

D.T1.4.3 - DEFINITION OF POTENTIAL POLICY MEASURES - LUKA KOPER

Work paper

Version 1.0
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1) Introduction

The Port of Koper is the most important station for all freight traffic on Slovenian railways. As much as 70% of the freight transport business by rail goes through Koper. That is why the need to optimize processes is necessary, as it is only possible to maintain long-term competitiveness to maintain the core business of the Port of Koper.

Rail transport consists of a private and public institutions that use their own standards and protocols to exchange information in electronic form. Railways stakeholders' communications planning and design must be based on the same starting points to enable a coordinated data exchange between individual stakeholders.

In the logistical process of dispatching goods by rail, there is still a large amount of paper documents that are exchanged between the stakeholders and governmental bodies, such as. Customs, Police, etc.

2) List of policy measures (linked to Priority list of action - D.1.4.2)

Action/measure (from deliverable 1.4.2)	Policy measure	Policy document to be addressed	Process description	Stakeholders involved	Time frame
Upgrading of the railway infrastructure	Financial policy and plans for infrastructure upgrade and assuring funds	National transport policy, national transport strategy	Proposal to be submitted to the Ministry of infrastructure who adopts policy document and propose new legislation. Amendment of policy document possible when the policy document expires (2023). EU funds have to be approved by the European Commission.	Ministry of infrastructure, European Commission	3-5 years
Integration module for railways upgrade	Financial policy and plans for IT system upgrade and assuring funds Document management policy Data Exchange policy	General conditions of Luka Koper, general conditions of rail operators and carriers.	Based on the process change agreement between Stakeholders (Luka Koper, Rail operators and Rail carriers) the particular general conditions should be addressed and changed accordingly. Ensure the funds for private entities to speed up adaptation.	Luka Koper Rail operators Rail carriers Ministry of Infrastructure (Slovenia)	1-2 years



	Legal validity of electronic documents	EU regulation for Railways related electronic data exchange	<p>Propose the EU regulation/Directive to introduce standardized communication messages between different stakeholders (logistic centres, ports, terminals, rail carriers, rail operators) and enforce the use of it.</p> <p>Introduction of communication message standard in EU level such as UN/EDIFACT, ASC X12 as examples for the standard enforced in USA.</p> <p>Facilitating the rail transportation documentation and processes positively affect the increase of railway transport share.</p> <p>Environmental initiative (dangerous goods cargo, environmental friendlier transport) can facilitate this process.</p>	<p>Ministry of Finance (Slovenia)</p> <p>Ministry of Interior (Slovenia)</p> <p>Ministry of Environment and Spatial Planning (Slovenia)</p> <p>European Commission</p>	3-5 years
Implementation of the new Railways system	Financial policy and plans for IT system upgrade and assuring funds	General conditions of Luka Koper, general conditions of rail operators and carriers.	Based on the process change agreement between Stakeholders (Luka Koper, Rail operators and Rail carriers) the particular general conditions should be addressed and changed accordingly.	Luka Koper Rail operators Rail carriers	1-2 years
	Document management policy			Ministry of Infrastructure (Slovenia)	
	Data protection policy to ensure equality and competitiveness	Railway Single Window Policy	Better insight of the data exchange between all stakeholders require policy adaptation to ensure that higher visibility does not influence on competitiveness between different stakeholders, it should enforce equality measures for all involved stakeholders.	Ministry of Infrastructure (Slovenia) or Stakeholders' agreement	3-5 years
Mobile APP	Financial policy and plans for IT system upgrade and assuring funds	Quality system documents (work manuals)	Process change using mobile apps require adaptation of the internal quality system documents and employee education.	Luka Koper	1-2 years
Visualization	Financial policy and plans for IT system upgrade and assuring funds	Stakeholders' agreement	Common visual schema of the Port related railway system requires stakeholders agreement (permissions and related data details level access).	Luka Koper Rail operators Rail carriers	1-2 years

3) Process

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

In the process of selection of policy measures two key organizations were consulted: Slovenian Railways as state railway company (main railway operator in Slovenia) and Port of Koper as the only Slovenian maritime cargo port (Internal logistics department, IT department) and other rail operators. Several meetings among them took place, also Regional Capacity Building Workshop was

carried out in March 2021. Furthermore, an IT consultant was involved, preparing a Study on optimization of processes at the Koper location in cooperation between Slovenian Railways and the Port of Koper for freight transport.

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 potential policy measures will be realized and followed up and how (referring to stakeholders in the policy measures table)?

Adoption of policy measures at the level of EU and individual country that supports the legal validity of electronic documents and enforce of the communication standard(s) would certainly accelerate developments in the field of electronic exchange.

Slovenian Railways and Port of Koper will keep strong formal cooperation (Steering committee) on this topic also in the future based on formal agreement (Letter of Intent) signed by legal representatives of both companies in December 2018. Steering committee will 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 policy measures 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.

At the state level, it would be necessary to provide financial resources that would enable the development of a single communication platform (railway's community system and integrated into the PCS), which would allow the entry of individual data in a »single window« approach, either manually or through a connected IT systems. The single system would include all business rules applicable to rail transport and traceability of the data entered. The system should allow connection to older applications, message transformation, and gain re-use possibilities based on modern technologies. The information system should also be connected to the public institutions' systems, for a comprehensive overview of the information and to empower the data insight.

Some of the challenges of the railway communication platform are the unification of code lists, the definition of mandatory fields, the nomenclature of goods used in the data exchange, etc.

In any case, for the efficient exchange of electronic messages, it is necessary to adopt a legal basis that ensures validity from the moment of acceptance to the handover of cargo, acceptance of cargo during transport, and the handover of documents between all railway stakeholders.

- 4) Which constraints (obstacles, risks) 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

Greater digitalisation and unification of the messaging system would increase the efficiency of rail transport at the local and international level, enable connections with other modes of transport and state institutions. It is clear, that the increase of the rail transport efficiency is needed also from the demands of increasing safety, higher delivery speeds, the impact of railways on the environment, etc. The introduction of electronic messaging enables the introduction of integrated transport systems that promote energy-efficient and environmentally friendly modes of transport.

There is also a tendency in the rail freight sector to improve the quality of service, increase revenues and ensure sustainable development. The key elements of successful freight transport are enabling tracking of shipments, guarantee delivery times and gain increasing productivity. The element for achieving the mentioned goals is definitely electronic messaging, according to a predefined standard.

In addition, information and communication technologies have spread in recent years, due to the exponential spread of the Internet and its services, which can be used to support the exchange of electronic messages.

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.