

Danube Commission Expert Meeting on Development of Ports and Port Operations

9 March 2022, 09:30 – 16:00 CET

AGENDA

1. Welcome & Introduction
2. DPN's new initiative: E4Danube
- 3. Moderated discussion**
4. Supporting slides
 - Pro Danube at a glance
 - Green Deal for Danube River Transport – policy initiative based on cooperation and commitment
 - DAPhNE project
 - DPN - platform for continuous and coherent transnational and cross-border cooperation among Danube ports

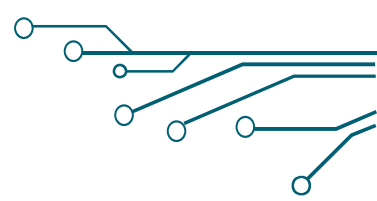
On-shore power supply for Danube ports, how best to implement?

Projects and initiatives in the DR ports

Presenter: Robert Rafael, General Manager Pro Danube Management GmbH

Technical Secretariat of the Danube Ports Network

DPN's new initiative: E4Danube



- The project aims to investigate the economic viability of on-shore power supply (OPS) in ports, including the applicable sourcing options, as well as the uptake by vessels and potential other users in the Danube Region.
- Several important aspects to be considered: environmental, technical, legal and infrastructural requirements along three different “port location types”:
 - Ports in cities
 - Ports in industrial areas
 - Remote ports
- “Best-Case” solutions and applicable pathways for the deployment of OPS as well as for a potential storage of energy (batteries, hydrogen, LNG, etc.) will be analysed.
 - Ports as hubs for energy production & storage serving a wide range of customers

E4Danube – Relevance of the project

- The **European Green Deal** – aiming to zero net emissions of greenhouse gases by 2050 and Europe to be the first climate-neutral continent
- **EU Strategy for the Danube Region**
 - Priority 1: A Smarter Danube Region
 - Priority 2: A greener, low-carbon Danube Region
- **NAIADES III** action plan - to boost the role of inland waterway transport in our mobility and logistics systems
 - Flagship 5: Developing inland ports as multimodal alternative fuels infrastructure hubs
 - Action 17: Study to support the greening of inland ports 2021
 - Action 18: Revision of the Alternative Fuels Infrastructure Directive and a roll-out plan with funding opportunities and requirements
- Learnings from the [CCNR / viadonau workshop](#) and respective initiatives

Selection* of relevant Danube ports initiatives & projects

I. Digitalisation, smart infrastructure, use of smart technologies and deployment of applications

- Implementation of EURIS at EU level and CEERIS at corridor level (e.g. RIS COMEX project) introducing a harmonised solution to support smart navigation in relation to i) voyage planning (fairway information, tracking & tracing) and for ii) administrative reporting
- Physical project - testing Physical Internet by means of 4 logistics scenarios
- Implementation of PLATINA 3 project with dedicated activities in relation to synchromodality, smart waterways & smart ports infrastructure
- DIWA project providing solutions for waterway administrations
- PCS solution for ports in HU
- Deployment of smart technologies for terminal operations (e. g. PIONEERS)

- Development of a Danube region Port Community System solution
- Development of sustainable and resilient IWT solutions (4SUREIWT)

II. Development of alternative fuels infrastructure incl. electrification

- Further development of on shore LNG infrastructure in AT, SK, HU (e.g. Ennschafen)
- Initiatives to kick-start the use of hydrogen as fuel (e.g. H2 meets H2O, Green Hydrogen for Blue Danube)
- EU wide initiative for implementing OPS in maritime ports (e.g. EALING)
- Existing OPS solutions in inland ports – e.g. NL, DE, AT, RO

- Development of a harmonized approach for the deployment of OPS infrastructure in inland ports

III. Sustainable cargo handling infrastructure development for efficient port operations & services, new logistics concepts

- Operation of the covered trimodal terminal in Giurgiu, Romania (e.g. High Performance Green Port Giurgiu)
- Development of concepts for container handling & container transporting vessels (NOVIMAR)
- Studies for the roll-out of a green container terminal in the Port of Constanta as access to the Danube Region (GROWPORT)
- Port solutions for efficient, effective and sustainable multimodality (MultiReload)

PIONEERS

PLATINA3
WT policy platform

NOVIMAR
VESSELTRAIN

CEERIS

PGPG
STAGE II CONSTRUCTION

DIWA

PhysICAL

RIS
COMEX

* DISCLAIMER: The above list is not comprehensive.

Other relevant projects with Danube stakeholders



with the support of
the European Union

Active contribution to the implementation of various other related projects dealing with greening technologies, waterborne promotion, education & training.



<https://www.waterborne.eu/projects/coordination-projects/steerer-about>



<https://www.waterborne.eu/projects/coordination-projects/lasting/about-lasting>



Series of FAIRWay projects

<http://www.fairwaydanube.eu/>

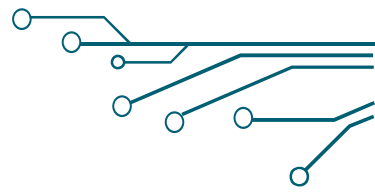


<https://www.iwt-competencies.eu/>



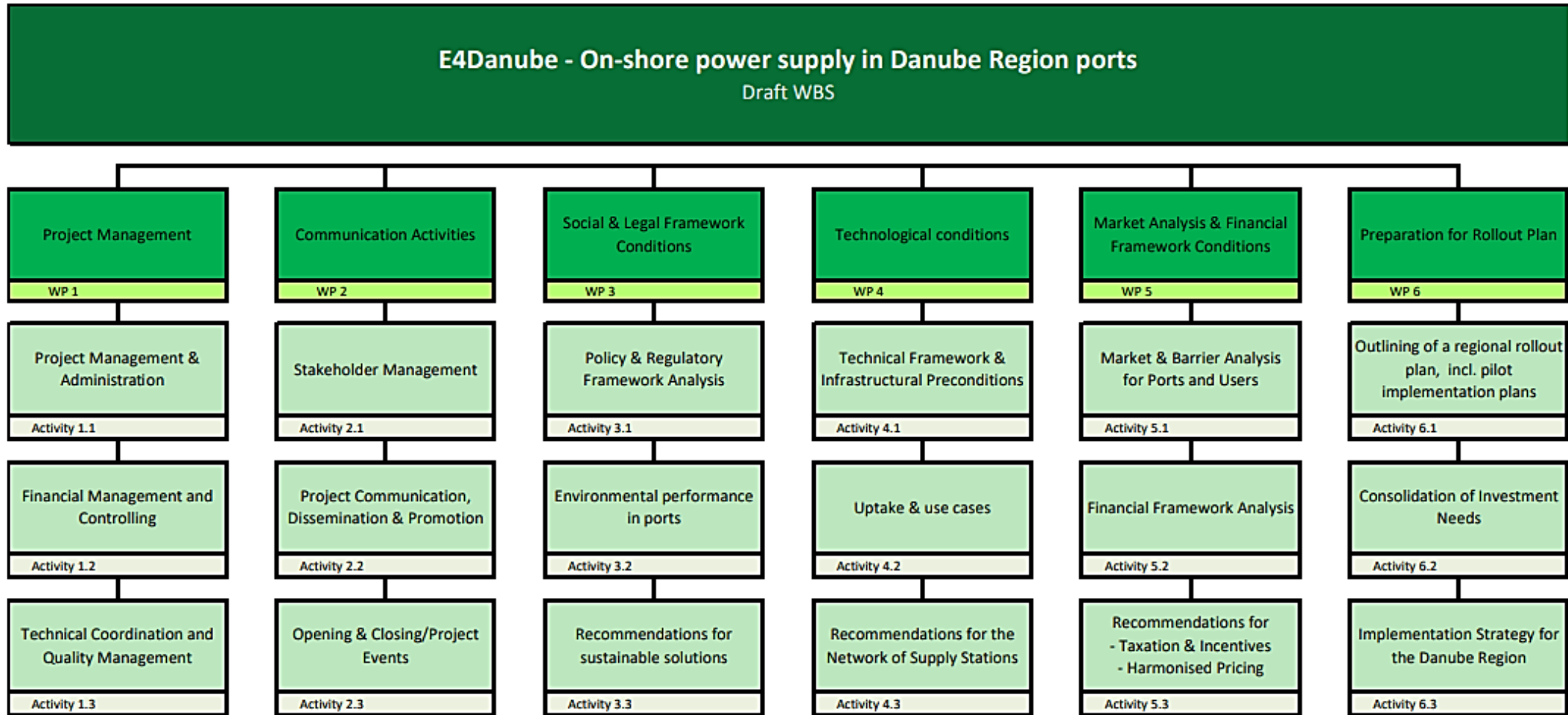
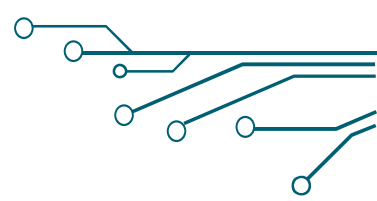
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E4Danube – Project Main Objectives

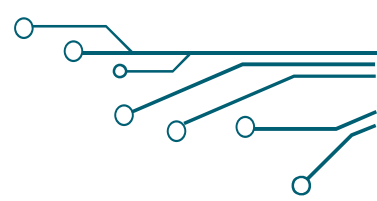


- Addresses Danube ports to provide additional puzzle-stones for the transition towards a zero-emission transport mode
- Provides recommendations for the three “port location types”
- Brings together energy and transport experts aiming for a sustainable integration of smart and renewable energy storage and management
- Considers the specific needs and infrastructural requirements of the ports & the customers (e.g. e-vessels) emerging in the future
- Complies with the corridor approach reflecting on possibilities for a coordinated roll-out including legal, technical and financial framework → **DISCUSSION**

E4Danube – Proposed WBS



Q&A with Danube Region Port Stakeholders

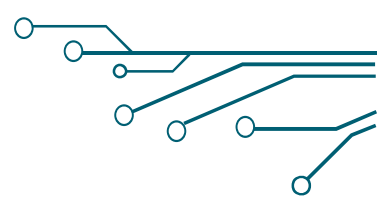


1. Status Quo Analysis

1.1 What is the status of OPS infrastructure in your ports? (maritime vs inland where available)

1.2 Have there been any studies conducted in this regard – pre-feasibility /feasibility studies (incl. specific technical requirements, investment costs)?

Q&A with Danube Region Port Stakeholders

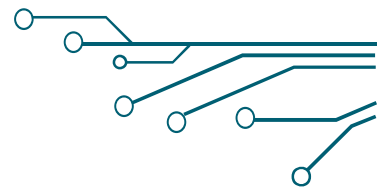


2. Market Analysis

2.1 What are the most important triggers for Danube ports to establish OPS connections?

2.2 What kind of demands have been received from vessel owners / operators (cargo & passenger) towards the ports?

Q&A with Danube Region Port Stakeholders



3. Regulatory Framework Analysis and Financial Framework Analysis

3.1 Are there any regulations / guidelines in force stipulated by municipalities / counties / regions etc. that oblige / motivate the use of OPS?

- If yes, what are the main framework conditions, requirements in those?
- If no, are there any discussions taking place on the local level?

3.2 Are there any regulations in force effecting Danube ports concerning (re)selling electricity towards inland vessels?

- If yes, are those reflecting pricing, taxation, billing etc.?
- Is there a difference if the electricity is used as a fuel or “only” instead of the auxiliary engine?
- If no, are there any discussions taking place on the national / local level?

Q&A with Danube Region Port Stakeholders



4. Implementation of a DR Strategy

4.1 Are Danube ports interested in adopting a harmonised approach towards the implementation of OPS facilities in a coordinated way at corridor level?

Thank you for your attention!



Pro Danube – the voice for better infrastructure and innovation in Danube transport

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Platform for the cooperation of Danube Region ports

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Supporting slides

- **Pro Danube at a glance**
- **Green Deal for Danube River Transport – policy initiative based on cooperation and commitment**
- **DAPhNE project**
- **DPN - platform for continuous and coherent transnational and cross-border cooperation among Danube ports**

Pro Danube at a glance

Acting for Danube minded businesses

PDI is a platform of private companies with strategic economic interest in better framework conditions and higher public investment in the Danube transport & logistics system.

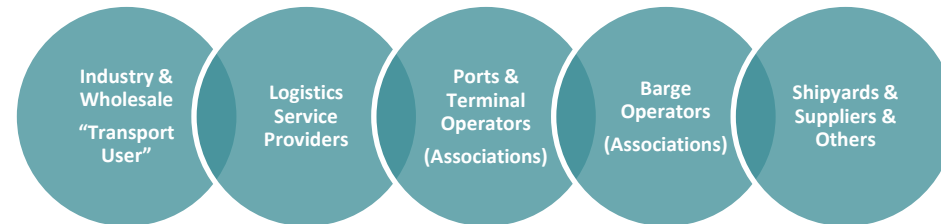
PDI in a nutshell

- Established autumn 2011 by a group of companies & associations
- Non-profit association based in Vienna
- Network of currently more than 180 companies
- More than a lobbying organisation as it initiates and executes projects
- Service company: Pro Danube Management GmbH
- Initiator & coordinator of policy initiatives & projects in IWT, port development, digitalisation & greening
- More info at: www.prodanube.eu

Priorities

- Engagement for better waterway maintenance & execution of TEN T bottleneck projects
- Promotion of investment in Danube ports
- Support to modernization of Danube fleet
- Elimination of administrative barriers
- Active involvement in EC initiatives & programs

Members



Pro Danube at a glance

Acting for Danube minded businesses

Pro Danube serves its members with the support of the management company Pro Danube Management GmbH that acts as a competence centre for EU grants accession and for EU projects applications preparation as well as for consultancy and project management of IWT related EU-funded projects in the following fields:

- fleet modernisation
- alternative fuels
- ports development & digitalisation
- green and efficient navigation
- education and training.

Additionally, Pro Danube has organised several transnational know-how transfer events in relation to Danube fleet modernization and ports development.

More information at: <https://www.prodanube.eu/about-us/about-us-pdm>



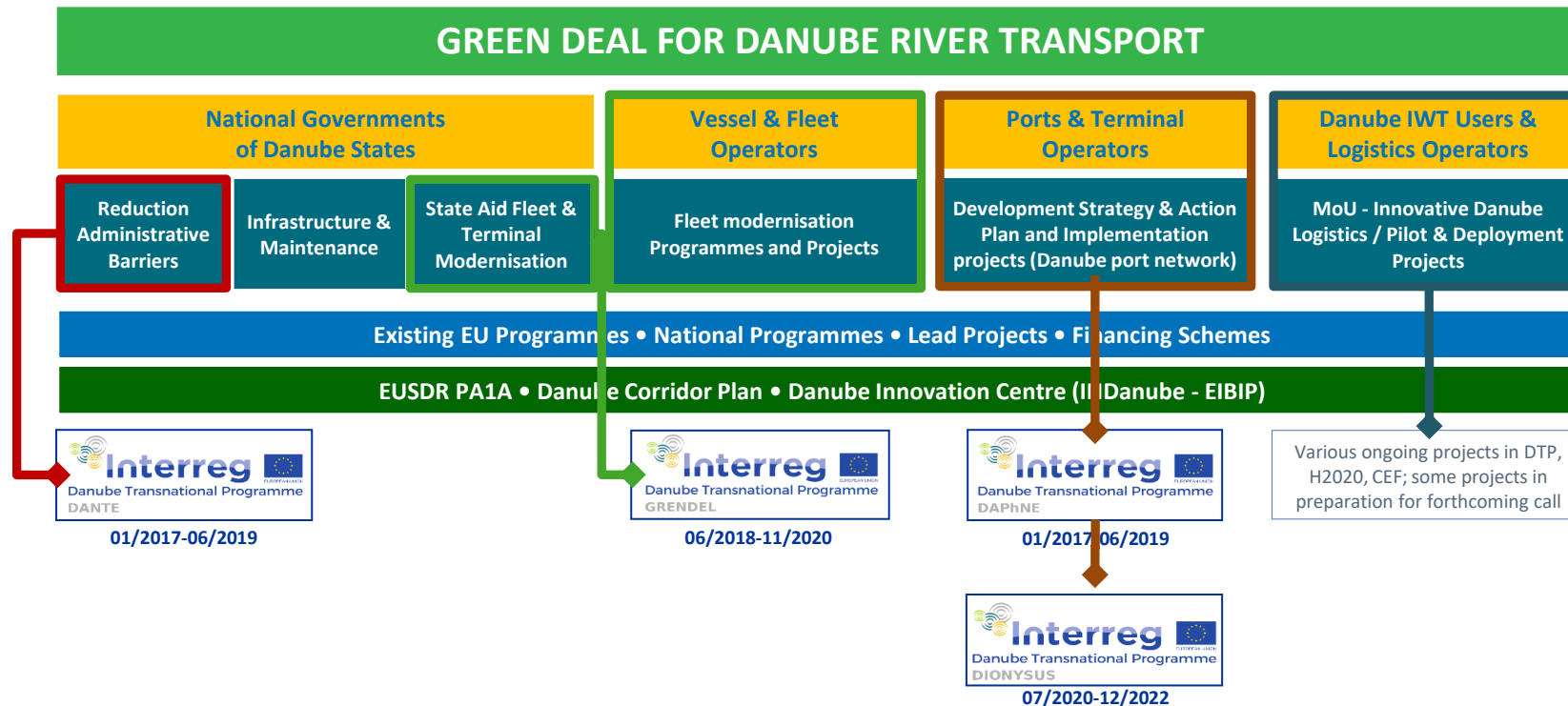
Tailored solutions to the needs of our members

GREEN DEAL for Danube River Transport

Policy initiative based on cooperation and commitment

It was initiated by Pro Danube mid-2016 and formed a new policy and business framework consisting of coordinated cooperation between public and private stakeholders to improve efficiency and environmental performance of Danube waterway transport system.

The Green Deal proposes solutions **that focus on the modernisation of the fleet, the reduction of the environmental impact and the development of Danube ports as catalysts for economic development on the regional level and beyond.** In 2017, PDI successfully started the implementation of the Green Deal by means of DANTE, DAPhNE transnational projects and has taken serious actions towards the modernization of the Danube fleet in the framework of the GRENDEL approach.



DAPhNE Project (finalised project)

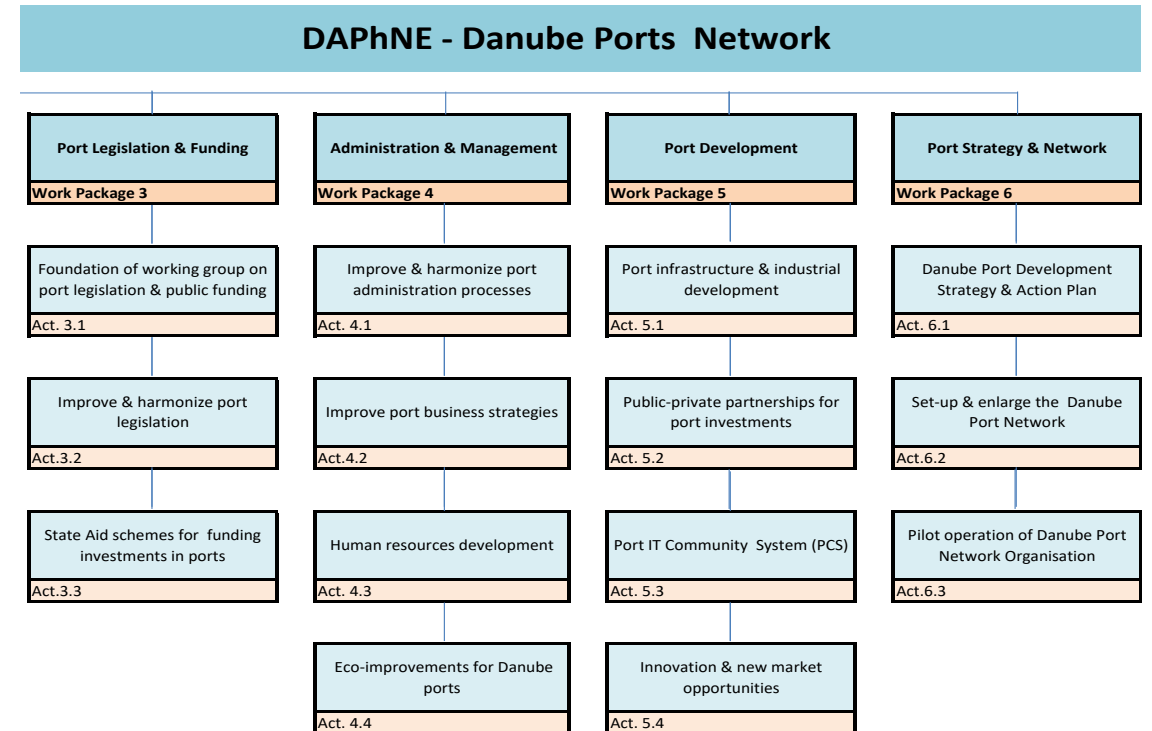
Danube Ports Network



- **Improve the balanced development** of Danube Ports as eco-friendly, well accessible multimodal hubs for the transport system of the region
- **Turn Danube Ports into buzzing economic centers** functioning as catalysts for economic growth and creation of high value jobs
- **Produce guidelines, recommendations and concrete pilot activities** based on best practices and leading into an overall development strategy and action plan
- **Set-up a Port Network** to eliminate gaps between stakeholders
- **Improve the eco-performance of the ports** in order to contribute to the ecological balance of the river and to improve the situation of the port municipalities

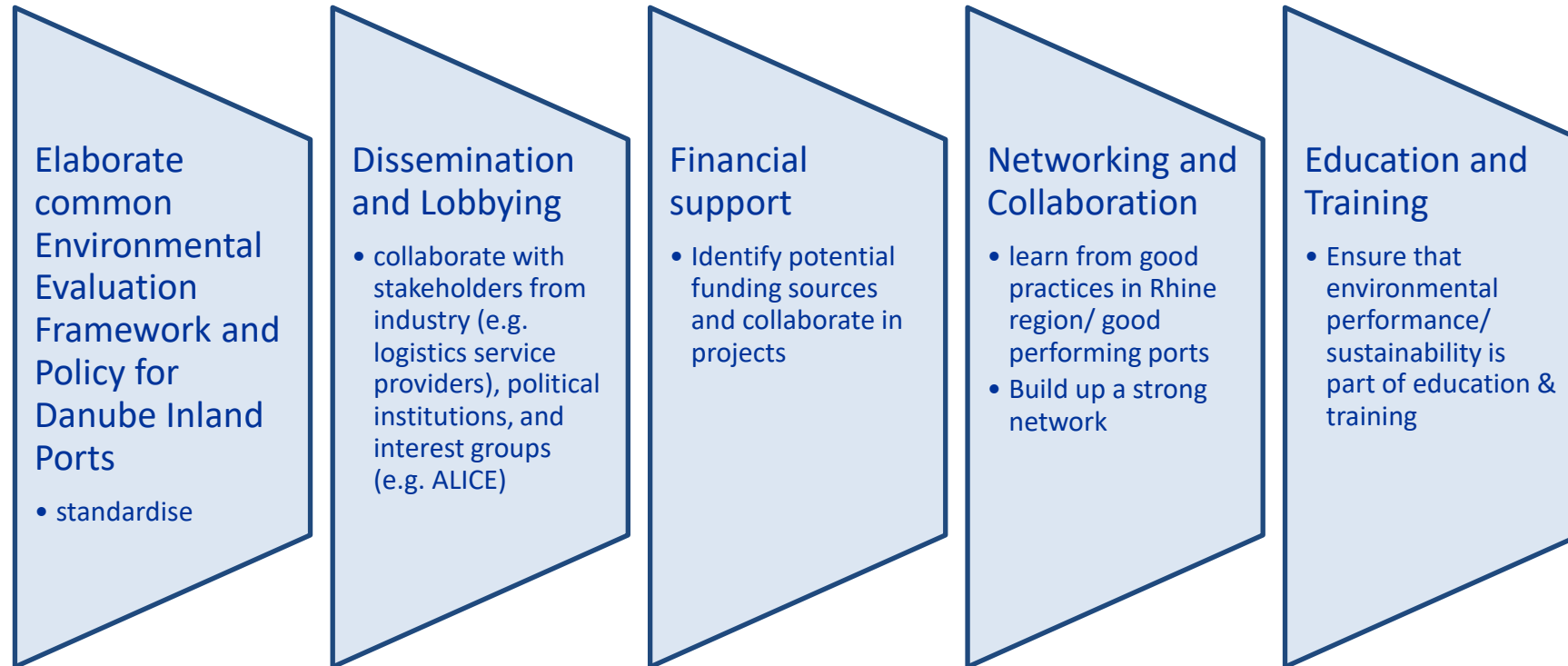
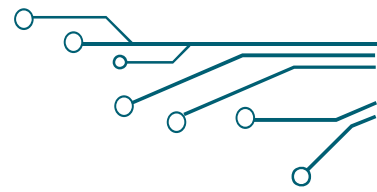
Quick facts:

- Project duration: January 2017 – June 2019
- Budget: 2,985 M Euro
- 23 partners from 9 countries



DAPhNE Project (01/2017 – 06/2019)

Danube Ports Network



Recommendations to measure and improve the environmental performance of inland ports

DPN

Danube Ports Network

Launched in July 2018 in the framework of the DAPhNE project, the Danube Ports Network aims towards cooperation strengthening between inland and maritime ports in the Danube Region.

The Danube Ports Network brings **together public and private sea & inland ports and terminal operators from the Danube Region** willing to engage in a long-term, active and coordinated cooperation process benefiting the port industry and regional economy at large.

Through its activities, the Danube Ports Network provides:

- A well-coordinated platform for continuous and coherent transnational and **cross-border cooperation** among partner organisations at policy, technical and operational level;
- A stronger voice and a greater capacity to contribute to and influence along with European IWT Sector organisations the EU Inland Waterways Transport and ports **policy agenda**;
- A dynamic inclusive network offering partner organisations better **channels of engagement with EU institutions and relevant port stakeholders** at national, regional and EU level (ports associations, funding institutions etc.);
- Innovative approaches and **sustainable solutions** to environmental, economic and societal challenges confronting inland and sea ports and terminals in the Danube Region linking to the western Black Sea;
- **Project-based access** to financial support through increased use of European and national support programs for infrastructure development, environmental improvements, human resource strengthening, improved business processes and successful market activities.

More details at: <https://danubeports.eu/>