EUSAIR TSG2

16th meeting of the sub-group of transport
18 March 2022

Capitalization of the Interreg ADRION projects
- ADRIPASS and ADRIPASS PLUS-

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Central European Initiative (CEI)

ADRIPASS project

ADRIPASS - Integrating multimodal connections in the Adriatic-Ionian region aimed at improving maritime-hinterland freight connections to boost growth and economic development of the transport sector in the ADRION region.

FOCUS

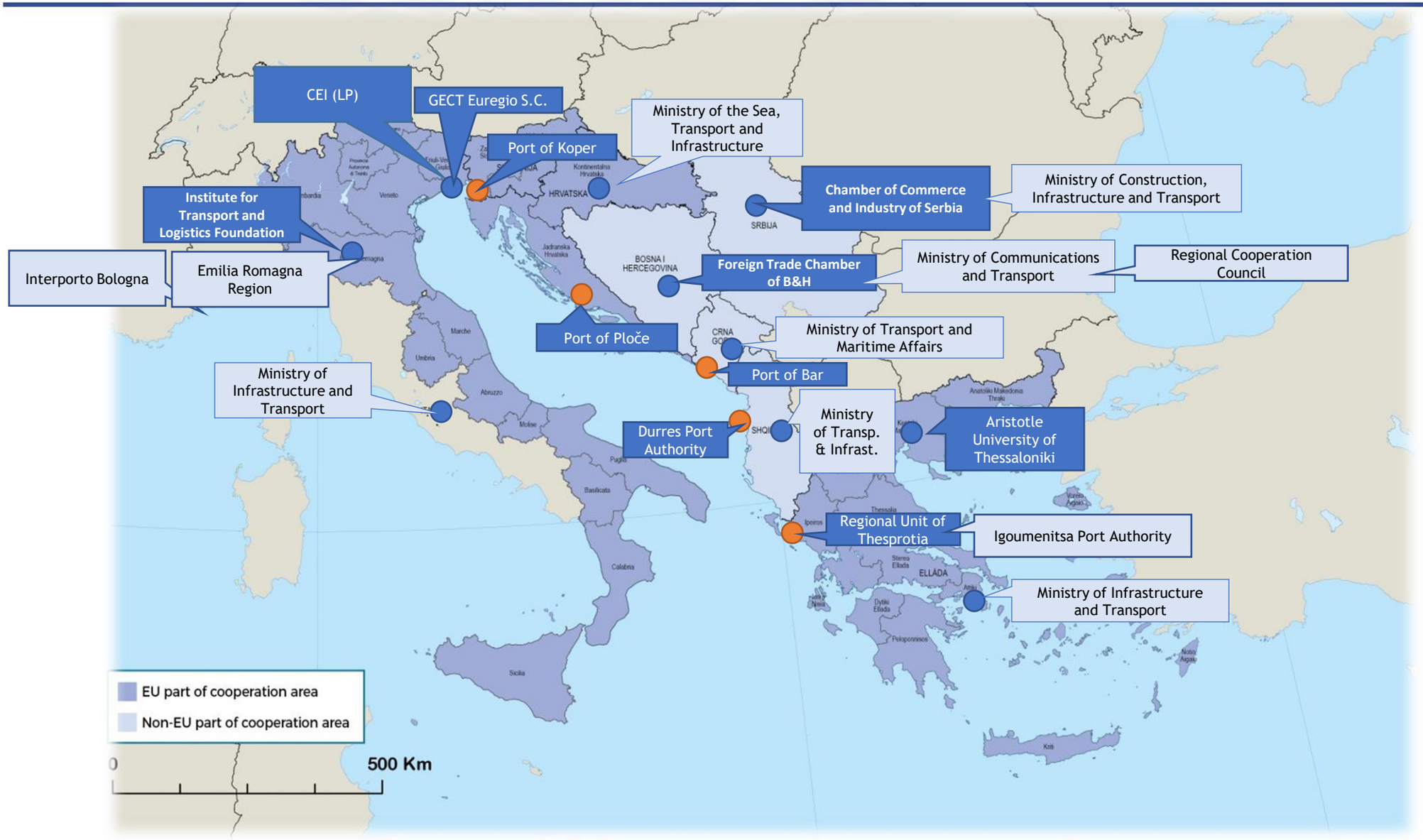
Identification of soft measures to streamline and enhance the connections on the TEN-T Network (extended to the Western Balkans), where most Border Crossing Points (BCPs) are located. It also tested specific ICT solutions for streamlining freight transport in ADRION ports, setting standards, which could be used within Electronic Data Interchange interfaces at BCPs.

Duration: Jan. 2018 – Dec.2020

11 project partners & 8 countries involved: Italy, Serbia, Greece, Slovenia, Albania, Croatia, Montenegro, Bosnia and Herzegovina

ADRIPASS project is EUSAIR labelled project – within the "Soft measures" category for Pillar II – Connecting the region.

ADRIPASS partnership



ADRIPASS goals

To improve the planning capacities of **transport stakeholders** and **policy makers** facing the same challenges concerning the **multimodal transport accessibility** and **network efficiency** in the ADRION region, from both a strategic and operational perspective, through the increased cooperation among them.

By **analyzing bottlenecks** on the TEN-T Corridor sections in the ADRION region.

By **testing ICT solutions**.

By establishing a **vision** for transport facilitation in the ADRION region.

ADRIPASS goals --> outputs

To improve the planning capacities of **transport stakeholders** and **policy makers** facing the same challenges concerning the **multimodal transport accessibility** and **network efficiency** in the ADRION region, from both a strategic and operational perspective, through the increased cooperation among them.

By **analyzing bottlenecks** on the TEN-T Corridor sections in the ADRION region.

Data collection
&
Final trans. action plan for transport facilitation in the ADRION region

By **testing ICT solutions**.

5 Pilot actions
&
ICT Action plan for improving multimodal transport

By establishing a **vision** for transport facilitation in the ADRION region.

Trans. cooperation network
&
Transnational strategy

ADRIPASS analysis – data collection

ADRIPASS analysed physical and non-physical bottlenecks on the Trans-European Transport Networks (TEN-T) corridor sections of the ADRION region, in order to improve multimodal freight transport in the area.

FOCUS

Analysis of BCPs at corridor level and development of Trans-national Action Plan for transport facilitation in the ADRION region.

Specific attention on those sections recently extended to the Western Balkans, where most BCPs are located.

The analysis was performed with **surveys and data collection.**

- Determine the operational performance
- Identify potential improvements (soft measures)

ADRIPASS analysis – data collection

Road BCP	Country	TEN-T Corridor
Bogorodica	North Macedonia	OEM
Blace	North Macedonia	OEM
Dobrakovo	Montenegro	OEM
Evzonoi	Greece	OEM
Promachonas	Greece	OEM
Gostun	Serbia	OEM
Horgos	Hungary	OEM
Hani i Hotit	Albania	OEM
Merdare	Serbia/Kosovo	OEM
Presevo	Serbia	OEM
Tabanovce	North Macedonia	OEM
Lipovac/ Bajakovo	Croatia	OEM
Obrežje	Slovenia	MED
Batrovci	Serbia	MED
Bosanski Samac	Bosnia and Herzegovina	MED
Bregana	Croatia	MED
Debeli Brijeg	Montenegro	MED
Gorican	Croatia	MED
Kakavia	Greece	MED
Karasovici	Croatia	MED
Klek	Croatia	MED
Metkovic	Bosnia and Herzegovina	MED
Neum I NW	Bosnia and Herzegovina	MED
Neum II SE	Bosnia and Herzegovina	MED
Zupanja	Croatia	MED
Zatoni Doli	Croatia	MED
Bijaca	Bosnia and Herzegovina	MED

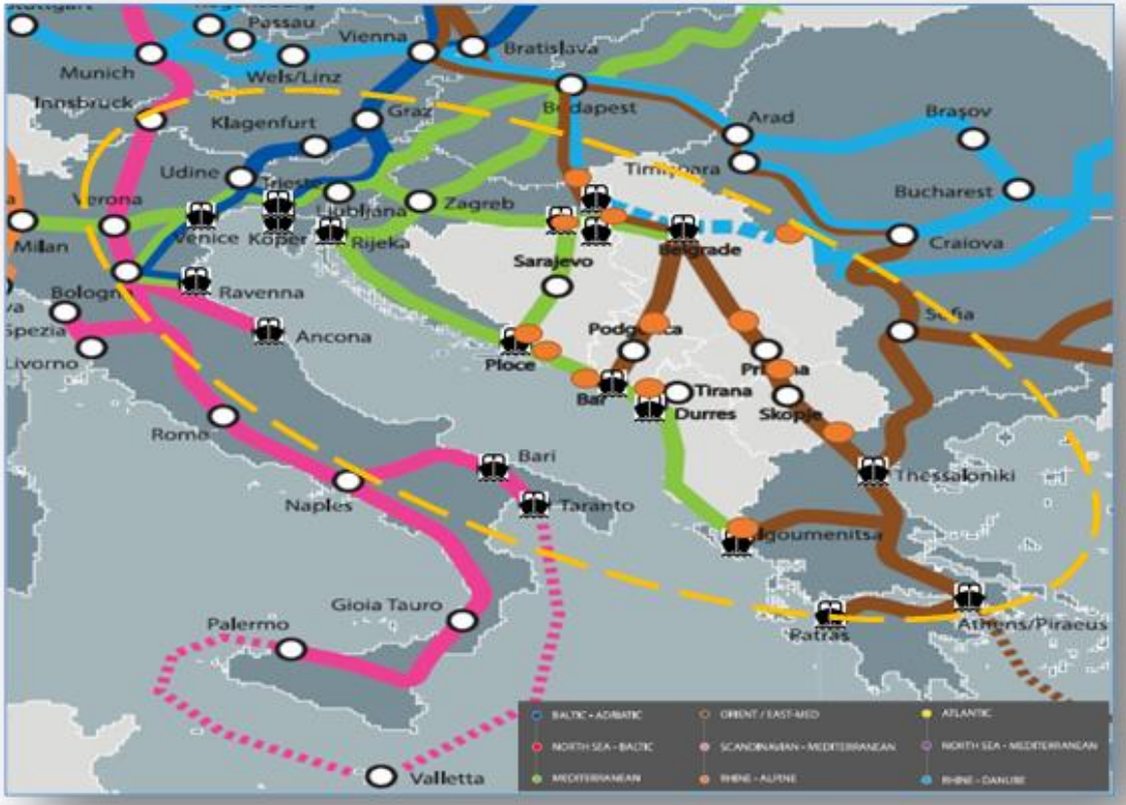
Maritime Port	Country	TEN-T Corridor
Durrës	Albania	MED
Igoumenitsa	Greece	OEM
Patras	Greece	OEM
Piraeus	Greece	OEM
Rijeka	Croatia	MED
Thessaloniki	Greece	OEM
Trieste	Italy	BAC, MED
Venezia	Italy	BAC, MED
Ploče	Croatia	MED
Bar	Montenegro	MED, OEM
Ravenna	Italy	BAC, MED
Vlore	Albania	MED
Koper	Slovenia	BAC, MED

Rail BCP	Country	TEN-T Corridor
Idomeni	Greece	OEM
Ristovac/ Presevo	Serbia	OEM
Sid	Serbia	OEM
Tovarnik	Croatia	OEM
Vrbnica	Serbia	OEM
Bajza	Albania	MED
Tuzi (Railway Station)	Montenegro	MED
Bosanski Samac	Bosnia and Herzegovina	MED
Capljina (BA)	Bosnia and Herzegovina	MED
Capljina (HR)	Croatia	MED
Dobova	Slovenia	MED
Subotica	Serbia	OEM
Bijelo Polje	Montenegro	OEM

IWW Port	Country	TEN-T Corridor
Slavonski Brod	Croatia	MED, RDAN
Vukovar	Croatia	RDAN
Brčko	Bosnia and Herzegovina	RDAN
Northern Italy Waterway System consisting of the river PO and its connecting canals (Section Milano-Cremona-Mantova-Venezia-Ravenna-Trieste along the Mediterranean Core Network Corridor)	Italy	MED

Logistic facility	Country	TEN-T Corridor
Padova	Italy	BAC, MED
Trieste	Italy	BAC, MED
Bologna	Italy	BAC, MED, SCMED
Maribor Tezno	Slovenia	BAC, MED
Ljubljana - Moste	Slovenia	BAC, MED
Vrapče, Zagreb	Croatia	MED
Agit d.o.o.	Croatia	MED
Adria Terminal Sežana	Slovenia	BAC, MED
JP Luka Brčko	Bosnia and Herzegovina	RDAN
Pristina	Kosovo	OEM
Smederevo	Serbia	OEM

ADRIPASS analysis – data collection



Focus of the analysis:

- 30 Road BCPs
- 21 Railway BCPs
- 15 inland waterways ports
- 28 inland terminals and
- 15 sea ports

Conclusion(s): There is a large margin for improvement of operations at ports and gateways and BCPs. Unless serious measures are taken, border crossings and other non-physical barriers will still hamper the full exploitation of existing, upgraded or even completely new and modern infrastructures.

Report available online.

ADRIPASS analysis – Trans. action plan

Transnational action plan for transport facilitation in the ADRION region is based on a mixed bottom-up and top-down approach (data collection + relevant strategic studies/plans).

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The action plan proposes priority measures to be taken at corridor level for overcoming the identified bottlenecks, complementing the results already achieved in past experiences.

Macro-categories were identified for problems, barriers or bottlenecks that affect the intermodal transport in the ADRION region, and relevant solutions.

Supplementary sub-categories of measures were identified to reflect the aim of the ADRIPASS project - to improve intermodal transport in the ADRION Region with a focus on the adoption and deployment of ICT tools and solutions to solve operational and administrative barriers, and support the interconnection between the logistics nodes.

Document available online.

ADRIPASS analysis – Measures

Category	ID	Problem Definition	Measure Definition	Type of Problem / Measure
Information Technology	IT	Deficiency of existing ICT technologies/solutions for the digitalisation of processes and system interoperability	Improvement/upgrade of the existing ICT infrastructure to foster transport digitalisation, the interoperability of communication and data sharing systems	Non-physical / soft
Operation and administration	OA	Inadequate staff number and competences, lengthy and paper-based procedures, long waiting times of intermodal and border crossing procedures	Hiring of additional/specialised personnel and provision of training courses to increase the quality of the working staff; implementation of ICT solutions to solve Operational and Administrative problems	Non-physical / soft
Telematic application for traffic management	TEL	Lack or deficiency of the existing telematic applications for traffic management	Deployment or upgrade of telematic applications for traffic management to the EU standards	Non-physical / soft
Utilities	U	Lack or poor conditions of the basic utilities (internet, telephone, drinkable water, toilettes, lit, etc…)	Provision of basic utilities (internet, telephone, drinkable water, toilettes, lit, etc…)	Non-physical / soft
Equipment	E	Lack of adequate equipment affecting the efficiency and effectiveness of processes at BCPs and transport nodes. This includes machinery, such as cranes weighbridges, x-ray scanners, etc…	Purchase and installation of equipment for the improvement of the process efficiency and effectiveness at BCPs and transport nodes	Non-physical / soft
Last Mile and hinterland connections	LM	Deficiency in the last-mile and hinterland transport interconnecting system (both inside and outside the node area)	Infrastructure improvement or expansion of the road and rail last-mile connections within and outside the node areas	Physical / hard
Infrastructure	I	Need of major infrastructure works and/or minor investments to remove physical and technical barriers, affecting operations and capacity of the infrastructure	New construction or modernisation of existing infrastructure aiming to remove physical and technical barriers or to increase the actual capacity	Physical / hard
Clean Fuels	CF	Lack of alternative clean fuels supply facilities	Realisation of alternative clean fuels supply facilities	Physical / hard

280 barriers

178 ICT measures

169 proposed measures

Due attention given to the implementation of **non-physical measures aimed at increasing the use of existing infrastructures**, making them more attractive by increasing their efficiency

ADRIPASS testing – Pilot Actions

With 4 pilot actions (Koper, Bar, Ploce, Igoumenitsa), and 1 pre-investment study (Durres), ADRIPASS was:

FOCUS

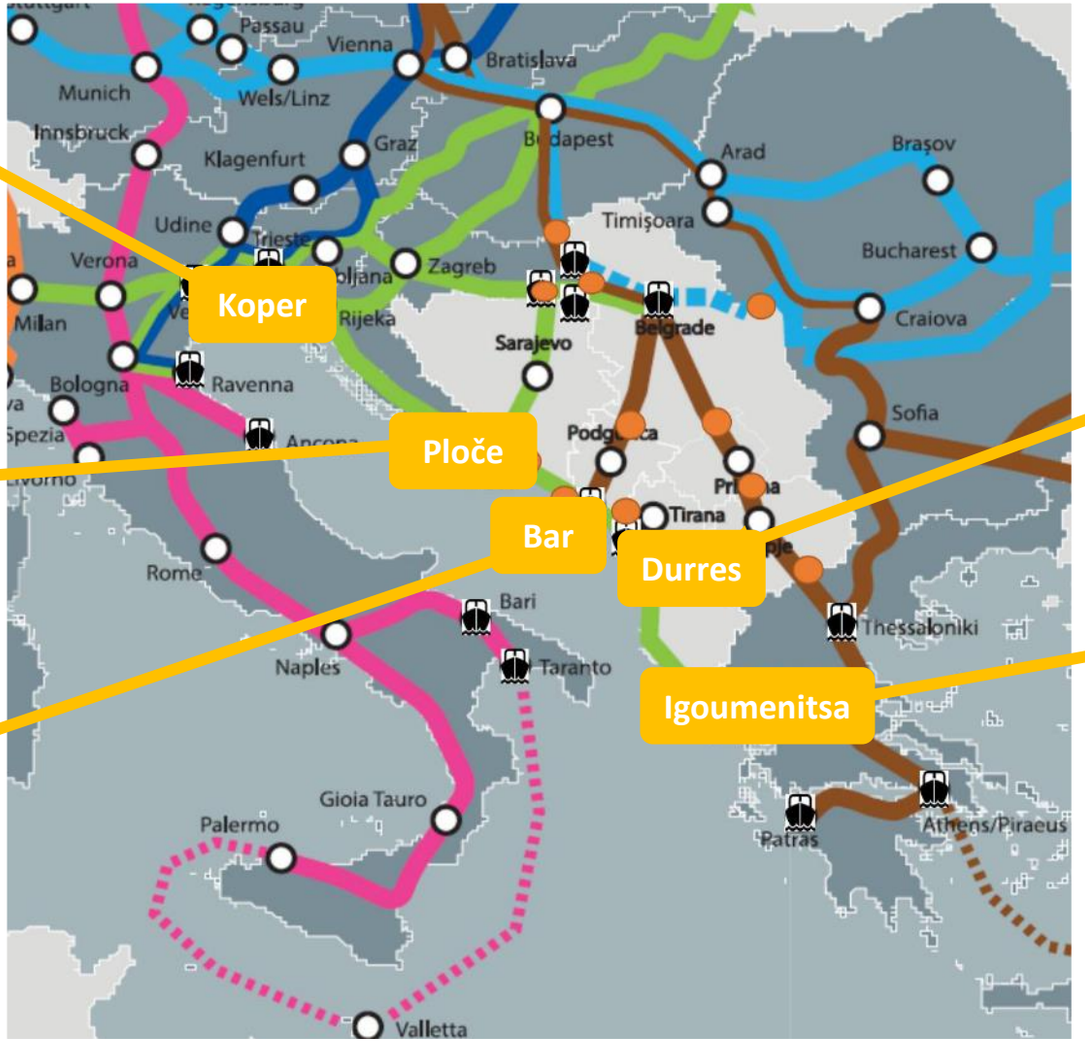
Testing specific ICT solutions (upgrades of PCSs) for streamlining freight transport in ADRION ports, setting standards which may be replicated to Electronic Data Interchange interfaces at BCPs.

The objective of the implementation of ICT tools and applications is to reduce problems and inefficiencies and to improve the performance of these corridors, by achieving:

- Elimination (reduction) of bottlenecks.
- Increase of transport capacity.
- Reduction of time needed for processes to be performed at the nodes.
- Promotion of multimodal transport.

ADRIPASS testing – Pilot Actions

Map of Core Network Corridors, Ports and BCPs of interest in ADRION region



Port of Koper
- ACAR Hybrid System ✓
- Vehicle Booking System upgrade ✓
- EDI center upgrade ✓

Ploče port authority
- PCS upgrade ✓
- Improved communication with port supply chain ✓

Port of Bar
- PCS upgrade ✓
- Possible mobile solutions ✓
- Control Center upgrade ✓
- Truck Module upgrade ✓

Durres port authority
- Pre-investment analysis ✓

Regional Unit of Thesprotia
- Platform for PCS flows analysis ✓
- AR virtual navigation mobile app ✓

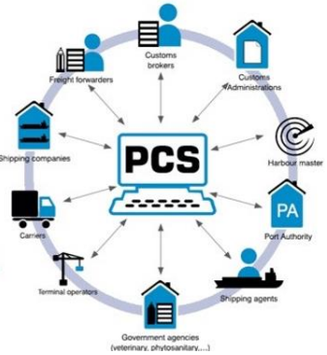
ADRIPASS testing – Pilot Actions

Interreg ADRION ADRIATIC-IONIAN
EUROPEAN UNION
European Regional Development Fund - Instrument for Pre-Accession II Fund
ADRIPASS

Results obtained:

- The **hybrid system ACAR** allows the registration and the booking of the arrivals/departures of trucks transporting cars in/from the port of Koper.
- The **Vehicle Booking System (VBS)** is an online platform that allows checking the cargo status and scheduling plans.
- The **EDI (Electronic Data Interchange)** systems are specific tools for the registration of containers entering/leaving the port.

(Port of Koper)



- Upgrade of PCS technology in order to develop a **central control management system** based on a single-window concept, being able to share and capture data to better analyze its flows in the Port of Ploce area
- Improvements in the traffic of goods **towards the hinterland**, considering the automations developed from the entry or exit respectively to or from the port.

(Ploce port authority)

Development of three new PCS modules:

- **The Control center module** allows stakeholders to use the reports and statistical data related to their roles in the port community
- **The Customs module - a**llows the custom administration of Montenegro to monitor cargo movement in the port of Bar
- **The Truck module** – allows regulation of the trucks and cars entering/exiting into/from the port of Bar

(Port of Bar)

ADRIPASS testing – Pilot Actions

Results obtained:

- New tool for analysing port-hinterland flows about road transport
- The toll station TYRIA on the Egnatia highway represents the gate for RUTH – data from/to Igoumenitsa
- Information about points of interest within the area of the Igoumenitsa port;
- Augmented reality tools (AR) in the port to provide information to truck drivers: available on Google Play and App Store *(Region of Thesprotia)*

- Drafted the guidelines for the implementation process of the **Port Information System** which will act as a single communication and exchange platform for the whole community that must exchange information with DPA as well as between the various stakeholders.
- Defined all the necessary requirements that the Project must solve with regards to the technical and functional specifications, the calculation of time and budget for an effective and successful implementation of the PCS of the Integrated Port System of Durres in collaboration with the companies concerned to the implementation of this system *(Durres port authority)*

ADRIPASS testing – ICT Action Plan

ICT action plan for improving multimodal transport in ADRION regions is based on activities from the pilot actions.

FOCUS

Promote the development of ICT tools at ADRION level in order to improve transport links between ports and hinterland logistic centres, as well as multimodality in the region.

The development of tools dedicated to the digitalization of solutions that enable a better link with the hinterland and the speed up of procedures on the logistic chain.

Document available online.

ADRIPASS vision – Transnational Strategy

Based on the results from project's analysis and testing phases, ADRIPASS seeked to provide a clear **vision and policy recommendations** by defining a

FOCUS

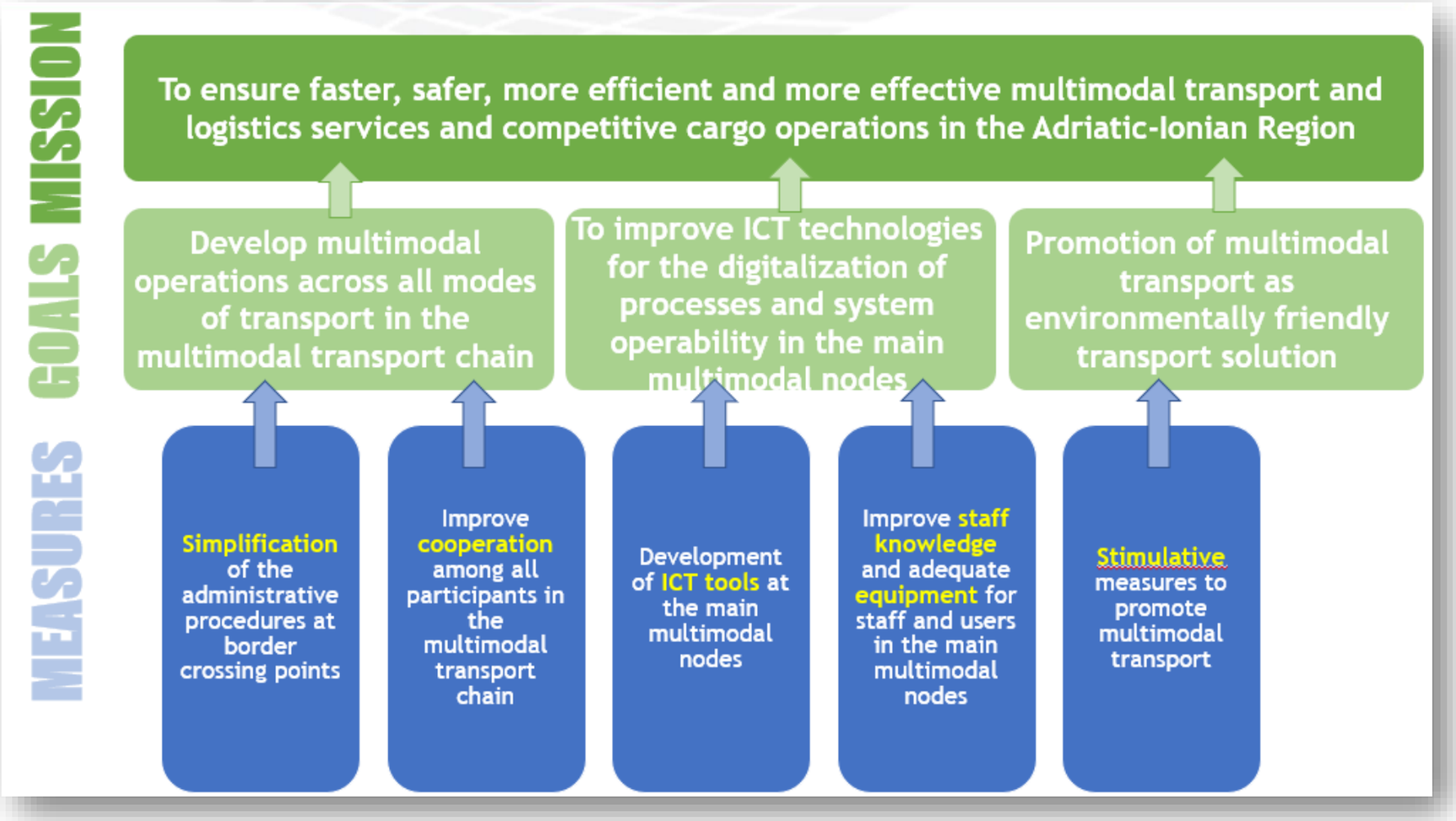
Transnational strategy for the enhancement of multimodal transport efficiency and competitiveness of the transport sector in the ADRION region

Strategy's mission:

- Supporting cooperation among key stakeholders (port authorities, terminal/logistic operators, freight forwarders)
- Providing guidelines to policy makers at national level (ADRION national Ministries of Transport) to implement measures to multimodal transport facilitation on the TEN-T Corridors in the ADRION region.
- Increase the capacity of ADRION transport policy makers at European level (European Commission – DG MOVE, DG REGIO and DG NEAR – European Transport Corridor Coordinators, Transport Community) **to plan and implement transport facilitation measures** in ADRION region, with a special focus on the recently extended TEN-T Corridors to the Western Balkans.

ADRIPASS vision – Transnational Strategy

Aiming to
- Increase the competitiveness of multimodal transport
- Optimize the performance of multimodal logistic chains
- Mitigate of risks and externalities



ADRIPASS vision – Trans. Cooperation Network

The Strategy was the object of **Letters of Support** signed by the Project Partners, Associated Partners and invited institutions within **December 2020**, as to ensure the highest level of political commitment and durability towards its concrete implementation, setting up a **permanent transnational cooperation network.**

FOCUS

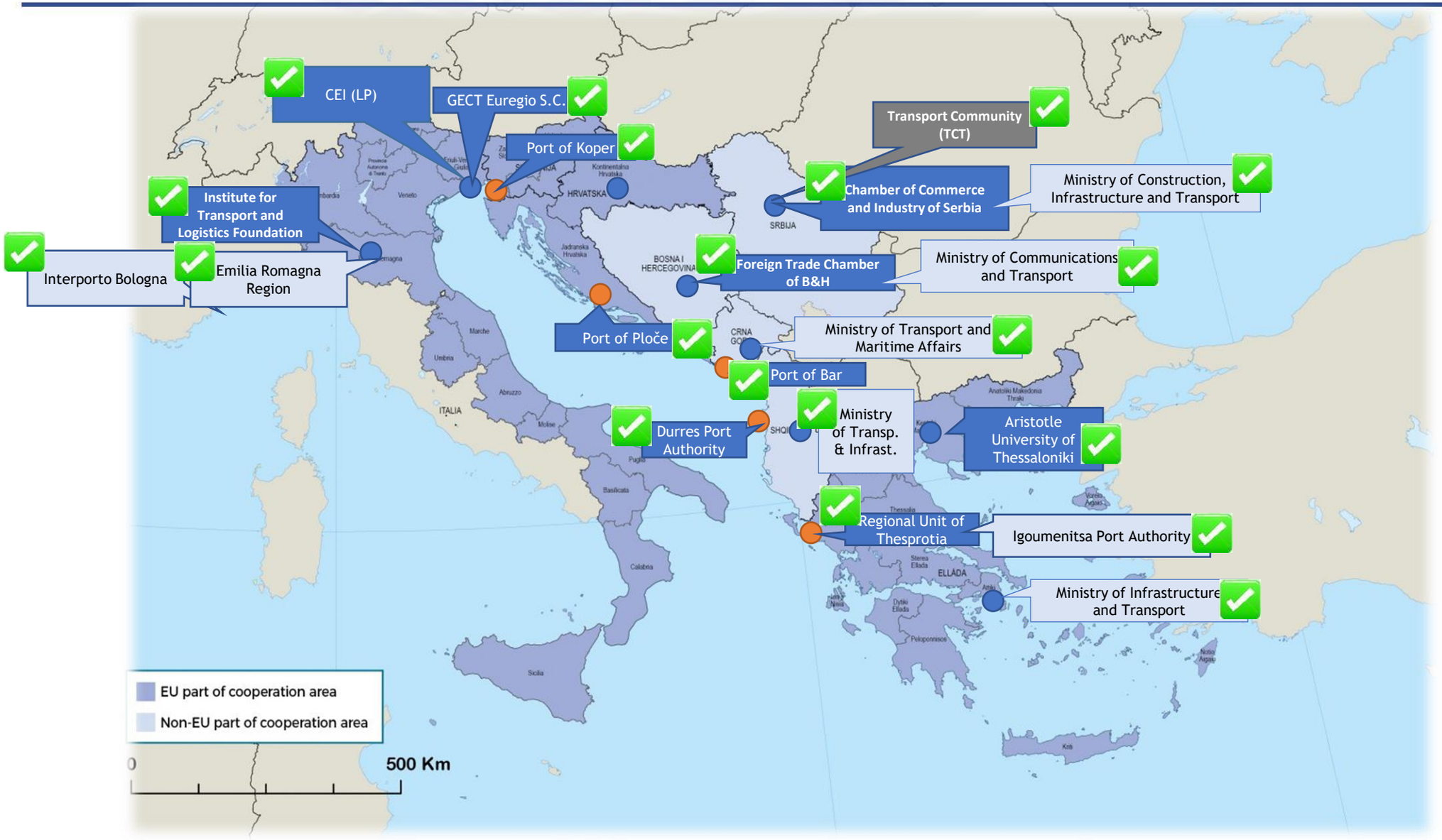
Setting up an enduring multilevel and multidisciplinary transnational cooperation network will guarantee an important impact on sustainable transport in this transnational area and beyond.

Project partners

Associated partners
(ADRION national Ministries of Transport, Freight Villages, Regions, Ports)

Relevant stakeholders
(e.g. TCT)

ADRIPASS vision – Trans. Cooperation Network



ADRIPASS PLUS – opportunity for capitalisation

COVID19 emergency affected the possibility to further disseminate ADRIPASS results.

Funded under the Interreg ADRION 4th restricted Call, **ADRIPASS PLUS** project was born.

FOCUS

Further capitalization and upgrade of some of the key outputs of the ADRIPASS project (by taking into account the effects of COVID19 pandemic) for better multimodal transport accessibility and network efficiency in the ADRION region.

Duration: January-June 2022

8 project partners & 7 countries involved: Italy, Serbia, Greece, Slovenia, Albania, Montenegro, Bosnia and Herzegovina

ADRIPASS PLUS – opportunity for capitalisation

Interreg ADRION ADRIATIC-IONIAN
European Regional Development Fund - Instrument for Pre-Accession II Fund
ADRIPASS PLUS

Building on ADRIPASS' positive results and the importance of capitalizing and further developing sustainable solutions for improving multimodal freight transport in the region, ADRIPASS PLUS will focus on:

- Promoting stakeholders' involvement to update the ADRIPASS Transnational Strategy (special focus on resilience to COVID19 & economic crisis)
- Capitalizing, upgrading & enhancing already developed ICT platforms, for more efficient maritime-hinterland connectivity
- Further dissemination of project results at national, regional & transnational level, & increasing awareness of ETC projects solutions among relevant stakeholders

ADRIPASS PLUS – opportunity for capitalisation

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ADRIPASS PLUS

Building on ADRIPASS' positive results and the importance of capitalizing and further developing sustainable solutions for improving multimodal freight transport in the region, ADRIPASS PLUS will focus on:

Promoting stakeholders' involvement to update the ADRIPASS Transnational Strategy (special focus on resilience to COVID19 & economic crisis)

→ Update of the ADRIPASS Transnational Strategy

Capitalizing, upgrading & enhancing already developed ICT platforms, for more efficient maritime-hinterland connectivity

→ Enhancement of ICT platforms in Port of Bar and Port of Koper

Further dissemination of project results at national, regional & transnational level, & increasing awareness of ETC projects solutions among relevant stakeholders

→ Dissemination and capitalization of project results

ADRIPASS PLUS – opportunity for capitalisation

2 meetings of the **ADRIPASS Transnational Cooperation Network** envisioned in order to provide quality inputs for the update of the ADRIPASS Transnational strategy for the enhancement of multimodal transport in the ADRION region.

1st TCN on 2nd March ✅

2nd TCN in May

New ideas/inputs shared on: digitalization and adoption of ICT tools, BCP infr. extension, focus on external borders of the Region member states, alternative fuels, reforms with harmonization with EU Acquis, etc.

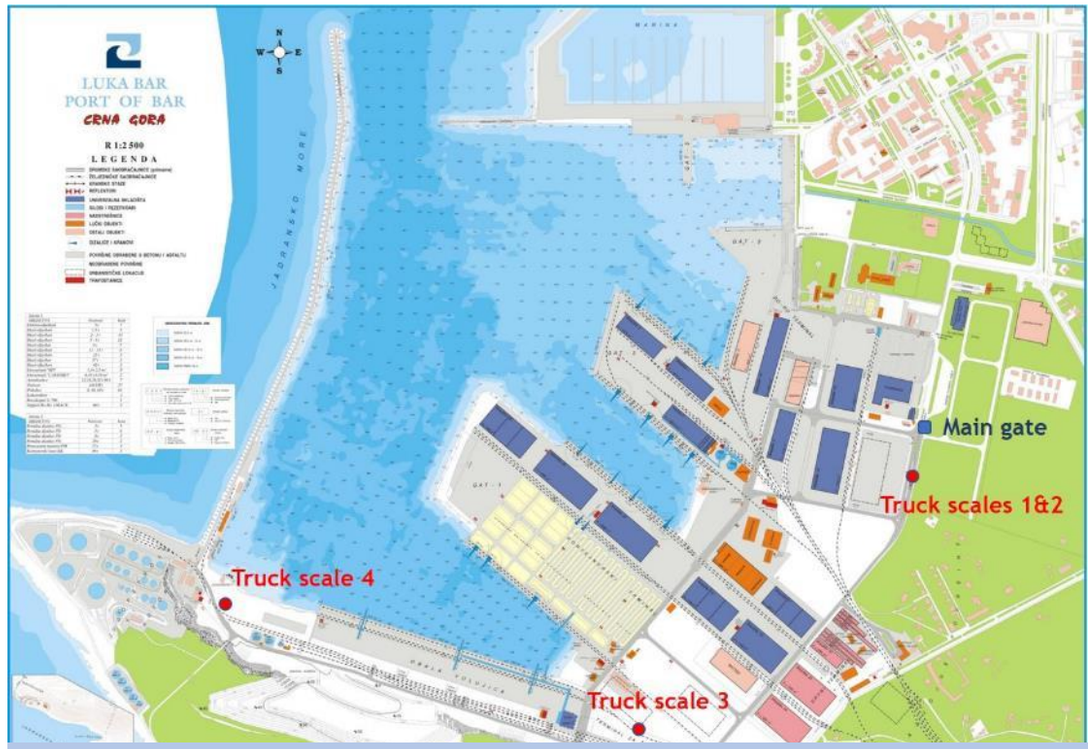
ADRIPASS PLUS project foresees the update and the improvement of the ADRIPASS Transnational strategy not only to ensure its resilience to COVID-19 and the consequent economic crisis but also to take into account relevant updates at national and transnational level.

ADRIPASS PLUS – opportunity for capitalisation

Port of Bar - enhancement of ICT platform

The Port of Bar owns 4 truck scales (at 3 different locations) used for measuring the exact weights of cargo entering to or exiting the Port of Bar.

- Pilot activity will be focused on integration of the internal IT system of the Port of Bar (LUBARIS) and the PCS.
- Within this pilot, stakeholders (agents and freight forwarders) will not have to physically come to pick up the paperwork, but they will be able to see through the PCS every truck that is being scaled, and in addition, they will be able to export all that data to the CSV or similar format and then use them for personal data processing.
- Truck module has been improved within the ADRIPASS project (established new possibilities to electronically keep track of truck movement), therefore, this pilot actions is based upon the achieved result of the ADRIPASS project.



PCS:

84 companies (forwarders,agents)/institutions

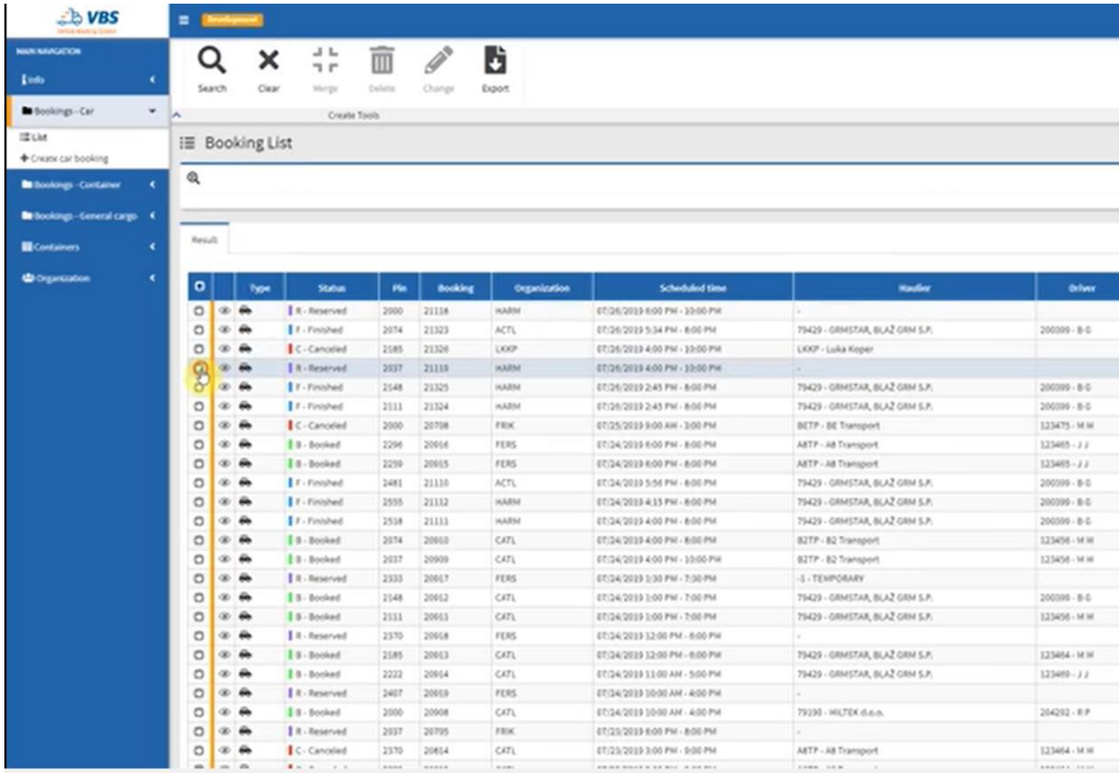
218 users

ADRIPASS PLUS – opportunity for capitalisation

Port of Koper - enhancement of ICT platform

Vehicle Booking System as one of the most important in the process of digitalization in the port of Koper. The announcement of vehicles extended to 3 gates.

- Act. 1 - Screen mask for displaying announcement data to the operator in the receiving office based on contactless reading of driver's badge
- Act. 2 - Blocking of announcement – once the announcement is confirmed by the operator, it will be blocked so that the driver will no longer be able to change the data on it
- Act. 3 - Reading of badges by portable devices
- Act. 4 - Preparation and electronic confirmation of un/loading cars
- Act. 5 - Developing an application for displaying data for customs
- VBS system has been upgraded within the ADRIPASS project, therefore, this pilot actions is based upon the achieved result of the ADRIPASS project.



ADRIPASS to ADRIPASS PLUS

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ADRIPASS PLUS

Integrating multimodal connections in the Adriatic-Ionian region

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ADRIPASS PLUS

Thank you for the attention!

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Central European Initiative – Executive Secretariat

(Lead Partner ADRIPASS & ADRIPASS PLUS)

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