



PILOT ACTIVITY CONCEPT & LAUNCH REPORT - LUKA KOPER

D.T2.1.1-2

Work paper

Version 1.0
7.2020

1) Introduction

The fast development of technology and the contemporaneous spreading of port's capacities, due to the rising volumes of cargo transported through the port of Koper, are bringing new opportunities for the better organization of spaces and technologies adopted for the management of the cargo. The modal split in the port is in favor of railways, since we have 60% transport on rail and 40% on road. We are in search of the solution that can speed up the process, produce a better linking with stakeholders on the same logistic chain and a further and concrete collaboration in the region, including areas beyond national borders.

The pilot activities will test new approaches to overcome various disruptions to the regional railway network in the participating regions - in the port of Koper we will test cameras to register numbers on wagons coming to Terminal for iron ore and coal (where the process of registering/checking the numbers on wagons is currently done manually). The port of Koper is going towards digitalization and automatization of operations and processes, also on railway network. The REIF pilot action will help to do one of the first steps with reducing manual work and optimizing railway services with digitalization and automatization. The data read directly from wagons will be gathered in the database and the pictures taken from the wagons will be also saved in the database. There will be no need for operator to go on the field and write down the numbers on wagons. Even in case that the cameras will not be able to read the numbers, the operator could check the picture on the PC screen and then type the correct number into the database.

2) Pilot action description

PP involved	Luka Koper, d.d.
Timescale (start/end date)	4/2020 - 7/2021
Main actors/stakeholders involved	Luka Koper, d.d.: <ul style="list-style-type: none"> - Strategic Development Department - Investment Department (Electronics Division) - PC for Liquid cargoes and Bulk - Terminal for iron ore and coal - Operations Department



	<p>Freight forwarders:</p> <ul style="list-style-type: none"> - M.B.L. d.o.o - Mediašped d.o.o. <p>Clients:</p> <ul style="list-style-type: none"> - Energetika Ljubljana (unit TE-Tol)
<p>Pilot action launch <i>Please describe when and how the pilot action was launched</i></p>	<p>Since the beginning of the REIF project Luka Koper d.d. - Strategic Development Department organized several meetings with Operations Department, Investment Department and Terminal for iron ore and coal operations manager in order to plan the implementation of the pilot action. In June 2020 consultations with the director of the Profit Center for Bulk and Liquid Cargoes were carried out, where we have identified key stakeholders for the implementation of the REIF pilot action. Communication was also carried out via mails and telephone.</p> <p>In July 2020 we organized a meeting for the establishment of Market Player Working Group on in the headquarters of Profit Center Terminal for bulk and liquid. The invitation was sent to the director of the Profit Center for Bulk and Liquid Cargoes (Mr. Bojan Tomišič) and he invited freight forwarding organizations and clients. Presentation of REIF project and pilot action was made.</p> <p>The exact location of the pilot action was determined, technical specifications for the equipment were prepared (cameras, housings, cable installation, reflectors for lighting etc.) and the public procurement procedure started in the mid July 2020.</p>
<p>Description of the activities to be done within the pilot action</p>	<p>It is expected that the solution provider will be chosen in August 2020. In September 2020 the cameras will be installed.</p> <p>After that, a 6 months period is foreseen in order to test the proper working of the cameras.</p> <p>After the testing period, the second phase of the pilot action is foreseen if the solution is appropriate and the results of first phase are satisfactory. The second phase will consist of integration of the solution into the existing information system.</p>
<p>Expected results</p>	<p>The expected results are:</p> <ul style="list-style-type: none"> - Optimizing / speeding up the process of registering / recognition of the wagons - Less manual work - Less human made errors - Improved health and safety at work (due to less work on-field - near the railway tracks and trains) - Digital evidence of the registered wagons (database of the pictures) - Possibility of double-checking



<p>Potential risks of the successful outcome of the pilot action and the adopted strategies to overcome them</p>	<p>The potential risk is the inadequate solution (less than 90% of exact registered numbers) due to dirt on wagons or damaged numbers.</p> <p>The location of the testing was carefully chosen (enough space for installation of cameras, wagons slowed down/stopped, the best possible conditions will be enabled). The cameras can be transferred to other location in the second phase.</p> <p>The potential providers will be carefully chosen.</p>
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3) Conclusion



Figure 1: Location of the cameras



Figure 2: MPWG meeting

Besides several internal meetings in Luka Koper, d.d. since the beginning of REIF project in April 2019, the actual pilot action started with Market Player Working Group Meeting. The meeting was held on July 3rd, 2020 in the offices of PC Terminal for liquid cargoes and bulk. The exact location of the pilot action was chosen, and further steps were defined - technical specifications and public procurement procedures. Most important stakeholders were present, including internal staff of Luka Koper who will be responsible for the pilot action implementation. Afterwards, the telephone call was made to Director of PC Terminal for liquid cargoes and bulk, in order to inform him about the agreement on pilot action planning and implementation at the meeting. This information was also communicated on regular briefing of Strategic Development Department, that is held by the Head of Strategic Development Department of Luka Koper, d.d. weekly.



REIF

REIF projekt
Koper, 1.1.2020

WPT2 - Sestanek direktorjev (Market Player Working Group)

REF | Luka Koper | Tražiljak

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PILOTNA AKCIJA V LUKI KOPER

Odčitavanje števk na vagonih

Lokacija
Tivintinci za razsute tovare (promog in šelazovni rudq)

Pričakovane koristi

- Podobno in avtomatizirano je pravo odčitavanje vagonov
- Zmanjšanje stroškov dela
- Zmanjšanje možnosti za človeške napake
- Iskajanje pravnih in organizacijskih rešitev in odpravi pomanjkljivosti v obstoječem sistemu
- Reše problem s podatki iz avtomatiziranih sistemov (dane, vidi)
- Možnost shranjevanja pravnih in avtomatiziranih podatkov

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REIF PROJEKT

CL2: pripraviti ponudbo dela šelazilnega tovornega prometa z digitalnimi ukrepi na regionalnem šelazilnem območju

Partnerji
10 projektnih partnerjev iz 6 EU držav: Nemčija, Avstrija, Italija, Slovenija, Finska in Poljska.

Budjet projekta (85 % sofinanciranje)
2,2 mio EUR

Trajanje
1.4.2019 - 31.3.2022

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KLJUČNI DELEŽNIKI

Področje strateškega razvoja (projektni management; izvedba javnega naročila)

Področje investicij - Elektronski (tehnološki) spodbujalci za opremo

Projektni odbor Tivintinci za razsute tovare (podrobni opis trenutnega procesa, potrebe in izdatki)

Področje operativne (šelazilni deli)

Drugi deležniki (spodbujalci) za šelazilni promet so biogeni skupni promet in šelazovni rudq)

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PILOTNA AKCIJA V LUKI KOPER

Odčitavanje števk na vagonih (na TRT)

Potek pilotne akcije

- Sestanki in drugih delavci za identifikacijo potreb in tehnološki šelazilni tovornog promet
- Avtomatizirano odčitavanje števk na vagonih na Tivintincih za razsute tovare (trenutno patenirano ročno)
- Določitev lokacije za izvedbo pilotne akcije; potrditev sodje terminala
- Wizualizacija vpliva razpisa do leta 2020 (potrdjeno v novembru 2019)

Kaj sledi?

- Opredelitev tehničnih specifikacij in izvedbo postopka javnega razpisa za nabavo kamov
- Implementacija in testiranje
- Wizualizacija in odčitavanje zunanjih direktorjev
- Rezultati pilotne akcije (demonstracija)

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POTENCIALNA TVEGANJA

Tveganja:

- Tehnično nezadovoljivo rešitev (odčitavanje podatkov ni dovolj točno)

Obvladovanje tveganj:

- Primerjanje mednih posrednikov (pregled referenc)
- Zagotovitev usposobljenosti in zadostno kvalifikacijske ekipe za implementacijo pilotne akcije (zmanjšanje, tiskanje)
- Redni sestanki projektnih skupine

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Figure 2: PPT (in Slovenian language) for the MPWG meeting and official launch of the pilot action