Lyon Valence Avignon Marseille Nîmes Montpellier Perpignan Girona Barcelona Tarragona Lleida Zaragoza Guadalajara Madrid

C8 C8 C7

# Report on e-freight requirements

## EXECUTIVE SUMMARY

Information and Communication Technologies (ICT) can greatly contribute towards intermodality by improving infrastructure, fleet management, traffic management, tracking and tracing of goods across the transport networks, simplifying documental and administrative procedures and improved connections between businesses and administrations.

However, ICT developments usually don't have an intermodal perspective, and, indeed, do not have a corridor perspective, as they are generally developed under an single-mode point of view (based on one transport mode but with difficult integration with other modes) or in a node perspective (based in the transactions among the agents in one transport node like a port or a terminal).

STUDY CONDUCTED BY:
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The full document is accessible to the project's Stakeholders Interest Group on the CLYMA website: **www.clyma.eu**

CLYMA
THE GREEN LINE

DEVELOPMENT OF THE
CONNECTION
LYON-MADRID
ON THE MEDITERRANEAN
CORRIDOR

Co-financed by the European Union
Trans-European Transport Network (TEN-T)

## Foreword

The process analysis of the Activity 5 of the CLYMA project: “Development of a strategic plan for ICT integration” has been structured in three different parts:

- **In the first one there have been analysed European existing initiatives** related with the exchange of electronic data, such as R&D projects financed by the European Commission or European Union Information Technologies initiatives that support the development of the rail freight corridors.
- **In the second one there have been studied the documentary process involved in the supply chains along the Corridor**, focusing on two specific supply chains. The first one runs from the Port of Barcelona to France by railway, and the other one by an inland connection from the Port of Marseille-Fos Port Area to
- **Finally, the last part is a proposal for developing Railway European Collaboration Network**, trying to integrate all the stakeholders involved in the railway transport chain.

## ICT gaps on corridors

The lack of interoperability could be considered the major challenge to be faced. European Union (EU) Information Technologies (IT) initiatives that support the development of the rail freight corridors have been analysed to identify potential gaps and describe high-level recommendations.

The different railway working groups have carried out standardisation and harmonisation processes between Railway Undertaking and Infrastructure Manager.

All this harmonisation has been focused on the management of means of transports, the coordination between the trains and the infrastructure. However, instructions orders to terminals have not been included in these processes.

The main gaps and finding detected are:

- The information is sent in unstructured format.
- Contracting railway services is not an easy task as it requires time and deep knowledge of the railway process.
- The process may be optimized through collaborative system.
- Lack of visibility of path assignation, train schedule, running information, incidences, etc.


## ICT corridor analysis

To analyse the documentary processes that are involved in supply chains along the corridor two existing supply chains have been studied:

- From Port of Barcelona to France by rail
- From Marseille to Lyon by barge.

The findings of the process analysis have been classified into a Strength Weakness Opportunities and Threats (SOWT analysis), which is going to help to draw out the improvement guidelines.

| STRENGTHS | WEAKNESS |
|---|---|
| 1. Strong integration and relationship between RU-IM, RU-RU, IM-IM<br>2. Rail Freight Corridors, RNE, IRU<br>3. Studies and researches developed by EU. | 1. Lack of interoperability and visibility among logistic operators.<br>2. Long and tedious process for railway transportation plan.<br>3. The "selling process" is complex and eCommerce has been slightly adopted. |
| **OPPORTUNITIES** | **THREATS** |
| 1. Support of authorities/public administration to benefit Railway Traffic.<br>2. Customs Simplified Transit for Railways. | 1. Not harmonized and unstructured growth.<br>2. Creation of new administrative burdens. |

1. RU: Railway Undertaken IM: Infrastructure Manager RNE: Rail Net Europe

## ICT Master Plan

A proposal for developing a Railway European Collaboration Network has been presented, trying to reduce the gap observed during the analysis.

The RECN is proposed to be composed of several Railway Collaborative System (RCS) along the corridor. Each RCS would be an autonomous system and would work in its community trying to integrate the stakeholders involved in the railway transport chain. The RCS would be run by an Entity/Company called Operator. The RCS Operator would be in charge of administrating, operating and selling the services offered. Finally, the vision would be that the different RCS would be interconnected to exchange information creating a Railway European Collaboration Network.

The Master Plan has been structured in two sections. The first one explains the vision of RECN and the second proposes a brief action plan to develop the RECN. The action plan is grouped in the following Working Activities:

- **Legal & polices:** aiming to purpose a list of recommendation European Union policy makers to promote the adoption of interoperability environment in Europe.
- **Harmonisation & process standardisation:** creating a common understanding about the railway planning and execution processes.
- **Technology:** helping to design the common interfaces for interoperability purpose.
- **Change management:** elaborating incentives plans addressed to operators for its implementation and exploitation, elaborating a communication plan and promotional material and training plans.

**CLYMA** project consists of the implementation of the corridor approach to a section of the **Mediterranean corridor**, concretely to the Western part of the corridor and specifically to the Lyon-Madrid Axis.

The project comprises of studies and actions on the organization and optimal implementation of the **TEN-T network**, taking into account long term perspectives, environmental aspects and associated needs, as well as studies that promote environmental sustainability, resource efficiency and low-carbon transport within an integrated transport concept. This should stimulate the deployment of the **Green Corridor concept.** The project also intends to develop a **managerial structure** for the intermodal corridor.


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