Trucks in-trucks out: smart monitoring in the port of Trieste

The contribution of EU funds
ACCESSMILE, MERIDIAN and MILEPORT

Munich, 4th June 2025

WHY EU PROJECTS?

- To pursue the mission of the Ports of Trieste and Monfalcone

- To bridge infrastructure missing links

- To mitigate climate change

- To optimise existing port infrastructures while works and upgrades are implemented

- To make port operations
  - ➤ smarter
  - ➤ faster
  - ➤ more sustainable

- To enhance cross-border and transnational cooperation with other ports and inland terminals

TERRITORIAL COOPERATION & CHALLENGES

✓ Maritime transport is the most sustainable way of transporting goods

✓ Central Europe and Italy-Croatia are crossed by 8 of the 10 European transport corridors, making them a hub for goods and services.

✘ Last mile accessibility to ports and multimodal freight terminals occurs by road, with negative impacts such as road congestion, leading to air pollution and CO_2 emissions, thereby contributing to climate change

✘ Digitalisation facilitates cooperation between supply chain actors, enables better visibility and real-time management of cargo flows, but its potential is not fully exploited

ACCESSMILE and MILEPORT

- ACCESSMILE - Improving regional ACCESSibility of last MILE freight connections in Central Europe

- Co-funded by the Interreg Central Europe Programme 2021-2027

- Project duration: 04/2023 - 03/2026

- Budget: 2,210,860 euros – 1,768,688 euros ERDF

- MILEPORT - Improving the last MILE accessibility of Adriatic PORTs

- Co-funded by the Interreg Italy-Croatia Programme 2021-2027

- Project duration: 02/2024 - 07/2026

- Budget: 2,575,574.60 euros – 2,060,459.68 ERDF

ACCESSMILE and MILEPORT - PARTNERSHIPS
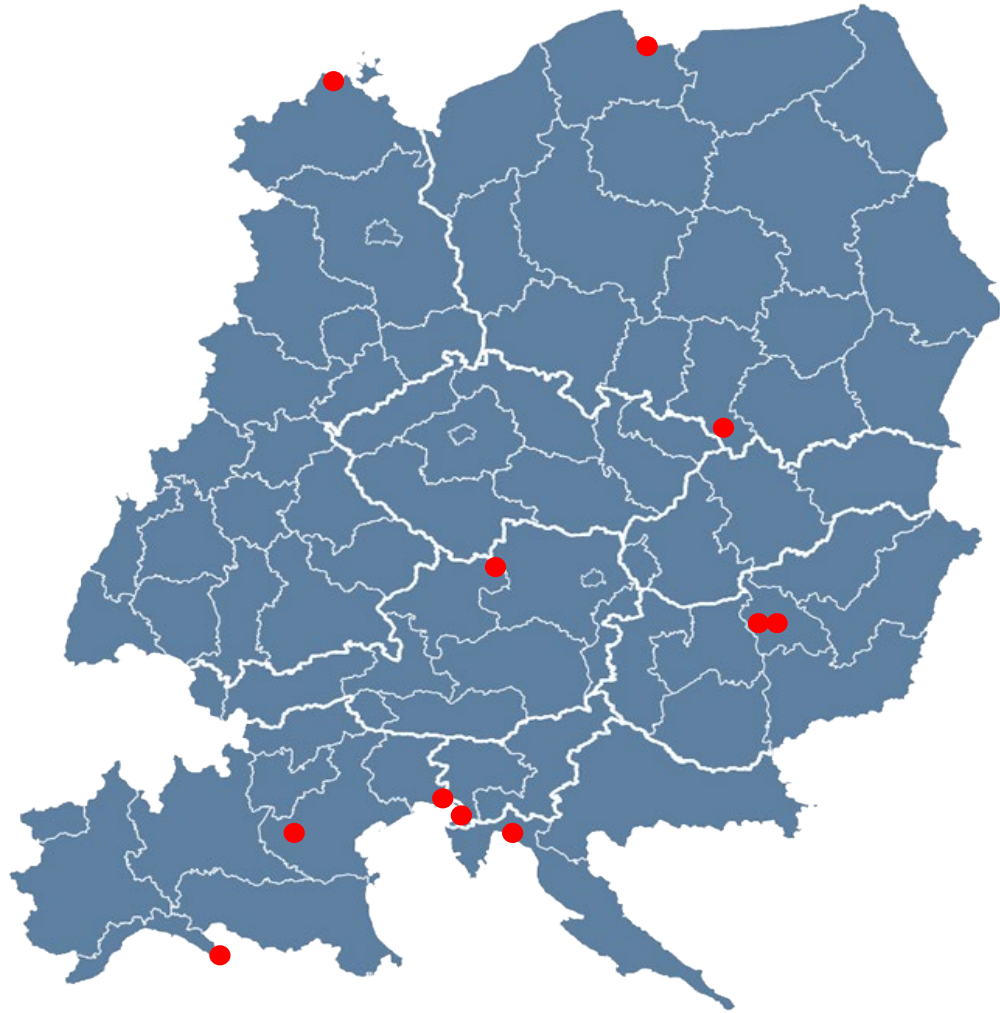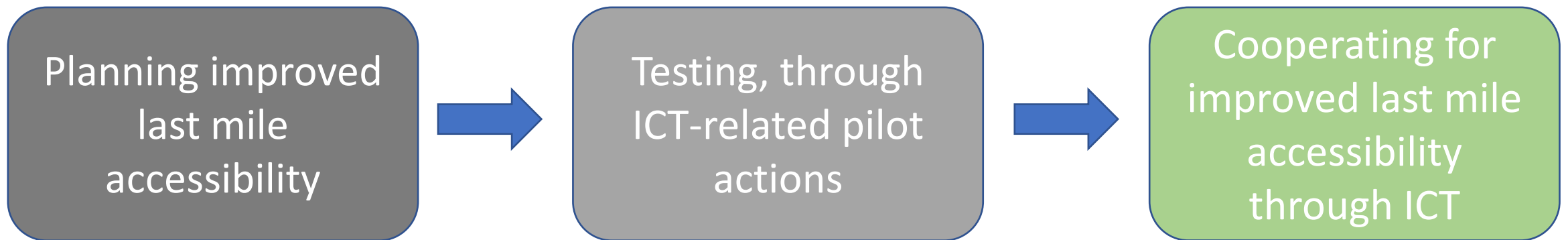
ACCESSMILE and MILEPORT - OBJECTIVES

Main objective: Both projects aim to smoothen the integration of ports/multimodal freight terminals in their cities and with their hinterlands by improving their last mile accessibility, strengthening territorial cohesion, through innovative IT solutions, delivering policy makers, maritime ports, port and logistics operators new planning tools, tested through joint pilot actions and ensuing solutions in three key topics:

1) transport flow management and vehicle booking systems;
2) gates & entry/exit tools;
3) cargo bundling (only ACCESSMILE)

Planning improved last mile accessibility → Testing, through ICT-related pilot actions → Cooperating for improved last mile accessibility through ICT

DIGITALISATION STRATEGY

DIGITALISATION AND PORT ROAD ACCESSIBILITY

- In 2022, through the Ursa Major neo project, the Port of Trieste developed an ad-hoc module of its PCS (Port Community System) for the complete digitalisation of the transit permissions (80.000) for the consistent Motorways of the Sea traffic flow with Turkey (almost 300.000 vehicles/year) by transforming this paper document into an electronic message, through the creation of the "pre-arrival notification"
- Thanks to this system, trucks directed to the port of Trieste can enter only if they have a daily permission, which is asked for and obtained through the new module of the PCS
- This has allowed smoother traffic flows to the port of Trieste, reducing queues and congestion

DIGITALISATION AND PORT ROAD ACCESSIBILITY

- Now, thanks to the MERIDIAN project, the Port of Trieste is developing a further step, i.e. the slot-booking feature, allowing trucks to enter the port only in a specific timeslot;
- A new module of the PCS dedicated to terminal operators is being developed as well as the module for the slot booking procedure, envisaging the creation of a new specific Module, called "slot booking", which will involve several actors, such as: the Haulier (and specifically the driver of the vehicle), the Terminal Operator, the Freight Forwarder, the Trieste Customs and Guardia di Finanza (Finance Police), as well as the Port Authority.

Interreg
CENTRAL EUROPE
Co-funded by
the European Union

ACCESSMILE

MERIDIAN

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Italy – Croatia

MILEPORT

DIGITALISATION AND PORT ROAD ACCESSIBILITY

- To optimise the overall truck entry/exit procedure, thanks to the ACCESSMILE project the port of Trieste is developing the pre-exit notification
- The aim of this project, similar to what has been achieved with the pre-arrival notification, is to:
  - optimise the time of exit from the port areas;
  - automatically detect anomalies related to the movement of goods;
  - decongest the port areas;
  - implement automated control of the visa exit from the port;
  - ensure customs and logistics monitoring of the flow of goods.

DIGITALISATION AND PORT ROAD ACCESSIBILITY

- Finally, thanks to the MILEPORT project, the Port of Trieste will install 21 sensors (laser scanners) at the port gates and a few hundred meters before the entry in the port, including photovoltaic panels necessary for their power supply, control units and software, in order to:
  - monitor the queues/congestion
  - measure these KPIs as to adapt the pre-arrival notification procedure to the changing circumstances, differentiating VBS policies for trucks transporting containers or other ITUs

Thank you for your kind attention!

**Port Network Authority of the Eastern Adriatic Sea
Ports of Trieste and Monfalcone**

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www.adspmao.it
www.interreg-central.eu/projects/accessmile/
www.italy-croatia.eu/web/mileport
https://meridian-corridors.eu/