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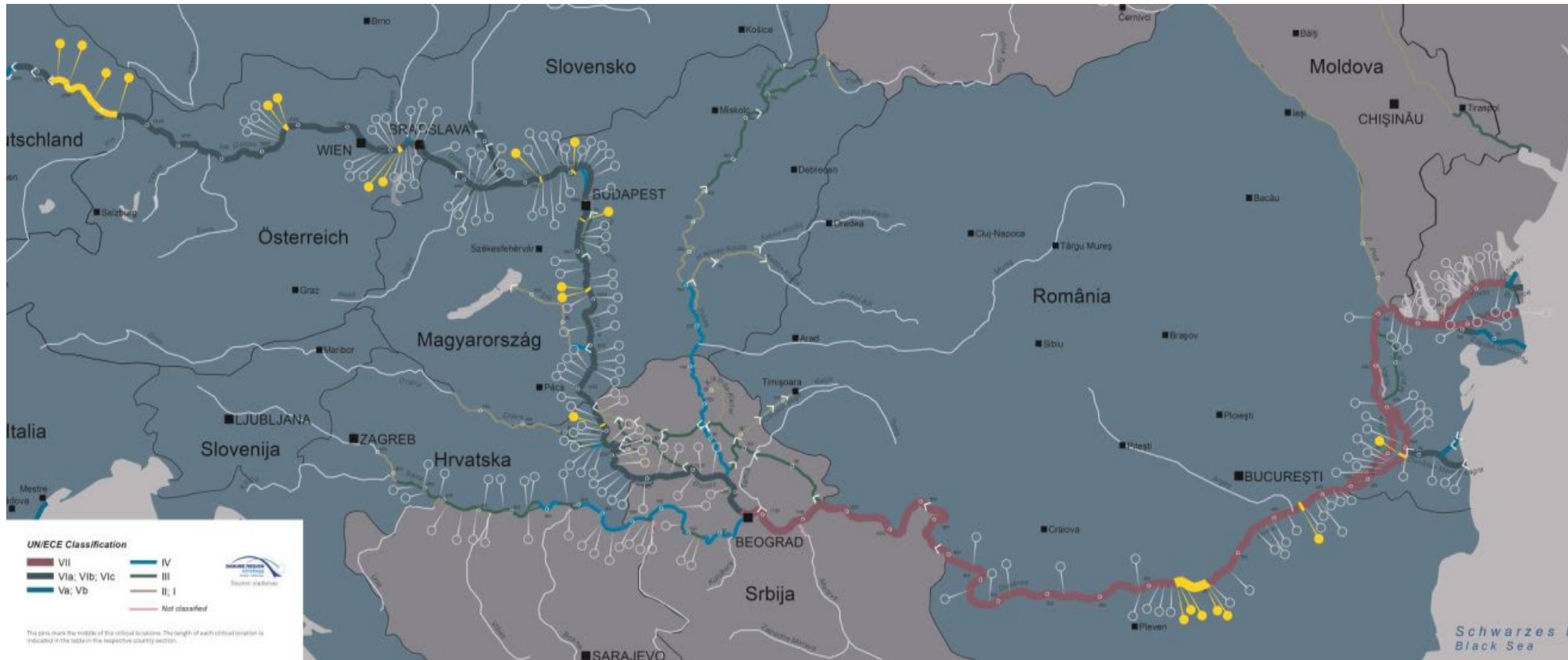
FAIRway Danube II

Joint Workshop on Waterway Management of EUSDR/PA1a
and the Danube Commission

Budapest, 4.3.2025, Andreas Bäck



Fairway Rehabilitation and Maintenance Master Plan (11/2014)

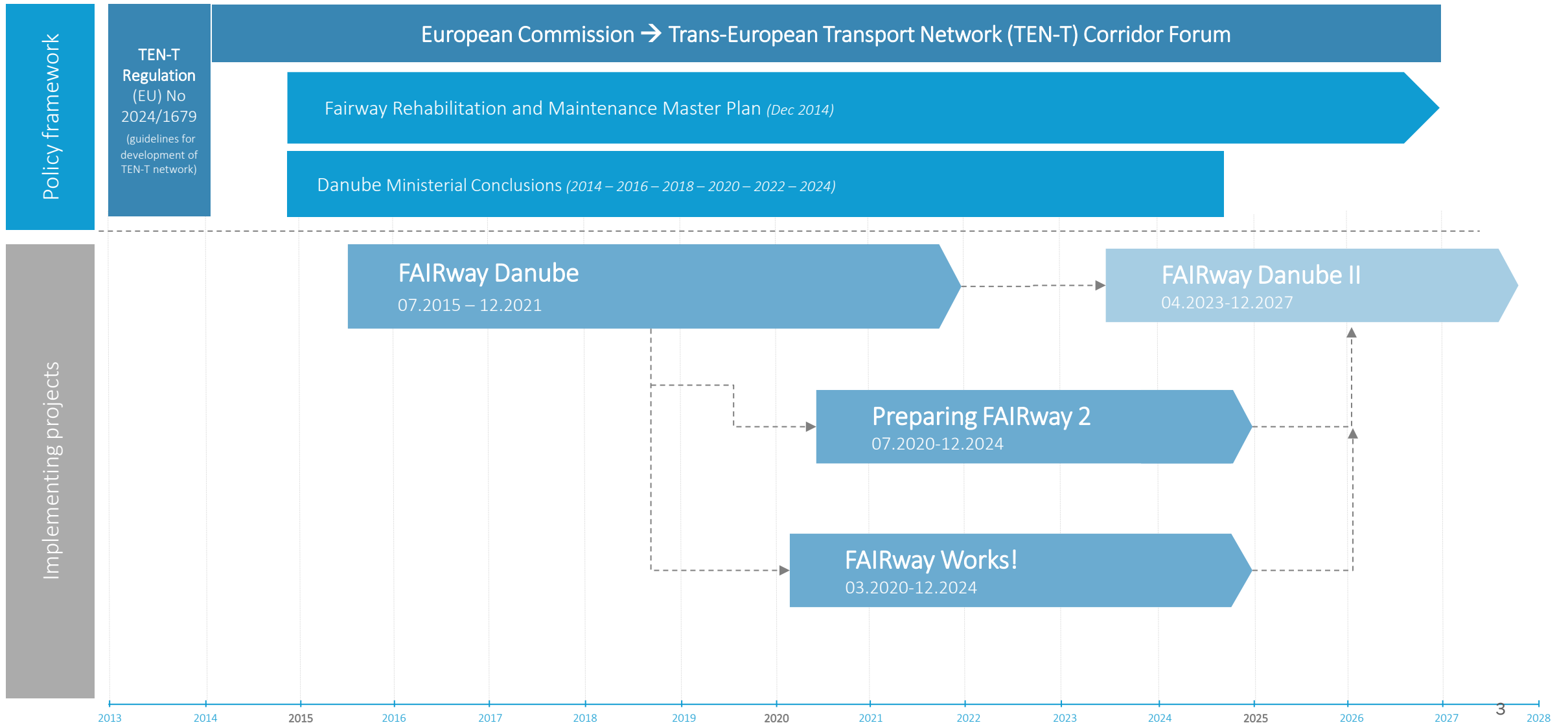


Definition of common service levels (2.5m fairway depth at ENR*)

Overview of critical bottlenecks and measures

*2,0m on German Danube

Deployment strategy





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FAIRway Danube II

Next steps towards Good Navigation Status on the Danube

Budget:

70 Mil.€
(46 Mil.€ CEF co-funding)

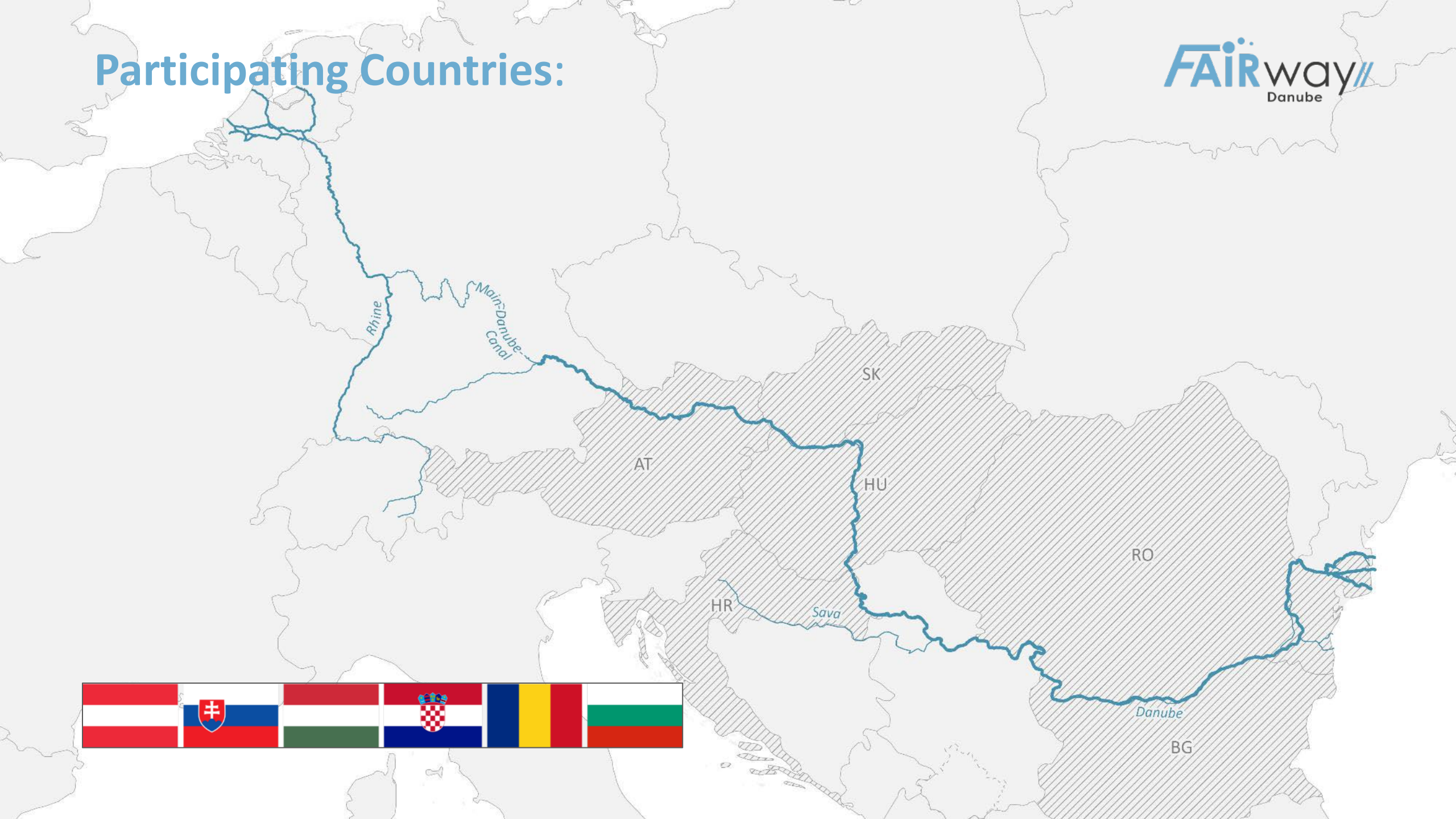
Duration:

(04/2023-12/2027)

Participating Countries & Partner Organisations:

- **Austria** via donau
- **Slovakia** Slovak Water Management Enterprise
- **Hungary** Ministry of Construction and Transport
General Directorate of Water Management
- **Croatia** Ministry of the Sea, Transport and Infrastructure
- **Bulgaria** Executive Agency for Exploration and Maintenance of the Danube River
- **Romania** Administration of the Lower Danube
Administration of the Navigable Canals

Participating Countries:





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FAIRway
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



Work packages (WP)

WP2	WP3	WP4	WP5	WP6		

Reports on Good Navigation Status (GNS)

Establish Fixed and Mobile Sensors for Measuring the Good Navigation Status (GNS)

Upgrade of the National Waterway Management Systems (WAMS) & the Transnational Waterway Monitoring System (WAMOS 2.0)

Extended Water-Level Forecast: Advancing Planning Reliability

Innovative Solutions for Enhanced Climate Resilience: Pilot Projects for Flexible Infrastructure Elements

Enhancing Safety and Sustainability: **Upgrade of Mooring Places in Austria and Romania**

Expanding Mooring Capacities: **Future Investments in Austria, Slovakia, and Croatia**

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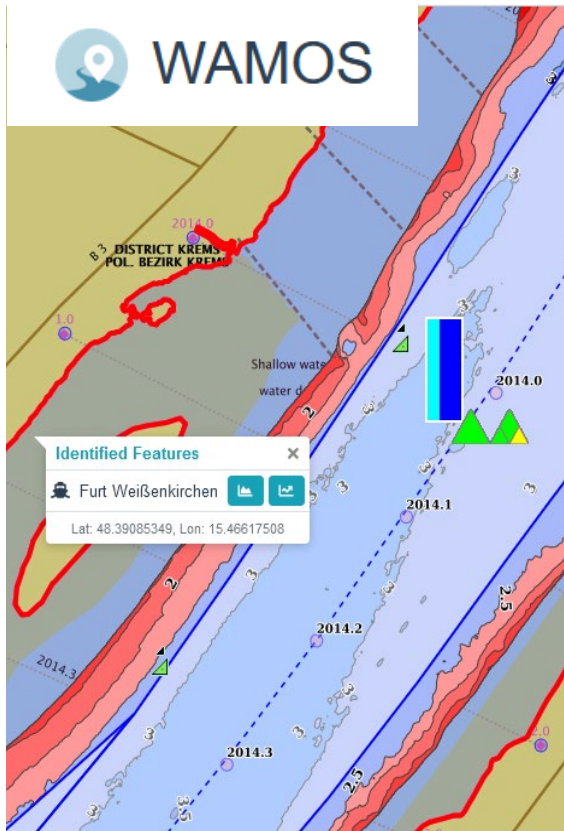
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Upgrade of the transnational Waterway Monitoring System (WAMOS 2.0)



- Collects hydrological and hydrographical data from the riparian Danube Waterway Administrations into one system
- Offers harmonized display and analysis of the data
- Web application
- Available for registered users only (Waterway Administrations) up until now
- **River Morphology in Bottlenecks:** bathymetric survey data & cross section profiles through the river bed (with compare function)
- **Water-Levels & Hydrological Conditions:** current and historic water levels, inclusive forecasts and long-term evaluation
- **Fairway Availability:** for different Levels of Service

WAMOS 2.0 – new functions (example)

Harmonised processing and provision of bottleneck related information & retrieval of surveying results to external systems

General:

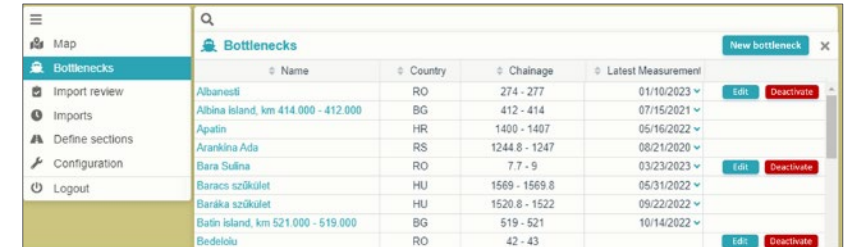
- Manages bottleneck related data (create, edit, deactivate)
- Calculates the shallowest spot information with approval process
- Calculates the available fairway depth

Data sources:

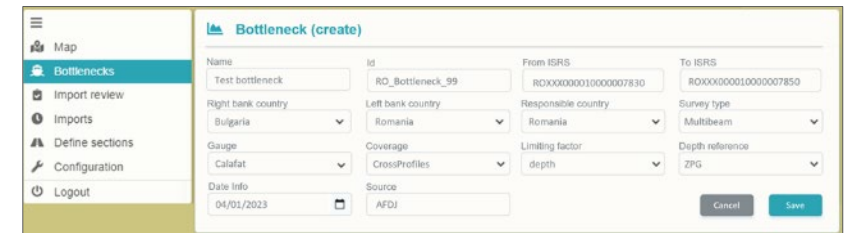
Distance marks virtual, water level, sounding results

Information to fairway users by means of EuRIS:

Webservice containing bottleneck information, survey results and shallowest point



Name	Country	Chainage	Latest Measurement
Albanesti	RO	274 - 277	01/10/2023
Albina Island, km 414.000 - 412.000	BG	412 - 414	07/15/2021
Apatin	HR	1400 - 1407	05/16/2022
Arankina Ada	RS	1244.8 - 1247	08/21/2020
Bara Sulina	RO	7.7 - 9	03/23/2023
Baracs szökület	HU	1569 - 1569.8	05/31/2022
Baraka szökület	HU	1520.8 - 1522	09/22/2022
Batfi Island, km 521.000 - 519.000	BG	519 - 521	10/14/2022
Bedelolu	RO	42 - 43	



Bottleneck (create)

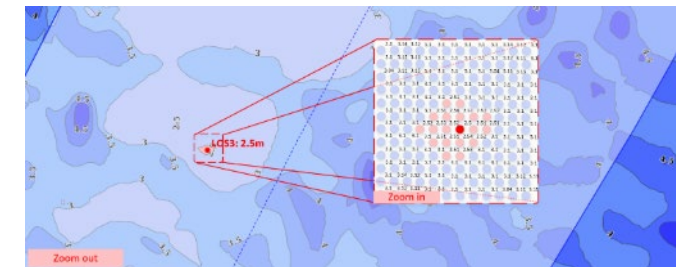
Name: Test bottleneck | Id: RO_Bottleneck_99 | From ISRS: ROXXX000010000007830 | To ISRS: ROXXX000010000007850

Right bank country: Bulgaria | Left bank country: Romania | Responsible country: Romania | Survey type: Multibeam

Gauge: Calafat | Coverage: CrossProfiles | Limiting factor: depth | Depth reference: ZPG

Date info: 04/01/2023 | Source: AFDJ

Buttons: Cancel, Save



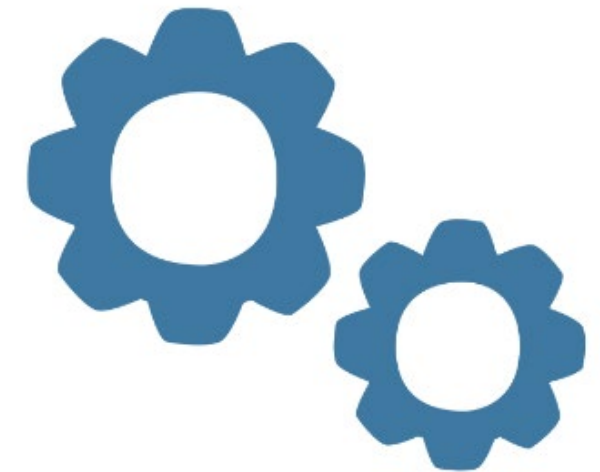
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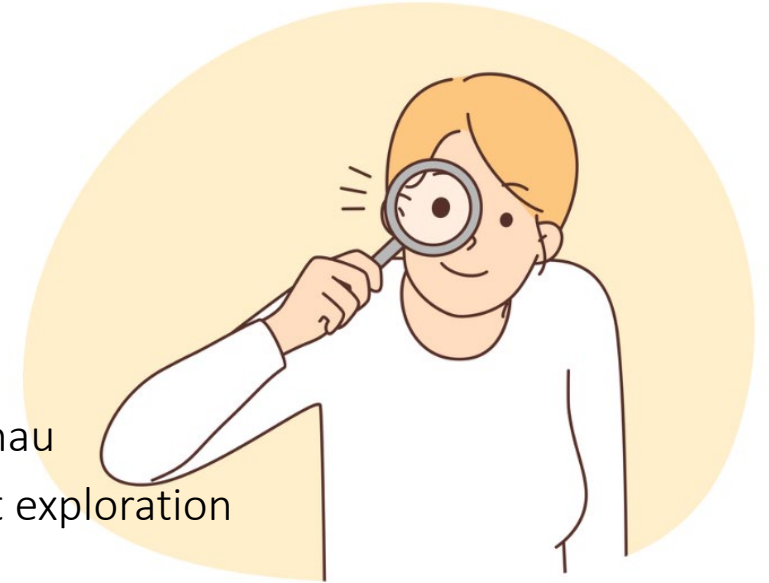
River stretch	Croatia: common Serbian-Croatian Danube Romanian/Bulgarian: common Romanian-Bulgarian section (river km 845-374)		
1 st period until (12/2024)	Preparatory activities		
	HR	RO	BG
2 nd period (until 12/2025)	1 barge at 1 shallow section	up to 4 barges at 1 shallow section	1 barge at 1 shallow section
3 rd period (until 12/2026)	2 barges at 1 shallow section	up to 4 barges at 2 shallow section	Up to 2 barges at 1 shallow section
4 th period (until 12/2027)	2 barges at 1 shallow section	up to 4 barges at least at 2 shallow section	Up to 2 barges at 1 shallow section
Optional prolongation	2 barges at 1 shallow section	up to 4 barges at least at 2 shallow section	not applicable



Implementation status

Pilot flexible infrastructure elements

- Market exploration
 - December 2023 until April 2024
 - Engagement of a market expert
 - providing inputs to the market exploration as published by viadonau
 - advertise, extend outreach and increase awareness of the market exploration in order to ensure sufficient competition
- Tender for rental of barges in HR/RO/BG
 - Market observation published in Official Journal in April 2024
 - Tender published in Official Journal in July 2024
 - 1st phase (completed)
 - 2nd phase (ongoing)
 - Contracting expected until end of June 2025



Work packages (WP)

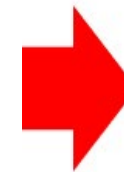
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Upgrade of mooring infrastructure in AT & RO

Planned upgrade at 6 locations:

- Shore access facilities
- Mooring facilities
- Shore side electricity
- etc.

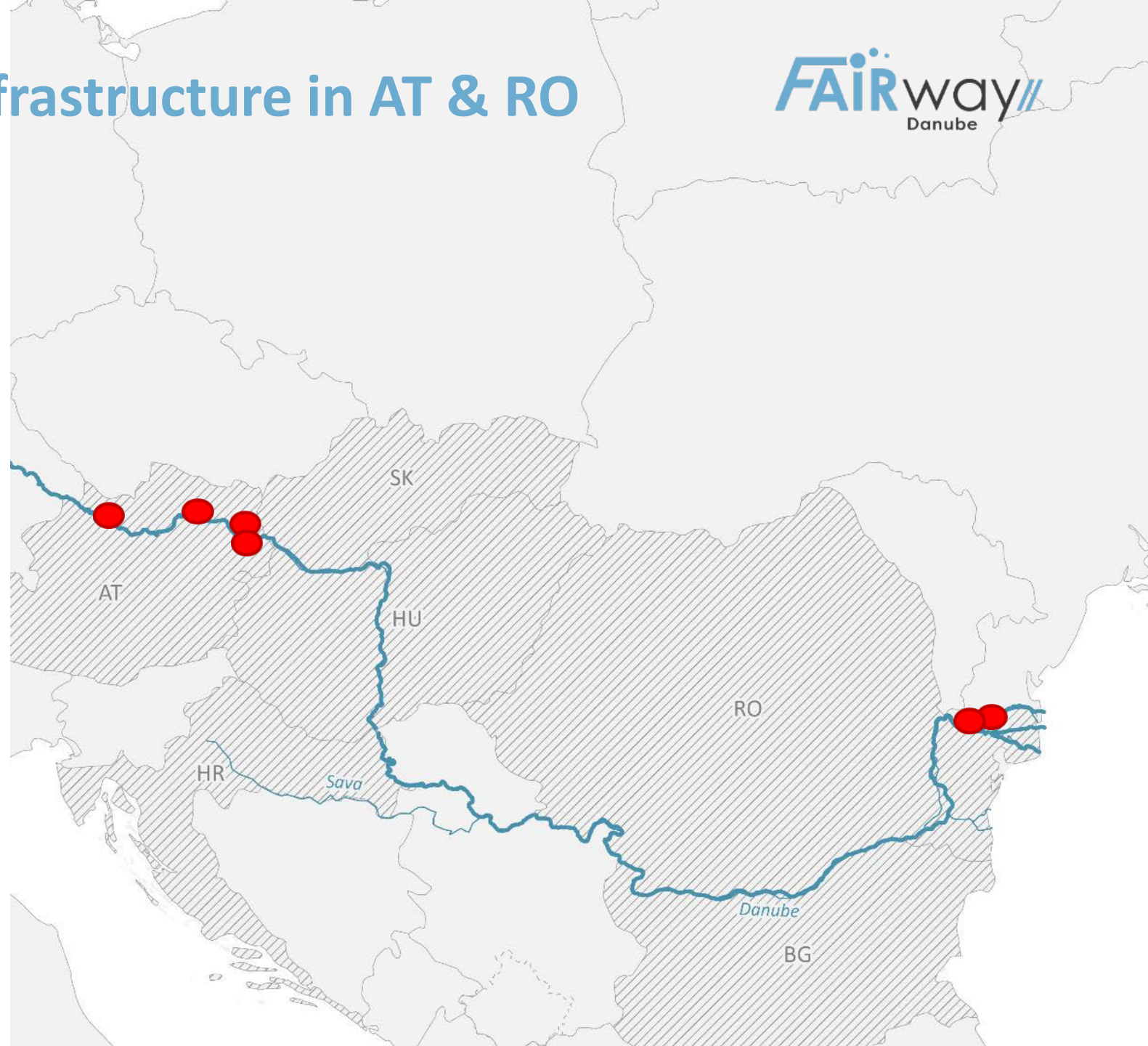
Previous Upgrade in Linz



Upgrade of mooring infrastructure in AT & RO

Planned upgrade at 6 locations:

- two locations in Aschach - Austria
- Harbour Krems - Austria
- two locations in Vienna – Austria
- Port Basarabi – Romania
- two locations at Port Medgidia - Romania



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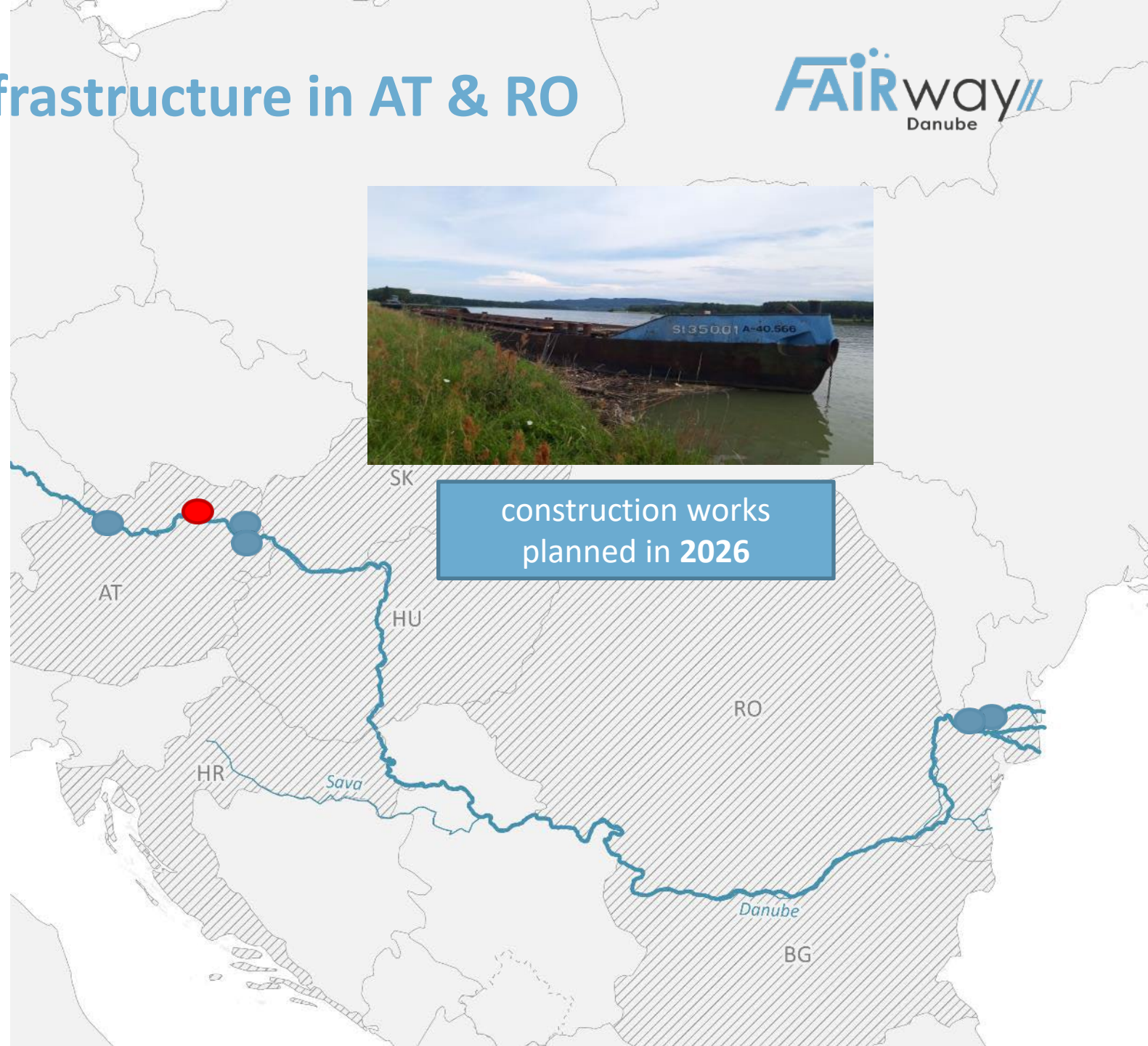
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- **Harbour Krems - Austria**
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construction works
planned in 2026



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- two locations in Aschach - Austria
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Contract signature on
3 March 2025



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Danube



www.fairwaydanube2.eu

Thank you for your attention!



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