

Pilot actions implementation

PILOT ACTION 1st consolidated report

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1. BACKGROUND

Introduction

Technical Work Package 2 includes multimodal freight transport pilot actions complementing OEM corridor development. To reach the goals, in the first step the methodology for the implementation of the pilot actions was agreed (D.T2.1.1).

Each partner shall carry out its pilot (as it is specified in the application form) and prepare its pilot report. In all cases other partners are involved, too (assessment, capitalization etc).

Purpose of this document

In order to get a comprehensive picture of how the pilots are doing overall. The WP leader, PP8 Freeport of Budapest prepares periodic, consolidated reports assessing the status of pilot activities based on the inception reports and mid-term reports provided by the project partners. The reports will be shared among partners for peer review and will be discussed by the partners during the partner meetings.

This document is the first element of this series, the 1st consolidated report (D.T2.1.4). This report aims to offer an evaluation framework supporting the learning and capitalisation process for each pilot action.

It consists of three parts:

- the progress of the partners since the pilots started;
- the status of stakeholder involvement;
- identification of expected results and risks.

For each part, a summary table/figure has been prepared for a more illustrative presentation.



Which project partners' activity was assessed?

Each project partner who has a pilot is involved. The following table summarises the pilot actions and the responsible PPs.

Topic of the pilot action	Deliverable	Partner responsible
Smart traffic management system for the Budapest Freeport	D.T2.2.1-3	Freeport of Budapest Logistics, PP8, BSZL
Solutions for accessibility harmonisation of inland ports in the German-Czech section of the OEM corridor	D.T2.2.4-5	Saxon Inland Ports Upper Elbe, PP2, SBO
Analysis of goods flows and development of logistics concept for new intermodal services along the OEM corridor	D.T2.3.1-4	Rostock Port, PP3, Rostock Port
Logistics concept for an OEM freight liner train Rostock-Saxony/Czech Republic	D.T2.3.5-6	Saxon Inland Ports Upper Elbe, PP2, SBO
Low-cost improvements for rail freight transport along the OEM corridor and related railway networks	D.T2.3.7-10	Győr-Sopron-Ebenfurth Railway, PP9, GYSEV
Identification of attractive multimodal logistics locations and elaboration of profiles for development in the South Moravian	D.T2.4.1-5	KORDIS JMK, PP5, KORDIS
Region and in the Bratislava Region		Institute of Spatial Planning, PP6, IPP



2. STATUS REPORT ON THE IMPLEMENTATION OF THE PILOT

For an optimal outcome, pilot actions require a careful implementation, assuring that all the planned outputs are delivered, the time frames are consequently respected, and all risks are managed during implementation.

Through the reports prepared by each project partner with pilot action (inception and 1st intermediate report), the WP2 lead partner has been informed about what they are planning to implement and at what pace it is progressing. Based on these inputs, the overall progress for the pilots is presented in the next section.

NEEDS AND CHALLENGES ADDRESSED BY THE PILOT ACTIONS

The pilot partners identified the following needs and challenges that justify the existence of these activities. These aspects were grouped into three groups.

Lack of solution or method deficiency:

- There is no access and traffic management system on the market that can handle a logistics center of similar size and functionality;
- Underdeveloped intermodal transport along the OEM corridor;
- Insufficient terminal capacities, low utilisation of intermodal equipment (e.g. trailer which can be loaded by cranes on rail wagons) within the transport industry;
- Need for a joint transport concept to increase rail freight traffic in the OEM corridor;
- There are a number of specific needs of rail freight concerning certain infrastructure elements and parameters, but in many cases shares the same rail network with rail passenger transport;
- Need for improving the conditions for rail freight and including rail freight better in policy decisions, infrastructure planning and investments, operational planning as well as in regional and land-use planning.

Challenges related to the implementation:

- The end result should be on one hand a tailor-made solution (programmes and support schemes) for the digitalisation of inland ports and on the other hand a harmonised and standardised Intelligent Transport System;
- The maximum possible transport parameters for regularly occurring oversized and heavy goods transport need to be defined and pre-confirmed;



- Greater attention shall be paid to ensure that new roundabouts or similar potential barriers for oversized or heavy transports are passable and light signal systems and traffic signs protruding into the loading gauge of the transport can be swivelled or dismantled;
- Adequate alternative routes are to be indicated when planning construction sites on heavy-duty corridors;
- Designation of heavy goods corridors between the point of origin / destination and the nearest inland port or rail loading point in order to facilitate the integration of inland waterways and rail into these specific logistics chains;
- The level of digitalisation differs from one port to another;

External factors:

- Disadvantageous political factors like low wages for truck drivers;
- The environmental footprint of trucks (which in South-East Europe are comparably old and consequently less environmentally friendly) are much more polluting than a rail-based transport chain;
- Ambitious targets for reduction of Greenhouse Gas (GHG) emissions in the context of European and national climate policies and the EU Commissions "New Green Deal";
- Rail freight, including its interfaces to other modes, is often neglected when it comes to investments in transport infrastructure and in regional and land-use planning;
- Rail freight usually has lower priority than passenger traffic;

STATUS REPORT ON THE DEVELOPMENT OF OUTPUTS OF THE PILOT ACTIONS (e.g. draft feasibility study, draft case study, proposal for harmonised regulation, a trial version of the IT system, proposal for logistics concepts etc.)

The following studies and analyses have been carried out by the partners since the start of the pilot implementation:

Research, plans and studies already carried out:

- Automated access control and traffic management system plan;
- Detailed technical specification study, draft navigation application, demo devices for the intelligent access and traffic management system;
- Collection of data for the Free State of Saxony for the mapping;
- Desk researches and evaluation of material from the relevant Rail Freight Corridors;
- Questionnaire has been prepared and suitable locations for interviews has been identified;



Research, plans and studies currently being prepared:

- Direct talks were held with various market players who are active in the OEM corridor;
- Working meeting with the stakeholders on 27.11.2019 in Dresden with the participation e.g. Stena Line, VTG Rail Logistics and LINEAS Germany;
- Technical specification of the Internet portal (SDSS) was elaborated partially;
- Draft version of the Internet portal was done partially;
- Mapping of road freight transport study is under preparation;
- Collection of geographical and statistical data for the Spatial Decision Support System has started.

Further preparatory steps taken:

- Procurement process for external support in carrying out the pilot action is in progress by the Rostock Port;
- Telephone conference among the project partners and agreement on the progress and the methodology of each pilot project;
- Specification of the structure and content of the Attractive Multimodal Logistic Locations study was elaborated;

For the purposes of illustrating the achievements so far, below are some highlights from the results delivered by the pilot actions.





1. Figure combination of cartogram and temporal lines

Source: IPP: GIS

The figure above was made by IPP in connection with the "Identification of attractive multimodal logistics locations and elaboration of profiles for development in the South Moravian Region and in the Bratislava Region" pilot action. The lines represent the



accessibility of municipalities to the closest EuroCity train station in Nitra Self-governing Region and at the same time cartograms represent the average accessibility of districts.



2. Figure Public infrastructure SGV Saxony

Source: SBO

The figure above was made by SBO in connection with the "Development of logistics concept for an OEM freight liner train Rostock-Saxony/Czech Republic" pilot action. The figure shows the transport infrastructure essential for land transport in Saxony. The long-distance highways (motorways and federal highways), the important rail routes as well as inland ports, freight transport centers and transshipment terminals for combined transport (KV) are shown. There are also various railway infrastructure projects that are important for Saxony.



METHODS APPLIED DURING THE IMPLEMENTATION OF THE PILOT ACTIONS (e.g. questionnaire, survey, physical measurements, desk research, cost-benefit analysis, expert interviews etc.)

The partners plan to involve stakeholders in the implementation of the pilots in various ways. Of these, the following were highlighted:

V	-Continuous discussions with stakeholders;
V	-On-site consultations;
V	-Field visits;
V	-Infrastructure surveys and interviews with tenants;
0	-Technical and geographical mapping;
0	-Interviews with market players and potential customers;
0	–Direct contacts;
V	-Moderated (online) project meetings;
0	-Conduction of surveys on current logistics concepts;
0	 –Literature research (scientific literature, policy documents and railway sector publications);
0	 Data search and extraction from internal databases (railway infrastructure parameters, railway station layouts, timetable data, transport statistics);
0	 Interviews with experts from internal units concerned (such as infrastructure unit, operations unit, traffic management unit);
0	-Data analysis with MS-Excel, including visualisation in diagrams;
0	-Elaboration of maps;
0	–Production planning for the Demonstration Train;
0	-Capacity application process;
0	-Settlement quality index modelling;
0	-GIS analysis of transport accessibility;
0	 Software development in the field of SDSS, GIS applications and access control system.



Numerically, of the above, the following have been achieved so far:

- Continuous discussions with stakeholders (2 times);
- On-site consultations (3 times);
- Field visits (2 times);
- Infrastructure surveys and interviews with tenants (1 time);
- Moderated online project meetings (8 times).

TARGET GROUPS/BENEFICIARIES OF THE PILOT ACTIONS

A number of target groups have been identified that can help the pilots to be implemented and utilise the achieved results in the future:











ANY DEVIATION IN TERMS OF THE CONTENT OR REALISATION OF THE PILOT ACTIONS (REASONS)

There was no deviation in the content or in the realisation of the pilot:

- D.T2.2.4-5 Saxon Inland Ports Upper Elbe, PP2, SBO;
- D.T2.3.1-4 Rostock Port, PP3, Rostock Port;
- D.T2.3.5-6 Saxon Inland Ports Upper Elbe, PP2, SBO;

There was a small change in the pilot's realisation:

- D.T2.2.1-3 Freeport of Budapest Logistics, PP8, FBL;
- D.T2.3.7-10 Győr-Sopron-Ebenfurth Railway, PP9, GYSEV;
- D.T2.4.1-5 KORDIS JMK, PP5, KORDIS; Institute of Spatial Planning, PP6, IPP.



D.T2.2.1-3 Freeport of Budapest Logistics, PP8, FBL

- The content and the focus of this pilot action did not change;
- The development and implementation of the automated access control and traffic management system for the site of FBL is delayed compared to what FBL planned earlier.

REASON: Finding the supplier for the required hardware and technology took more time than estimated IMPACT: It has no negative impact, the pilot action is still proceeding according to the time schedule of AF.

D.T2.3.7-10 Győr-Sopron-Ebenfurth Railway, PP9, GYSEV

- The content and the focus of this pilot action did not change;
- Regarding the timeline, one of the Deliverables (D.T2.3.9, TEN-T Demonstration train), originally scheduled for September/October 2020, is postponed until April/May 2021

REASON: COVID-19.

IMPACT: The Lead Partner and Coordinator have been informed accordingly by e-mail on 23 April 2020. The postponement will content-wise not have any impact on the deliverable. Even with the postponement it will still be implemented before the end of the Pilot Action as a whole (which is running until 30 June 2021) and well ahead of the overall end of the CORCAP-project in March 2022.

- The other three deliverables (D.T2.3.7, D.T2.3.8 and D.T2.3.10) of the Pilot Action are not affected by this postponement and are expected to be delivered on time.

D.T2.4.1-5 KORDIS JMK, PP5, KORDIS; Institute of Spatial Planning, PP6, IPP

- There was a small change in the content of this pilot action REASON: Deviation has been identified within planned purchase of equipment Maintenance and updates of the GIS software for the Spatial Decision Support System (SDSS) Period 1: 2.970 EUR Period 3: 2.970 EUR Period 5: 2.970 EUR. IMPACT: Based on the detailed set-up and planning of the pilot action, the provision of an online GIS solution should be implemented with the following elements:
 - Purchase of software upgrade & maintenance for online GIS, estimated cost: max. 1.600 EUR/per year
 - Purchase of hardware for GIS workstation, estimated cost: 1.800 EUR.

Taking into account the implementation period of the project, its expected total cost is approx. EUR 5,000 for the entire duration of the project.

To ensure proper performance, additional hardware must be purchased to run the required software (ArcGIS Pro).





Source: Own editing

Based on the chart, it can be seen that the FBL is progressing the best with its pilot implementation while the SBO's D.T2.2.4-5 pilot action and the Rostock Port's pilot action are progressing the slowest. However, this is not surprising, as it was already planned at the time of writing the AF that the FBL would be the first flagship to show the others the direction. FBL is the only one to have already completed more than 50% of the tasks that arise during implementation.

By D.T2.2.4-5 and by D.T2.3.1-4 pilots, the partners are in the initial phase. During these weeks, procurement and initial consultations on the implementation methodology will take place or have taken place.

In the case of pilot D.T2.3.5-6, a number of research activity have already been carried out and regular consultations are taking place on a scheduled basis between the parties involved.

A number of sub-tasks have already been completed for pilot D.T2.3.7-10, but the planned schedule had to be modified for this pilot in view of the current epidemiological situation (COVID-19). So there is a slight delay, however, this will not be a problem overall.



D.T2.4.1-5 pilot activity is different compared to the rest of the pilot activities. The content of the pilot activity is based on the results/outputs of the Regional Analysis (WPT1). As a result, the implementation could only start after the completion of WPT1. Since then, implementation has been ongoing and partners are progressing at a planned pace with the implementation of the methodology.

All in all, the implementation level of the pilot actions is adequate, with only minor delays that can still be managed by the partners.



3. STATUS REPORT ON THE INVOLVEMENT OF STAKEHOLDERS

In order to achieve a maximum level of capitalisation of the knowledge and experiences, pilot actions should be accompanied by a high level of stakeholder involvement, mobilising the relevant actors of the topic.

The methodology by the involvement of stakeholders looked as follows. PP8 provided a series of logbook templates, and instructions including:

- Stakeholder involvement logbook;
 - \circ the aim of this document is to provide a methodological support of:
 - how to organize and document stakeholder involvement and
 - how to report it to the WP responsible partner (Freeport of Budapest PP8).
 - the document contains a detailed list of the potential stakeholder institutions based on the type of the project partner, a list of obligatory and possible additional attachments that have to be sent to the WP responsible partner.
- Stakeholder involvement logbook_Agenda;
 - this is a template provided for the project partners to be filled out before the organisation of the meeting.
- Stakeholder involvement logbook_Attendance list;
 - \circ this is a template provided for the project partners to be filled out on the venue.
- Stakeholder involvement logbook_Minutes of Meeting.
 - \circ $\,$ this is a template provided for the project partners to be filled out after the venue.

STAKEHOLDER INVOLVEMENT CARRIED OUT IN DESIGNING THE PILOT ACTIONS

Already in the initial phase of pilot designing, a number of stakeholders were involved by the partners. These are as follows:

- During the business requirement specification and system development, FBL's key tenants of the site facilities were interviewed Key tenants: Ekol Logistics, Láng Ltd., MASPED Logistics Ltd., Arcelor Mittal, MCC Ltd. Ghibli Ltd;
- The lowest transport authorities, who are necessary for applications and permits;
- Ministries, which can improve the corresponding legal regulations;



- Rail cargo operators with transhipment capacities and those operating in the OEM corridor;
- Regional authorities in Bratislava, Trnava and Nitra Self-governing Regions, South Moravia Region;
- National authorities Ministry of Transport and Development of the Slovak Republic;
- Transport and logistics experts.



PLANNED STAKEHOLDER INVOLVEMENT DURING THE PILOT ACTIONS

STAKEHOLDER TYPE	STAKEHOLDER NAME/GROUP	RELEVANCE OF THE STAKEHOLDER TO THE PILOT ACTION	NAME OF PP WHO WILL INVOLVE THIS STAKEHOLDER	PLANNED WAYS AND METHODS OF INVOLVEMENT
Ministrios	Saxon State Ministry for Economic Affairs, Labour and Transport	Supreme authority for transport	SBO	Multiplier on the Saxon planning associations
Ministries	Ministry of Transport and Development of the Slovak Republic	Ministry is responsible for transport concepts and spatial planning concept development at national level	KORDIS, IPP	Meetings and interviews
	Bratislava Self- governing Region	Stakeholder is responsible for Regional Master Plan development	KORDIS, IPP	Meetings and interviews
Regional and	Trnava Self-governing Region	Stakeholder is responsible for Regional Master Plan development	KORDIS, IPP	Meetings and interviews
authorities	Nitra Self-governing Region	Stakeholder is responsible for Regional Master Plan development	KORDIS, IPP	Meetings and interviews
	South Moravia Region	Stakeholder is responsible for Regional Master Plan development	KORDIS, IPP	Meetings and interviews
Transnational and	EGTC NRL Dresden- Prague	Middle	SBO	Information and coordination via Email, telephone conferences, video conferences



interregional cooperation	RAG-TAG RFC OEM	Corridor users	GYSEV	Consultation/interview with Spokesperson and/or Members
	RAG-TAG RFC Amber	Corridor users	GYSEV	Consultation/interview with Spokesperson and/or Members
	Management Board RFC OEM	Corridor manager	GYSEV	Consultation/interview with Chairperson
	Management Board RFC Amber	Corridor manager	GYSEV	Consultation/interview with Chairperson
	MASPED Logistics Ltd.	Tenant of FBL	FBL	System integration; specification and development for the workflow and system MASPED uses for their logistics services. Evaluation of the access control management and communication of the systems.
	Arcelor Mittal	Tenant of FBL, significant traffic to their rental	FBL	Studying traffic and behaviour of drivers to Arcelor Mittal
	MCC Ltd.	Tenant of FBL, container traffic	FBL	Studying needs of container traffic
Private	Ekol Logistics	Tenant of FBL, warehousing and logistics	FBL	Understanding warehousing and logistics need
companies	Láng Ltd.	Tenant of FBL, warehousing and deliveries	FBL	Understanding warehousing delivery needs
	LISt GmbH	Representative of the Free State of Saxony for the VEMAGS and NOVALAST systems (permission for heavy and oversized road transport)	SBO	Adjustment of the data stock
	Transport operators	Serious impact, data provision	Rostock Port	Questionnaire surveys, interviews
	Logistic service providers	Serious impact, data provision	Rostock Port	Questionnaire surveys, interviews



	Cargo owner / industrial companies	Serious impact, data provision	Rostock Port	Questionnaire surveys, interviews
	STENA Line	Middle	SBO	Information and coordination via Email, telephone conferences, video conferences, excursions
	VTG Rail logistics	Middle	SBO	Information and coordination via Email, telephone conferences, video conferences, excursions
	LINEAS Germany	Middle	SBO	Information and coordination via Email, telephone conferences, video conferences, excursions
Others	Transport and logistics experts	Experts with specific freight transport (different modes), logistics and spatial planning experiences	KORDIS, IPP	Meetings and interviews



List of all stakeholders involved in all the consultations - listed by PP and by type of institution- according to the classification of the logbooks:

NAME OF PP; DELIVERABLE	FBL D.T2.2.1-3	KORDIS, IPP D.T2.4.1-5
Public body		Bratislava Selfgoverning Region (BSK) Nitra Selfgoverning Region (NSK) Trnava Selfgoverning Region (TTSK) Ministry of Transport and Development of the Slovak Republic
Tenant	MASPED Logisztika Ltd. MAHART CONTAINER CENTER Ltd. Láng Kereskedelmi Ltd.	
100% owned public company		MDaV SR
Private company	Digital Eye Ltd. ITD Informatika Ltd.	AUREX s.r.o.

Pilot actions performed in terms of stakeholder involvement very well in relation to their progress. The involvement of the requested stakeholders has been successful, the most stakeholders have already expressed their willingness to cooperate and cooperation with some partners has already begun.



4. EXPECTED RESULTS AND RISKS

DESCRIPTION OF THE EXPECTED TRANSFERABLE RESULTS

At the end of the pilot implementation, a number of results will be available for transfer to different target groups. These results were summarized as follows:

Instant solution possibilities:

- The know-how of port digitalisation for similar sites, especially location and site mapping;
- Automation of access control and SMART traffic management via navigation application and LED screens. Evaluated software and hardware solution to deliver for intermodal logistics centres;
- Best practices how to inform and navigate visitors of such sites;
- Solutions for the access of heavy and oversized goods transports to the inland ports in Saxony and Ústecký kraj;
- A model-based calculation concept to elaborate costs for a new transport concept is transferable to the general public;

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Tools to facilitate planning:

- Recommendations for the improvement of the accessibility of other comparable loading points along the Orient-East-Med- corridor;
- An approach that demonstrates how a market player can identify and approach a
 potential user to convince them from using new developed transport offer;
- A logistics concept which will show ways to implement future freight train projects in the TEN-T corridors;
- A general system approach can be considered as generally applicable to railway corridors in Europe;
- Application of the system approach for low-cost improvements for rail freight transport in other parts of the Brno-Budapest corridor, as well as in other corridors;
- Urban Study will serve as background for regional Master Plan modifications for South Moravian and Bratislava Regions can be used for other CE regions too;
- By the on-line portal (SDSS + GIS), the developed software and the methodology used will also be public to other stakeholders (the software will be an open source platform).



ACTIONS PLANNED FOR DISSEMINATION AND KNOWLEDGE TRANSFER

In order to achieve the widest possible range of users, various methods will be implemented by the partners who are implementing the pilot:



Digital marketing:

-Evaluation report will be part of the dissemination tool by the end of the Pilot Action;

- -Technical article in the (trade) press;
- -Publication of project deliverables on the project websites;
- -A news release in the e-Newsletter and on the website of RFC Amber and RFC OEM;



Direct marketing:

- -There are direct discussions planned to share the experiences with interested logistics sites. Field visits, on site demonstrations are available at FBL. For example, for Saxon Inland Ports Upper Elbe and Ústecký kraj;
- -The Hungarian Federation of Danube Ports (HFIP) will be involved in the marketing and demonstration of such solution for its members;
- -Also, the European Federation of Inland Ports (EFIP) can be involved to promote the system for its member ports;
- -Presentations at the planned stakeholder and expert meetings within the project;
- -Presentations about the results on conferences;
- -Presentations about the Pilot Action on Railway and Terminal Advisory Group-meetings of the Rail Freight Corridor(s)
- -A presentation about the Pilot Action in the SERAC Rail Freight Corridor Working Group organized by the European Commission (DG MOVE) after operation of the TEN-T Demonstration Train.



TRANSFERABILITY TARGET GROUPS AMONG PPS AND OTHER STAKEHOLDERS IN THE CE REGION

The target groups to which the results can be transferred after implementation have also been identified:

- The developed automated access control and traffic management system is targeted to Czech -Saxon intermodal sites of the consortium, but also to any intermodal logistics site that are in need of similar solution or identifying similar challenges as FBL;
- All river ports in CE region that are connected to road transportation may be interested to learn about the outcome and product that the Pilot Action will deliver;
- Project partners in the project;
- Relevant target groups in the field of transport and planning along the OEM corridor;
- Rail freight companies, terminal operators as well as inland and seaports in Central Europe;
- Any other entities involved in planning and managing of rail-freight related infrastructure along the OEM corridor, including planning authorities and entities in charge of policy decisions, such as Ministries;
- NUTS 3 regions in CE area.

RISKS AND LIMITATIONS OF TRANSFERABILITY

Risks that could threaten the transferability after pilot projects have been also collected:

- The access control system can be used only by "closed" logistics centres that are not situated on public roads and access to the site has to be controlled;
- The system can be implemented as a boxed solution only for those sites that has no current system in place, especially any automated process for the management of the flow of traffic. An existing system may limit its effectiveness;
- The logistics sites, which would like to implement this system, have to meet a certain complexity in order to take full advantage of the system deployment;
- According to the current corona crises, a commitment of market players is a huge risk of being able to test the theoretical drafted train concept;
- Confidentiality agreements with potential customers and operators can also cause some problems;
- Certain elements of the Guidelines may be specific to certain conditions (such as single track or double track), but none of these conditions are unique to the OEMcorridor;
- Transferability to certain elements of the Guidelines to cases outside Europe could be somewhat limited since operational conditions on some railway networks may fundamentally different from those in Europe (e.g. mainly or even only freight traffic, diverging traffic patterns and operational methods);



- Employee turnover in the regions;
- Unexpected important (transport, business) investments in the region;
- Outputs are too specific for spatial planning needs in the conditions of Slovakia and Czech Republic;
- Outputs are too oriented to Bratislava and South Moravian Regions environment.

RISKS AND LIMITATIONS OF IMPLEMENTATION

The current situation caused by the COVID-19 virus is affecting many parts of the pilots. For example, some delays in implementations that may also occur in later phase are due to limited opportunities, such as:

- On-site installation and testing are only possible in compliance with regulations;
- A drastic reduction in the number of personal meetings and the importance of switching to online discussions;
- Limited IT infrastructure for employees for transition;
- Rethinking of the events' organisation, possibility to switch to online video conferencing.

Addressing these factors will be crucial in the future for all pilots to succeed.