

# STRATEGY FOR FOSTERING COORDINATED MULTIMODAL FREIGHT TRANSPORT THROUGHT ICT SYSTEMS - HUNGARY

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## 2. Introduction

The Application Form defines precisely to elaborate a common concept / methodology for elaborating the Strategies for fostering multimodal freight transport in CE through ICT systems for all COMODALCE regions.

# 3. Aim of document

The "Strategy for fostering coordinated multimodal freight transport through ICT systems - Hungary" (D.T1.3.9), described as "strategy for fostering multimodal transport through ICT systems setting a vision, objectives and priorities in a mid- to long-term perspective, including a detailed wish list of measures to be tested in the pilot action" for Hungary.

The scope of this document are the Hungarian Danube ports.

The document is based on the existing relevant strategic studies especially with the Port Development Plan (Ex Ante, Mahart Passnave, 2019) for Hungary.





# 4. Methodology

## 4.1. Setting vision, mission, key values

The definition of vision statement, mission statement and key values provides a strategic framework for the planned measures.

#### VISION

(Vision statement focuses on tomorrow and set the target aims to be achieved)

The Hungarian Danube ports shall become significant and effective multimodal hubs until 2030 in their region's transport system capable to transport the 10% of the domestic freight traffic on the environmental friendly inland waterways.

#### MISSION

(Mission statement focuses on today, what challenges shall we face towards the vision today)

- 1. Supporting modal shift
- 2. Generation of additional demand
- 3. Establishing financing system
- 4. Development of humanr resources
- 5. Establishing sustainable regulation environment

## **KEY VALUES**

(The principles and values that are the basis of the vision of the strategy)

Modernisation, innovation and digitalisation

Environmental friendliness

Investing in human resources

Improving competitiveness





# 4.2. Setting strategic goals

Please define the strategic goals your organisation wants to achieve in the domain of <u>ICT tools for fostering</u> <u>multimodal transport</u> in the medium (5 years) and long term (10 years).

#### Medium term (5 years):

- 1. Goal no. 1: Establishing National Integrated Port Management Information System
- 2. Goal no. 2: IWT Loading Plan Software
- 3. Goal no. 3: Adopting common Upper Rhein Container List

#### Long term (10 years):

- 1. Goal no. 4: Automatisation of ports, Industry 4.0 solutions
- 2. Goal no. 5: Danube Ports Information System integration

Goal no. 1: Establishing National Integrated Port Management Information System

Perspectives	Goal	Measurement	
1. Environmental and safety perspective	Port management system will also enhance the environmental and safety aspects of the ports.	Environmental: less pollution incident because electronic reporting Safety: Enhanced and more effective monitoring will conclude less conflict issues, e.g. by using fee calculator, electronic log	
2. Internal processes perspectives	Improvement of internal processes will be necessary because introduction of new system.	More effective and modernised processes can be measured by reduced time and efforts port processes.	
3. Innovation and growth perspective	Digitalisation will bring innovation and growth possiblities.	Number of partner users (e.g. truck drivers) growth will measure effectivity of the system and innovation level.	
4. Customer / Partner perspective	Improved and more comfortable modern services will raise customer satisfaction.	Customer acceptance of the system and satisfaction can be measured by surveys or feedbacks.	
5. Financial perspective	Effectivity and satisfaction growth will lead to financial increase as well.	Financial income or port traffic volumes can be measured.	
VICION.			

### VISION:

The Hungarian Danube ports shall become significant and effective multimodal hubs until 2030 in their region's transport system capable to transport the 10% of the domestic freight traffic on the environmental friendly inland waterways.





The first goal is to provide a national port management information system framework for Hungary to modernize, digitalise port operations and to harmonise statistics and port log systems. In order to increase competitiveness several modules of the system will support the daily activities of the terminal and port operators.

Goal no. 2: IWT Loading Plan Software

Perspectives	Goal	Measurement	
Environmental and safety perspective	IWT Loading Plan Software will increase safety of container ships and containter terminals.	Safety: Enhanced and modernised container plan will improve safety by reducing problems in loading and unloading.	
2. Internal processes perspectives	Improvement of internal processes will be necessary because introduction of software.	More effective and modernised processes can be measured by reduced time and efforts at loading and unloadings.	
3. Innovation and growth perspective	Modern software will bring innovation and growth possiblities.	Number of partner users growth will measure effectivity of the service and innovation level.	
4. Customer / Partner perspective	Improved and more comfortable modern services will raise customer satisfaction.	Customer acceptance of the system and satisfaction can be measured by surveys or feedbacks.	
5. Financial perspective	Effectivity and satisfaction growth will lead to financial increase as well.	Financial income or port traffic volumes can be measured.	
VISION:			

The Hungarian Danube ports shall become significant and effective multimodal hubs until 2030 in their region's transport system capable to transport the 10% of the domestic freight traffic on the environmental friendly inland waterways.

The second goal is to provide a harmonised loading plan solution, which does not exist yet for the Danube. This software solution will support the daily operation of ship captains and terminals.

Goal no. 3: Adopting common Upper Rhein Container List

Perspectives	Goal	Measurement	
Environmental and safety perspective	Internationally standardised format will have more effective safety.	Safety: Enhanced and more effective monitoring will conclude less conflict issues	
2. Internal processes perspectives	Improvement of internal processes will be necessary because introduction of new data format.	Number of foreign ports using this data format.	
3. Innovation and growth perspective	Digitalisation will bring innovation and growth possiblities.	Number of partner users growth will measure effectivity of the system and innovation level.	





	Internationally standardised modern	Customer acceptance of the system
4. Customer / Partner	services will raise customer	and satisfaction can be measured by
perspective	satisfaction.	surveys or feedbacks.
5. Financial perspective	Effectivity and satisfaction growth will lead to financial increase as well.	Financial income or port traffic volumes can be measured.

## **VISION:**

The Hungarian Danube ports shall become significant and effective multimodal hubs until 2030 in their region's transport system capable to transport the 10% of the domestic freight traffic on the environmental friendly inland waterways.

It is important to harmonise and standardise data formats between the Rhein and the Danube. According to this goal the stadardised Rhein data format will be analysed and adopted for Hungary. The harmonisation will increase competitiveness and better processing of logistics data.

Goal no. 4: Automatisation of ports, Industry 4.0 solutions

Perspectives	Goal	Measurement
Environmental and safety perspective	Automatisation will also enhance the environmental and safety aspects of the ports. Reduction of human factor mistakes or problems. New safety rules will be needed.	Environmental: less pollution incident because electronic reporting Safety: Enhanced and more effective processes will conclude less human factor accidents and problems.
2. Internal processes perspectives	Improvement of internal processes will be necessary because introduction of new services.	More effective and modernised processes can be measured by reduced time and efforts port processes.
3. Innovation and growth perspective	Automatisation will bring innovation and growth possiblities.	Time and cost reduction.
4. Customer / Partner perspective	Improved and more comfortable modern services will raise customer satisfaction.	Customer acceptance of the system and satisfaction can be measured by surveys or feedbacks.
5. Financial perspective	Cost saving and more effective automatisation.	Financial cost reduction can be measured.

## **VISION:**

The Hungarian Danube ports shall become significant and effective multimodal hubs until 2030 in their region's transport system capable to transport the 10% of the domestic freight traffic on the environmental friendly inland waterways.

Based on the National Port Development Masterplan it is a priority to boost automatisation and Industry 4.0 solutions in port operations. The innovation increases competitiveness and effectivity of port operations.





Goal no. 5: Danube Ports Information System integration

Perspectives	Goal	Measurement
Environmental and safety perspective	Danube port management system will also enhance the environmental and safety aspects of the ports.  Cooperation with other Danube ports.	Environmental: less pollution incident because electronic reporting Safety: Enhanced and more effective monitoring will conclude effective intaernational processes.
2. Internal processes perspectives	Improvement of internal processes will be necessary because introduction of new international system.	More effective and modernised processes can be measured by reduced time and efforts port processes.
3. Innovation and growth perspective	Digitalisation will bring innovation and growth possiblities.	Number of cross border Danube ports involved.
4. Customer / Partner perspective	Cross border modern Danube services will raise customer satisfaction.	Customer acceptance of the system and satisfaction can be measured by surveys or feedbacks.
5. Financial perspective	Effectivity and satisfaction growth will lead to financial increase as well.	Financial income or port traffic volumes can be measured.
VISION.		

#### VISION:

The Hungarian Danube ports shall become significant and effective multimodal hubs until 2030 in their region's transport system capable to transport the 10% of the domestic freight traffic on the environmental friendly inland waterways.

The Danube transnational transport corridor would need a harmonised and integrated information system to manage cross border transport effectively. Hence the riparian countries' ports and national administrations shall make efforts to harmonise their system and interconnect them. The Danube Ports Network will serve as perfect basis for this.





# 4.3. Wish list of ICT measures

According to the AF, local strategies include a "detailed wish list of ICT measures to be tested in the pilot actions (WPT2)".

Wish list of ICT measures			
Title	Short description	Link to the strategic goal	Link to the pilot action
1.	Integrated Port Information System in Hungary (KIR)	Goal no. 1: Establishing National Integrated Port Management Information System	ongoing project, cooperation with COMODALCE pilot
2.	IWT Loading Plan Software	Goal no. 2: IWT Loading Plan Software	part of COMODALCE pilot (WPT2)
3.	Adopting common Upper Rhein Container List	Goal no. 3: Adopting common Upper Rhein Container List	part of COMODALCE pilot (WPT2)
4.	Automatisation of ports, Industry 4.0 solutions	Goal no. 4: Automatisation of ports, Industry 4.0 solutions	-
5.	Danube Ports Information System integration	Goal no. 5: Danube Ports Information System integration	-

End of document.