



D.T1.4.2 - PRIORITY LIST OF ACTIONS & COST ESTIMATION - LUKA KOPER

Work paper

Version 1.0
1.2021

1) Introduction

With the growth of cargo in the Port of Koper and the rapid growth of competitiveness in Slovenia and the world, the current information system in use:

- It contains a lot of data, which unfortunately is in different formats, in different systems,
- enables only minimal data exchange between the Port of Koper, Slovenian Railways and external customers,
- Not all data collected is available to all actors involved in the process,
- There is no real time and vertically integrated communication, which leads to poorer utilization of resources and delays,
- The shift process does not support real time IT monitoring, which means slow flow,
- Increasing demands for real-time information,
- Isolated, uncoordinated and outdated software,
- Infrastructure is not digitized.

Major benefits of the new IT system:

- One central IT solution, integration of all relevant processes in one solution,
- Improved planning and decision-making capacity based on valid real-time data,
- Elimination of manual processes and old IT systems that cannot be upgraded,
- Rapid implementation based on established practices.
- IT support in the function of improving business processes,
- Ensuring the availability of related data through a common platform (unique identification),
- Providing a platform that is coherent and modern and already established in the international world,
- Ensuring control over business processes, from the arrival of the train at TPK all the way to the unloading / loading of the wagon and the re-preparation of the wagon for train departure - for the entire production cycle in the area concerned,
- Improving capacity availability, increasing work efficiency,
- Providing conditions for managing the entire transport chain in cooperation with all its links.

Advantages of process optimization:

- A comprehensive overview of all planned and ongoing tasks,
- Integration of all tasks from one source:



- Before the train arrives, train and wagon data can be received electronically in advance,
- The move can be planned and coordinated,
- Terminals can send train orders based on the same real-time data.

2) Priority list of actions

Action	Priority area	Challenges/ results, impact of action	Priority level	Area/level	Timeframe (start of action)	Estimated costs	Potential indicators to measure the success of the action	Responsible entity
Name of action	- Transport infrastructure - Rolling stock / machinery - Services /operations - Legislation/ administration - Other: _____	What the action will improve?	-high(H) -low (L) - medi-um (M)	- country - region, - municipality, -	- Short term – S (in 1-2 years) - Medium term - M (in 3-5 years) - Long term – L (in more than 5 years)	EUR	- increased capacity - shorter travel time - lower maintenance costs - lower operational costs -	-region, - railway infrastructure manager, - port authority, -
Integration module for railways upgrade	IT System	Use of modern and commonly used standard, flexibility, Improved data quality	H	Slovenia	S	25.000	Increased data quality,	Slovenia national rail carrier, Port Of Koper
Implementation of the new Railways system	IT System	Additional functionalities to simplify rail process, real time overview of the operations, usability, identification of problems and bottlenecks	M	Slovenia	S	80.000	Increased data quality	Port of Koper
Mobile APP	IT System	Paper digitalisation, real time information, better data quality	M	Slovenia	S	20.000	Paper reduction by 5%	Port of Koper
Visualization	IT System	Better overview of the	M	Slovenia	S	35.000	/	Port of Koper



		operations, real time view						
--	--	-------------------------------	--	--	--	--	--	--

3) Process, responsibilities and lessons learnt

1) Which organisations/stakeholders were consulted in the selection of priorities? What were their priorities and how were they involved?

We have involved Port of Koper and its Internal logistics department, Slovenian Railways and other rail operators.

The highest priority is to achieve a better data quality with the upgrade of the current data exchange.

Another point is the data timeliness. During the operational process, a lot of information is exchanged too late without being inputted in the system. With the introduction of mobile support this will be easily tackled.

The third point is the visualization of the data facilitating faster responsive times of the operations within the Luka Koper’s terminals and Slovenian Railway shunting station of Luka Koper.

2) Who will ensure that the priority list will be followed up when investment decisions are taken and how (referring to responsible entities in the list of actions table)?

We do have a Steering committee within two major Stakeholders that is regularly check the milestones and is highly motivated to achieve the optimisation goals. As described above, the highest priority is of interest of all stakeholders, so we do not expect issues in that respect. However, we can have some risks associated with investments decision because the modernized system needs investment on each stakeholders’ side.

3) What lessons were learnt when the priority list was selected/negotiated?

Priority list is the reflection of the operational issues all involved Stakeholders have due to the missing data/information. Data is the key of better performance that must be achieved to follow the cargo throughput growth and assuring the quality our business partners are used to when using rail facilities in Port of Koper.

4) Which constraints are expected in its realization?

The constraints that can follow the action plan, are:

- Budgeting on each stakeholders’ side and
- human resources availability.

4) Conclusion

Depending on the participation of different stakeholders, each with their own goals and roles, in order to effectively support rail transport, it is necessary to introduce standards that uniquely define the data and the way in which they are exchanged.



It should be emphasized that electronic messaging within rail transport faces technical, organizational, and legal issues.

Therefore, it is necessary for the state institutions to guarantee the formal validity of all documents in electronic form, which would accelerate the computerization of the railway transport process. It is also necessary to provide national and international financial resources that enable such development.

The final goal is to achieve the points below:

- Wagon fleet management with real-time data,
- One central platform that integrates all relevant processes and partners with one solution without separate manual communication,
- High level of process automation,
- One central planning and scheduling tool
- Management of all transport requirements and operational processes of all participants with one solution,
- Proactive process control, automated alerts,
- Real-time monitoring of equipment.