

## FERRMED – EULER DECLARATION

### FERRMED – EULER / R+D+4i Platform position on the revision of the Trans-European and Trans-Eurasian Transport Network

#### ABOUT FERRMED

FERRMED is a non-profit multisectoral Association that was founded by the private sector in Brussels on the 5<sup>th</sup> of August 2004 to improve rail freight transportation and industrial competitiveness in Europe and neighbouring countries.

Another key FERRMED objective is the optimization of the full logistics chain, considering appropriate intermodality, reducing costs, increasing quality, assuring environmental friendliness, adequate transit times and improving management procedures in the transportation system, in the framework of 5G and Circular Economy.

FERRMED has more than 130 members all over Europe<sup>1</sup>.

#### ABOUT EULER / R+D+4i Platform

The EULER / R+D+4i Platform (EULER = EU /Eurasian Locomotive Economic Regions) is an open conglomerate of institutions and companies at European/Eurasian level, proposed by FERRMED and all other organizations that signed this Declaration, in order to:

- Support the Action Plan related to the “FERRMED Study of Traffic and Modal Shift Optimisation in the EU”.
- Promote a new Regional International concept based in socio-economic scope.
- Enhance the socio-economic and environmental goals based in the reinforcement of excellence: Research, Development, innovation, identity, impact, and infrastructure (R+D+4i).

### 1. PERFORMANCE AND ENVIRONMENTAL IMPACT OF THE EUROPEAN LAND FREIGHT TRANSPORT SYSTEM

#### 1.1. Background

- In 2015 transport volume in the EU-28 was **19 billion tonnes** of goods transported (or **2,385 billion tonne/kilometre**). In terms of tonne-kilometre, **75% was transported by road, 18% by rail and 7% by barge<sup>2</sup>**.

---

<sup>1</sup> Members | FERRMED. (2020). <http://www.ferrmed.com/es/MEMBERSHIP/members>

<sup>2</sup> Rail Freight Forward (13/12/2018): 30 by 2030 – Rail Freight strategy to boost modalshift (page 6)

- Alternatively: In the year 2018, total freight transport performance in the EU-27 (without the UK) was **2,267 billion tonne-kilometres** of which **75,4% by road, 18,7% by rail and 6% by inland waterway**<sup>3</sup>.
- Most (around 55%) of total road freight transport performance was over distances of more than 300km of which, roughly one third, where over more than 1000km<sup>4</sup>.
- The impact of road freight transport on the environment is massive: some **275 million tonnes of CO<sub>2</sub>** per annum representing **30% of total GHG emissions of the transport sector** as a whole<sup>5</sup>.

Road freight transport also contributes substantially to road congestion and is responsible for premature deaths from pollution and accidents mainly on roads.

## 1.2. PRESENT CONDITIONS OF THE EUROPEAN LAND FREIGHT TRANSPORT SYSTEM

- In the EU, according to the “World Economic Forum”<sup>6</sup>:
  - 24% of freight vehicles run empty
  - The loading of the rest is, on average, of 57% in terms of weight
  - Overall efficiency is only 43%
  - Estimated recoverable loss of 160 billion Euros/year (similar conditions appear at Eurasian level)
- **Rail has 6 times lower specific energy consumption and external costs than road, however, there has been no increase in European rail freight share in the last 15 years!**

## 1.3. CALL FOR A COMPREHENSIVE PLAN OF MODAL SHIFT OPTIMISATION

Considering:

- The performance and environmental impact
- The economic development expected from 2019 until 2030
- The existing inefficiency of the system
- The waste of economic resources in useless investments
- The lower specific energy consumption and external costs of the railway versus the road

**Under the scope of the “European Green Deal”, a comprehensive plan at EU level (even at Eurasian level) of modal shift optimisation is urgently needed. See annex 1**

## 1.4. KEY MESSAGES

- Under the framework of the European Green Deal, to concentrate efforts on achieving the “White Paper” targets in the most crowded sections of the corridors of the Core Network already defined by the EC (EU Backbone Network)

<sup>3</sup> EU Transport in figures 2020 (Table 2.2.1)

<sup>4</sup> Eurostat: Statistics explained: Road freight transport statistics November 2019 (page 4)

<sup>5</sup> Rail Freight Forward (13/12/2018): 30 by 2030 – Rail Freight strategy to boost modal shift (page 6)

<sup>6</sup> FERRMED Conference (2019) Opening speech of Mr. Antonio Tajani MEP, Chairman of the Committee for Constitutional Affairs, Former President of the European Parliament.  
<https://www.weforum.org/agenda/transportation/>

- To push the implementation of innovative actions in the railway system (infrastructure – operation – rolling stock), seeking more flexibility and drastic operating cost reduction
- To compel automation, “intelligent freight trains” and “intelligent intermodal terminals”
- A mandatory Action Plan at EU Core Network level, led by the EC, previously agreed by the EU Parliament is urgently required.

## 2. EURASIAN TRANSPORT SYSTEM CHALLENGES

The continuous increase of trade between the Eurasian countries<sup>7</sup> (EU and North Africa included) require strengthening of the performance of the global transport interconnection system, particularly railway, where we need to identify the strategic hubs, shorter transit times and long, compact, and intelligent trains, as well as smart and efficient intermodal terminals & ports. This is key in order to reduce logistics costs and environmental impact.

## 3. THE FERRMED STUDY OF TRAFFIC AND MODAL SHIFT OPTIMISATION IN THE EU

### 3.1. PRELIMINARY

Considering there has been no increase in EU rail freight share in the last 15 years (17,9% in 2005 and 17,3% in 2017) and that the EU Transport Core Network is too vast (~80,000 km), **the shift from road to rail requires the concentration of investments in a selective part of the main corridors of the Core Network.** FERRMED has initiated a major study highlighted below.

### 3.2. OBJECTIVES

The objectives of the study are:

- **To identify freight traffic** in total and by mode of transport in the main corridors of the EU Core Network (EU Backbone Network).
- **To propose an Action Plan** to achieve the EU “White Paper” targets by 2030 (30% of freight land transportation over 300 km carried by rail or barge) in the most crowded sections of the corridors, covering 60÷65% of the traffic related to the EU Core Network. *See annex 2*

### 3.3. MAIN TOPICS IN THE SHIFT TO RAIL

- We do not intend to have road compete against rail; we consider the railway as the main complement to road traffic. In the vast majority of cases, road is best for short distances and for the first and last miles. **Railway could be considered in the same way as a “ferry” or short sea vessel**, suitable to carry trucks and trailers for long distances (and/or point-to-point traffic).

---

<sup>7</sup> According to China National Railway Co., the Trans-Eurasian railway network has performed unexpectedly well under the severe constraints imposed by the measures against the COVID-19 outbreak. In the first half of 2020 the Eurasian land bridge has responded remarkably to the surging demand for rail freight in both ends of the Continent, producing overall growth of 50% in China – Europe container traffic over the same period last year.

- To achieve the appropriate transfer from road to rail, “**combined transport**” (CT) is key, mainly **unaccompanied CT**. Accompanied CT (Rolling Motorways) is more adequate to facilitate the efficient crossing of geographical obstacles (e.g., the English Channel, the Alps, etc).  
Therefore, forwarding of intermodal loading units like containers, swap bodies or semi-trailers is the base of CT and the best way to attain the targets of the EC White Paper on transport.

### 3.4. BASIC STRUCTURE AND CONTENTS OF THE STUDY

- Identification of:
  - The sections of Main Corridors of the Core Network with most traffic (all transport modes) → “Backbone Network” (65% of Core Network traffic). Present and future conditions.
  - The key strategic logistics hubs.
  - The key intermodal terminals & ports of the “Backbone Network”.
  - The main interconnection links, back-up links and feeder links related to the key intermodal terminals & ports in the “Backbone Network”.
  - The bottlenecks in intermodal terminals & ports and interconnection links according to the traffic (present and future conditions)
  - The best routes to interlink EU main logistics hubs with neighbouring countries and main Eurasian countries like Russian Federation, China, Kazakhstan, etc. See the basic concepts in Annex 3.
- Key issues:
  - Solving bottlenecks in the EU Backbone Network.
  - Highest level of digitalization and ERTMS totally implemented in main intermodal terminals & ports and interconnection links.
  - Determining the required number and characteristics of the intermodal terminals.
  - In the case of railway, the main intermodal terminals and the corresponding interconnection links must be able to handle long freight trains (1<sup>st</sup> stage 740 m., second stage 1.000 ÷ 1.500 m) as well as offer the possibility of piggybacking (ferroutage) in all of them (adequate loading gauges is required).
  - Satisfactory transborder connections with neighbouring countries of the European Union, a Eurasian outlook with shorter transit times and long train handling, are essential.
  - At operation level, actions in rolling stock are urged. Mainly, full digitalization with automatic couplings and longer freight wagons, each one being able to carry 4 TEUs. These features allow for longer and more compact trains, facilitating the automation of coupling / decoupling and the entire marshalling yard.
- Actions with a socio-economic and environmental impact:
  - Railway Network considering infrastructure and operation
  - Rolling Stock
  - Inland waterways

- Socio-economic and environmental results
  - Required investments
  - Savings in VOC
  - Savings in transport time
  - Environmental measures: reduced GHG and other emissions, reduced number of accidents
  - Net Present Value
  - GDP impact
  - Potential financing (public vs private) approach

### 3.5. A KEY TOOL FOR THE EU COVID-19 RECOVERY PLAN IN TRANSPORT INFRASTRUCTURE AND OPERATION

FERRMED is working industriously on the **FERRMED Study of Traffic and Modal Shift Optimization in the EU**, the results of which may be a key tool to achieve the best return on investment for the actions to be carried out along the global logistics chain.

It is necessary once and for all to put an end to investments of a political or wasteful nature and **to have a properly structured Investment Plan at EU level, in accordance with the socio-economic and environmental priority criteria** approved in advance by the European Commission and Parliament.

These initiatives must be in line with the objectives of the **Commission's White Paper on Transport**. We need to **act where there really is traffic** and not where the socio-economic and, particularly, environmental impact is negligible.

### 3.6. MILESTONES

The first phase of the Study, involving **fact-finding on the zones of the whole "EU Core Network", where it is necessary to act pre-eminently**, will be finished in the first half of **2021** and the complete Study, which will **specify actions to be carried out on the railway network and on the waterways**, together with an assessment of favourable economic and environmental impact, at the end of the first quarter of 2022.

The provisional results already available from the first phase of the Study for some countries, give a clear picture of the sections of the railway network requiring investment, if it is intended that by 2030 the railway and the barge bear 30% of land traffic for distances greater than 300 km.

The actions proposed by the FERRMED Study for the whole of Europe include short-term (2023), medium-term (2025) and long-term (2030) actions.

### 3.7. SCHEDULE

#### FERRMED STUDY OF TRAFFIC AND MODAL SHIFT OPTIMISATION IN THE EU DEVELOPMENT TIMING

MAIN ACTION / ACTIVITY	CALENDAR													
	3Q 2019	4Q 2019	1Q 2020	2Q 2020	3Q 2020	4Q 2020	1Q 2021	2Q 2021	3Q 2021	4Q 2021	1Q 2022	2Q 2022	3Q 2022	4Q 2022
1 Definition/approval of targets and content	█													
2 Definition/approval of budgeted and required manpower	█													
3 Establishment of agreements/collaborations with key international Associations	█													
4 Development timing preparation	█	█												
5 Data collection of traffic on railway, road and IWW		█	█	█	█	█								
6 Backbone Network determination					█	█	█	█						
7 Interactive maps preparation					█	█	█	█						
8 Data collection intermodal terminals & ports and marshalling yards + stakeholders survey					█	█	█	█						
9 Data collection interconnecting links						█	█	█						
10 Forecast traffic & scenarios + stakeholders survey							█	█	█					
11 Analysis of traffic & scenarios impact in intermodal terminals & marshalling yards + Actions required								█	█	█				
12 Analysis of traffic & scenarios impact in interconnection links + Actions									█	█	█			
13 Rolling Stock Improvement										█	█	█		
14 Trans-Eurasian Main Railway Network Enhancement											█	█	█	
15 Socio-economic and environmental analysis												█	█	█
16 Edition of the Study content														█
17 Dissemination														█

The results and proposals of the FERRMED Study of Traffic and Modal Shift Optimisation in the EU, will be at the full disposal of the European Commission, European Parliament and all involved Member States and neighbouring and interrelated countries.

This will undoubtedly be a key tool for establishing the corresponding priorities and achieve the best socio-economic and environmental results according to the forthcoming Action Plan of the Study.

Brussels, January 2021

\_\_\_\_\_  
Name of the Company / Association / Institution

gives its support to the “FERRMED Study of Traffic and Modal Shift Optimisation in the EU” and main targets it envisaged.

\_\_\_\_\_  
Name of representative

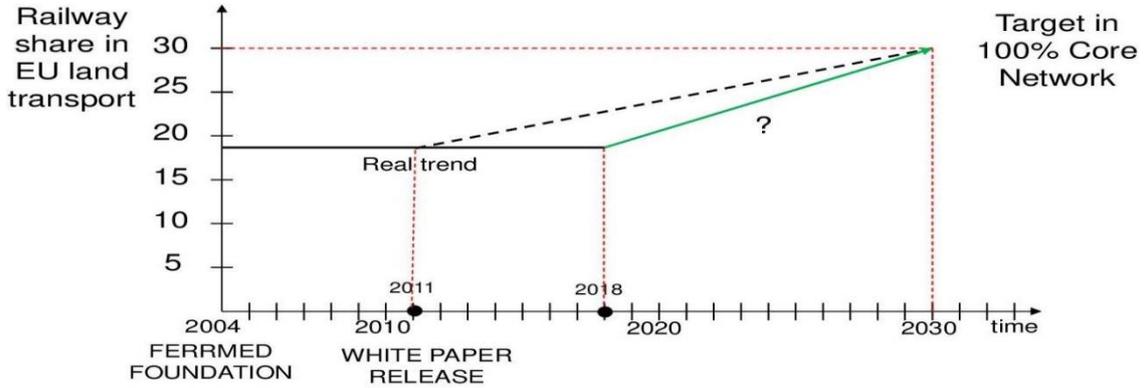
\_\_\_\_\_  
Signature

\_\_\_\_\_  
Position

\_\_\_\_\_  
Address / phone / e-mail

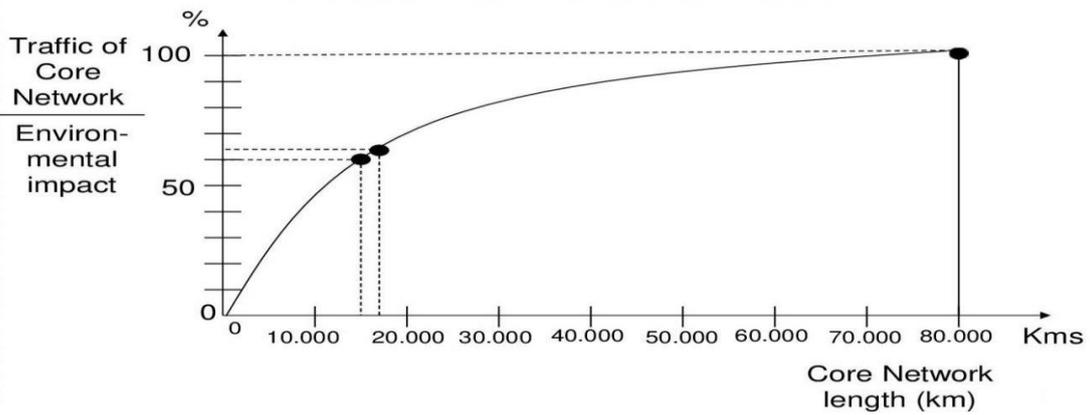
Annex 1

**RAILWAY SHARE REAL VERSUS PLANNED**



Annex 2

**FERRMED APPROACH TO ACHIEVE AT LEAST 60 ÷ 65% OF "WHITE PAPER" TARGETS IN 2030**



Annex 3

