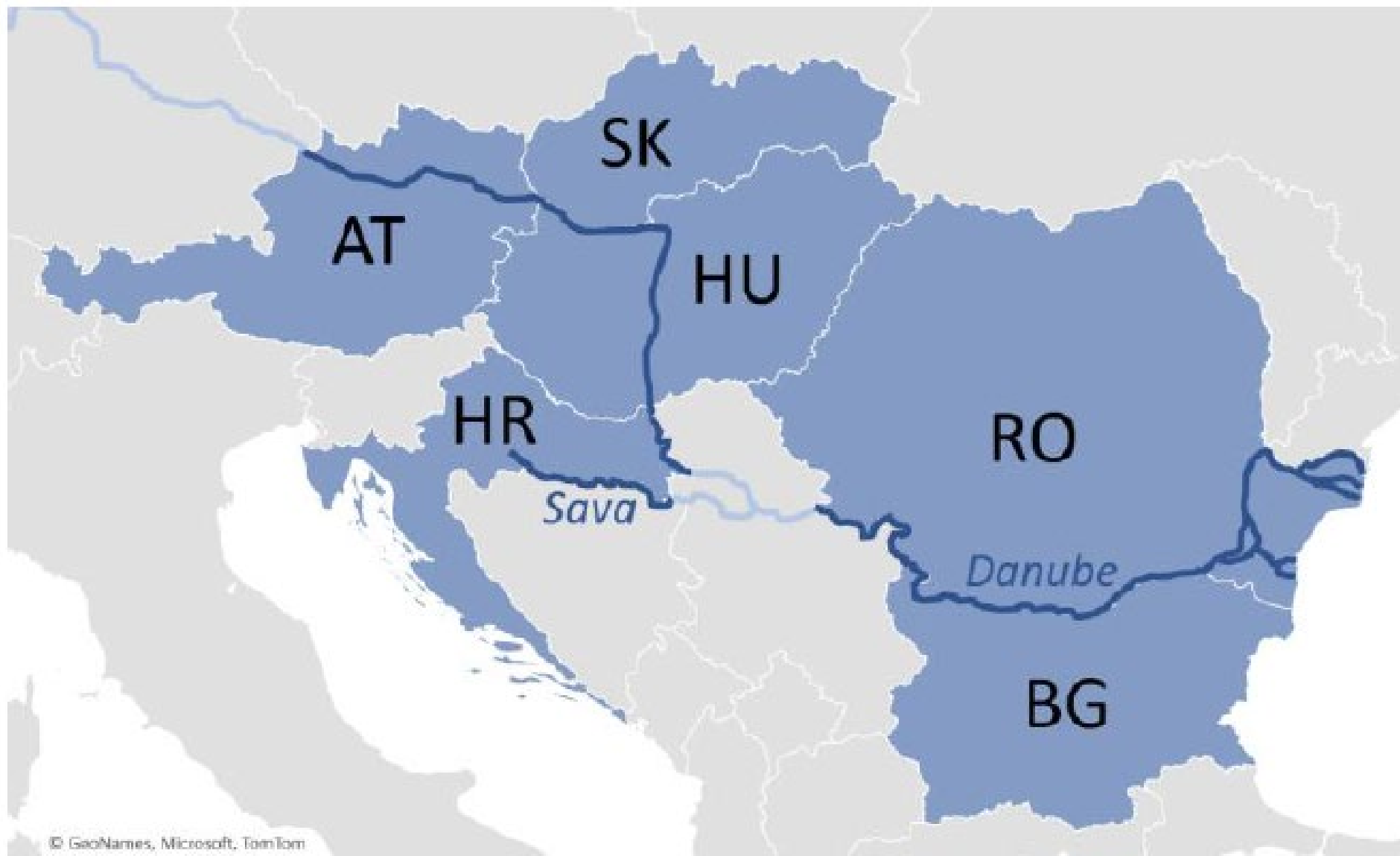
- Monitoring of fairway parameters: (annual) Reports on Good Navigation Status
- 183 buoys (HR, RO), upgrade of 19 gauging stations (BG, RO), bridge clearance sensors (HU, RO)
- new surveying vessels (HU, RO, BG), upgrade sensors in SK, HU, HR, RO, BG
- 6 drones (HU, HR, RO, BG)
- Upgrade of water-level forecast in AT, HU, RO
- Upgrade trans-national waterway monitoring system (WAMOS)
- Pilot flexible infrastructure (AT, HR, RO, BG)
- Upgrade of mooring places in Austria and Romania
- Prepare upgrade of mooring places in Austria, Slovakia and Croatia

Budget: 70 Mil.€ (46 Mil.€ CEF co-funding)

www.fairwaydanube2.eu



FAIRway Danube II – project area



FAIRway Danube II – selected topics

Next steps towards Good Navigation Status on the Danube - Main activities:

- Monitoring of fairway parameters: (annual) Reports on Good Navigation Status
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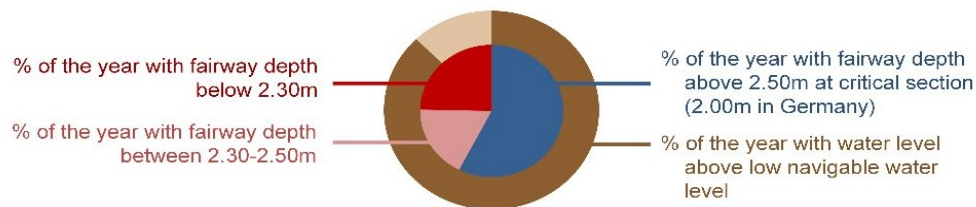
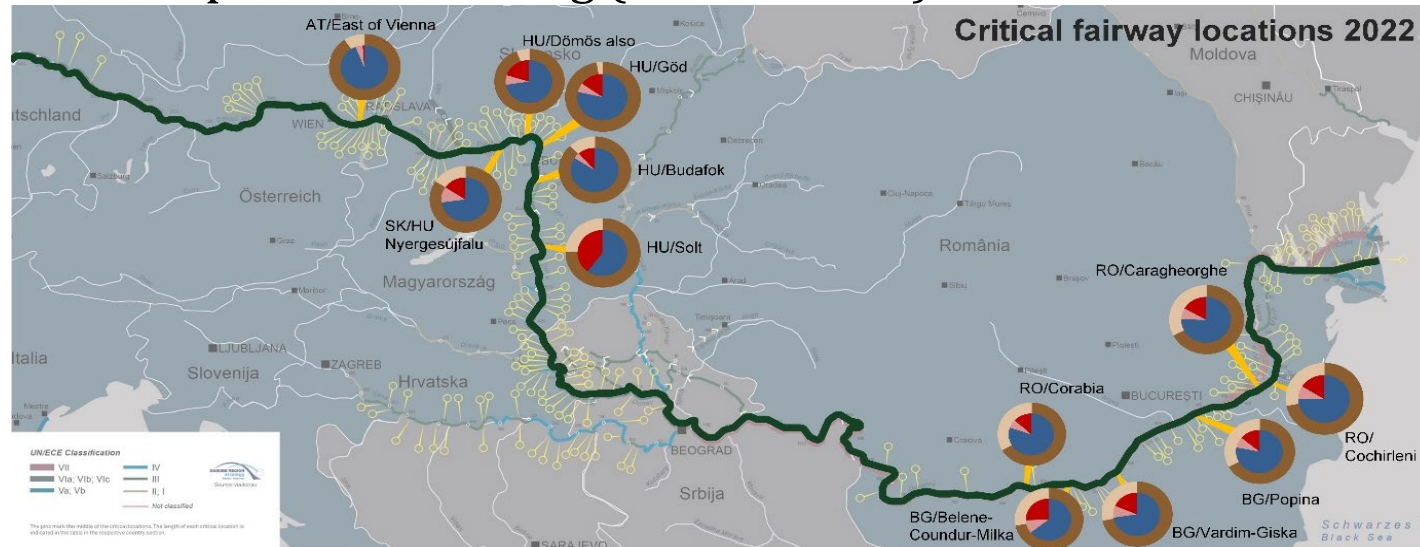
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WP2: Reports on Good Navigation Status (GNS)

In cooperation with EUSDR PA1a (Germany&Serbia)

- ✓ 1st report completed (data of 2022)
- 2nd report forthcoming (data of 2023)



* No data from Germany was available at the time the graphic was created.

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Report on Good Navigation Status

Status 2022



Project Title:	Fairway Danube II
Project Acronym:	22-EU-TG-FAIRway Danube II and 22-EU-TG-FAIRway Danube II
Project ID:	101122575 and 101122576
Deliverable No:	D2.1
Deliverable Name:	1st Update of the reports on Good Navigation Status (2023)
Work Package No:	Task 2.2
Due Date:	31.12.2023
Delivery Date:	31.12.2023
Lead Beneficiary:	AT-VIA
Main author:	Viktoria Weissenburger
Dissemination Level:	public (PU)

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FAIRway Danube II – selected topics

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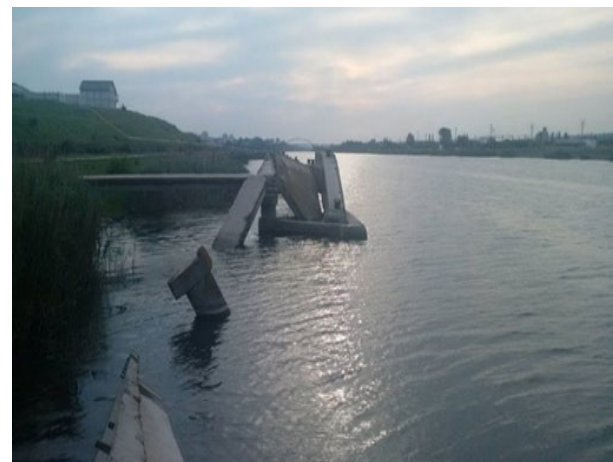
Mooring places

Construction works and studies

Construction works

Romania:

- Port Basarabi
- Port Medgidia



Austria:

- Aschach
- Krems
- Vienna (2 locations)



Studies preparing further construction works

- **Austria:** roadmap until 205
- **Slovakia:** plans and permits for 6 locations
- **Croatia:** plans and permits for Vukovar

FAIRway Danube II – selected topics

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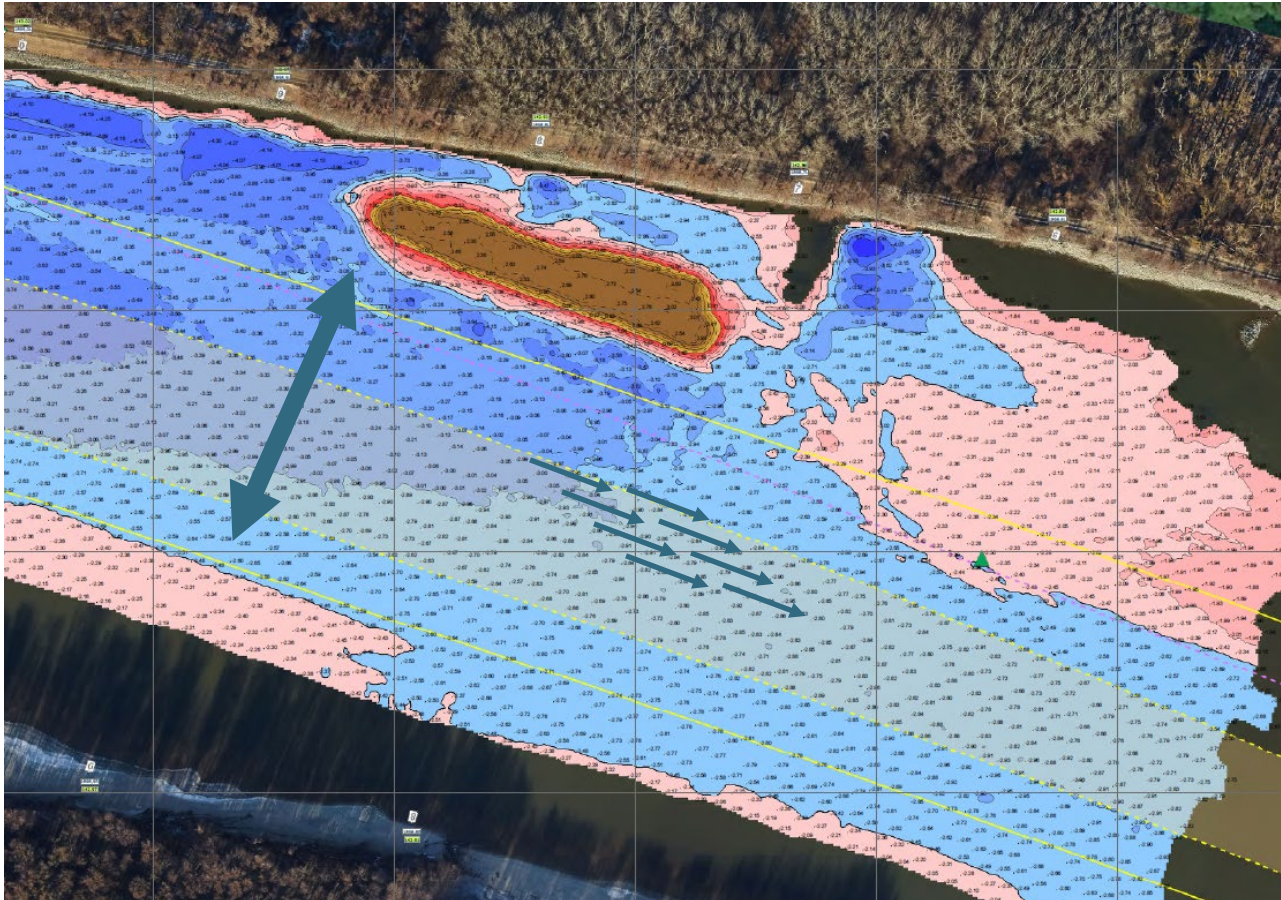
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Development steps of waterway management

2018



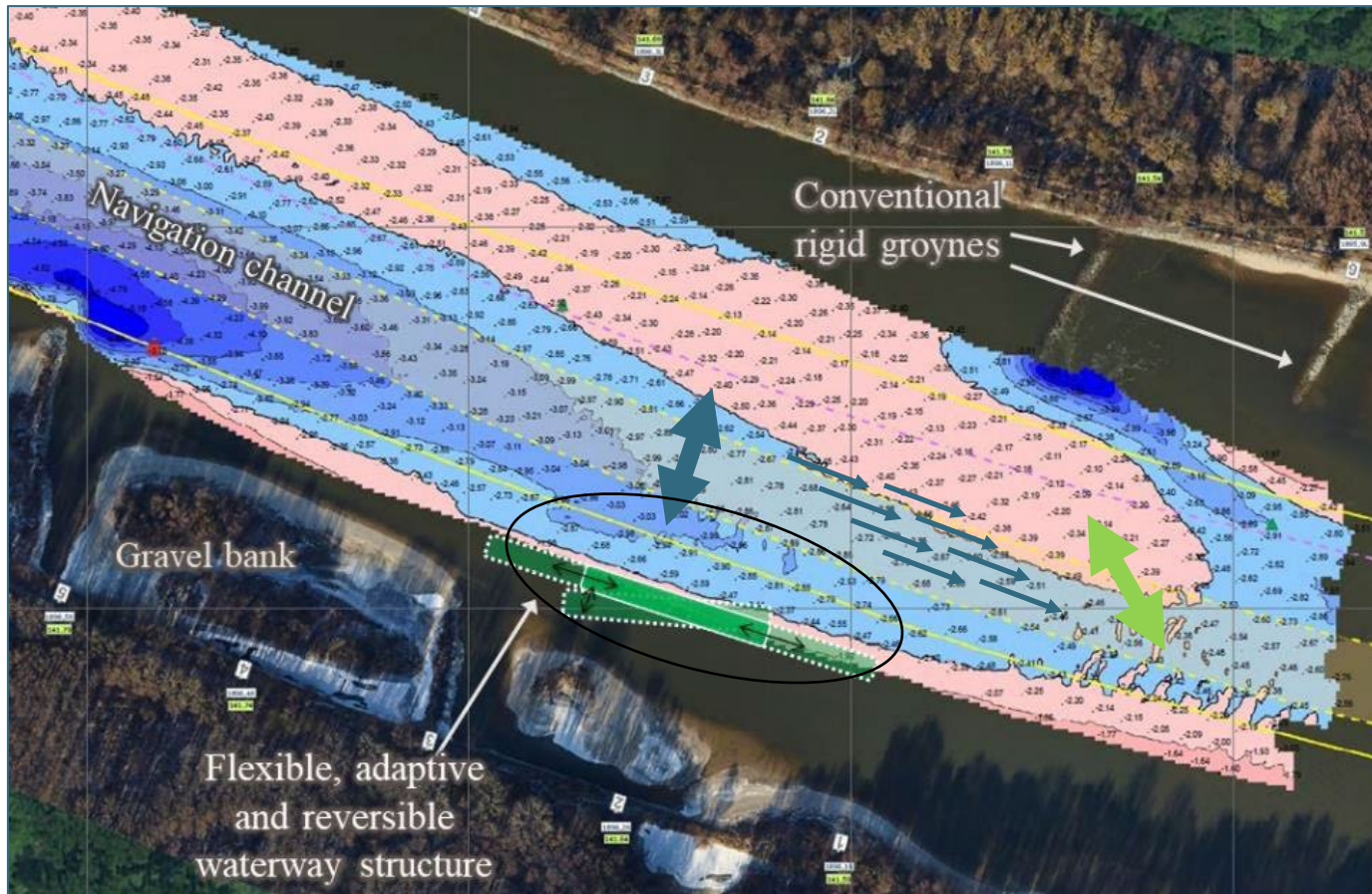
2022



Artificial islands –
as of February 2018
at 2 locations East of Vienna

Effects: narrowed cross-
section increases flow
velocity and bottom shear
stress

Pilot for flexible low water regulation – first proof of concept



Pilot project:

Loaded barges strategically positioned next to shallow sections as a temporary and mobile training wall

Effects: narrowed cross-section increases flow velocity and bottom shear stress

Results: increased fairway depths for the shipping sector when most needed

Status quo of pilot in Austria

Status of contracting

- ✓ included as option in the contract for maintenance dredging

Status of permits

- ✓ Very positive statements of all stakeholders (national park Donau-Auen, ICPDR, WWF, ...)
- ✓ permit of national park
 - Ecological supervision (birds)
 - Annual reports incl. pictures
- ✓ Water law permit, Lower Austria
 - Positive response
 - No impact regarding water levels (barges will be removed at higher water levels)
- ✓ Shipping permit, Lower Austria
 - Concern: anchor strength
 - Transmission of the naval expert's calculations to the authorities
 - Annual reports

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12. Okt 2023
viadonau
Zentrale Tech Gate

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OR: Kall
Cc: Hartl S.

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AMT DER NIEDERÖSTERREICHISCHEN LANDESREGIERUNG
Gruppe Raumordnung, Umwelt und Verkehr
Abteilung Naturschutz
3109 St. Pölten, Landhausplatz 1

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01. Sep 2023
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UA-V-170/054-2023

Bearbeitung
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Haselsteiner

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Durchwahl
15270

Datum
30. August 2023

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temporäre Leitwerke in der Donau östl. von Wien, Ansuchen um naturschutzbehördliche Ausnahmegenehmigung gemäß § 35 S. 5 und § 6 NO Nationalparkgesetz

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10.10.2023

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Bescheid

Die Bezirkshauptmannschaft Gänserndorf erteilt der viadonau Österreichische Wasserstraßen-Gesellschaft m.b.H. die **wasserrechtliche Bewilligung** zur Durchführung des Pilotversuches „Flexible Infrastruktur“ für eine temporäre Niederwasserregulierung in folgenden Bereichen des Verwaltungsbezirkes Gänserndorf sowie des Verwaltungsbezirkes Bruck an der Leitha als von der Bezirkshauptmannschaft Bruck an der Leitha ermächtigte Behörde:

- Furt Fischmündung (betroffenes Gebiet: Strom-km 1906,60 – 1905,10)
- Furt Regelsbrunn (betroffenes Gebiet: Strom-km 1899,50 – 1897,80)
- Furt Rote Werd (betroffenes Gebiet: Strom-km 1897,70 – 1895,90)

Pilot operation for enhancing low water resilience



- Procure and rent barges and supplementary services
- Stakeholder Forum & obtain permissions

- Execution of pilot
Monitoring of effects on navigation channel & environment

- Analysis of (intermediate) results
- Recommendations for way ahead



Table of planned activities

River stretch	<u>Croatia:</u> common Serbian-Croatian Danube section (river km 1.433 – 1.295)		<u>Romania/Bulgaria:</u> common Romanian-Bulgarian section (river km 845 - 374)
Indicative shallow section & indicative timeline	critical sections relevant for navigation		
1st period (until 03/2024)	Preparatory activities (mainly procurement of rental of flexible infrastructure elements and monitoring as well as obtaining the required permits)		
2nd period (until 03/2025)	Pilot activities at 1 shallow section	Pilot activities at 1 shallow section in Romania	Pilot activities at 1 shallow section in Bulgaria
3rd period (until 03/2026)	Pilot activities at 1 shallow section	Pilot activities at least at 2 shallow sections in Romania	Pilot activities at least at 1 shallow section in Bulgaria
4th period (until 03/2027)	Pilot activities at 1 shallow section	Pilot activities at least at 2 shallow sections in Romania	Pilot activities at least at 1 shallow section in Bulgaria
5th period (until 12/2027)	Pilot activities at 1 shallow section	Pilot activities at least at 2 shallow sections in Romania	Pilot activities at least at 1 shallow section in Bulgaria

Market exploration (2/2)

Engagement of a market expert

Task of market expert:

providing inputs to the market exploration as published by viadonau and intended to increase the publicity and awareness of the market exploration so that there is sufficient competition

Questions & expression of interest concerning market observation to fairway@viadonau.org



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Thank you for your attention!



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