

**Technical, Socio-economic and Supply/Demand study regarding the transport of the FERRMED Great Rail Network (Scandinavia-Rhine-Rhône-Western Mediterranean)**

## **Conclusions – Proposals**

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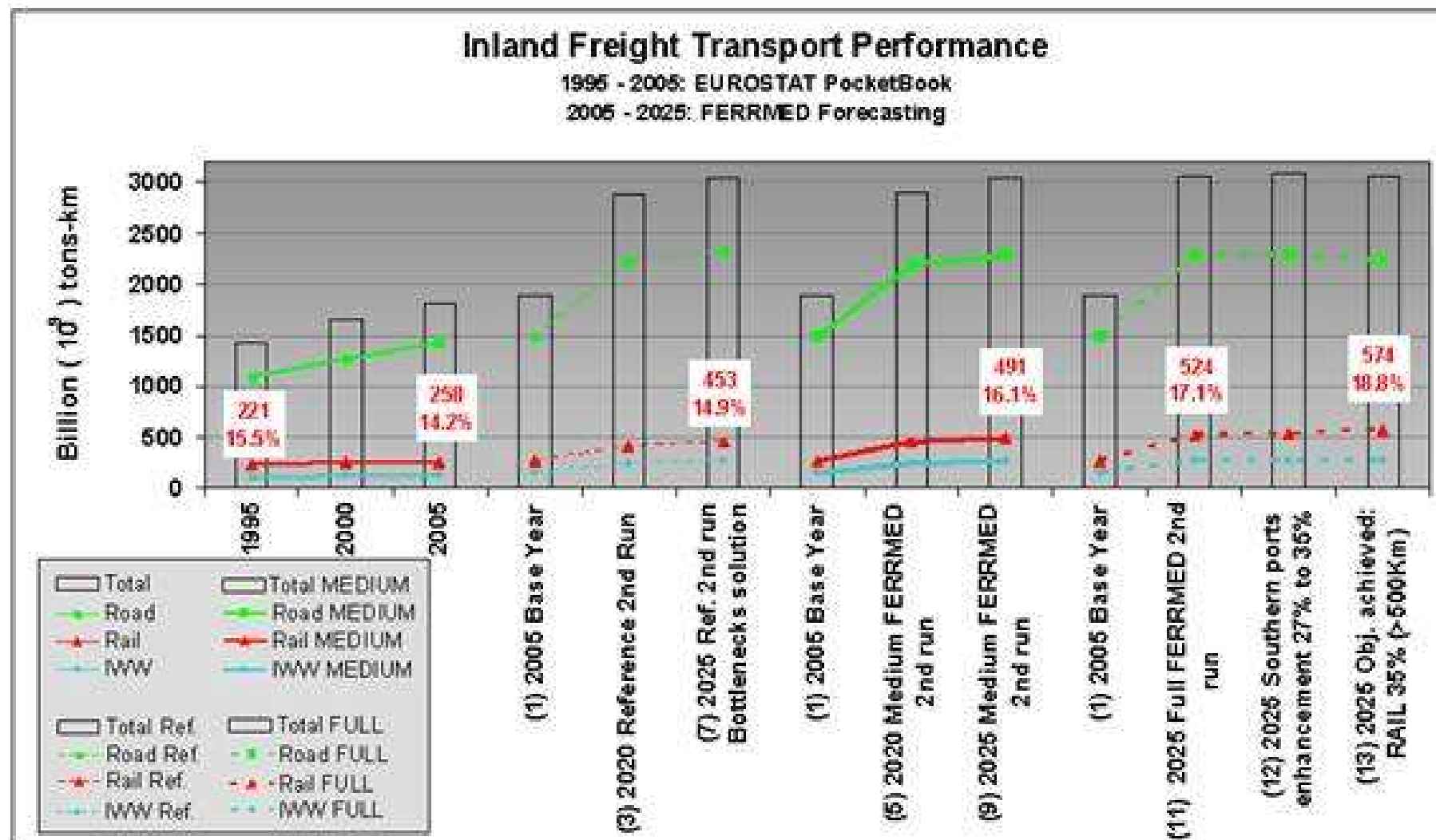




- Growth of freight traffic between 2005 and 2025 (with bottlenecks solved):
  - Rail 70.5%
  - Total inland 61.7%
  - Road 56.6%
- Rail share in Red Banana:
  - 2005 9.4%
  - 2025 10%

# Rail Freight Traffic

Growth (tonnes-km) between:	Road	Rail	IWW	Sea	Total All	Total Inland
2020 Reference/ 2020 Medium	-1.8%	10.7%	-0,5%	-0.1%	0.1%	0.0%
2025 Reference/ 2025 Medium	-1.4%	8.4%	-1,0%	-0.5%	0.1%	-0.1%
2025 Reference/ 2025 Full	-2.0%	15.6%	-1,8%	-0.8%	0.7%	0.2%



# Proposed Investments (Full FERRMED Scenario)

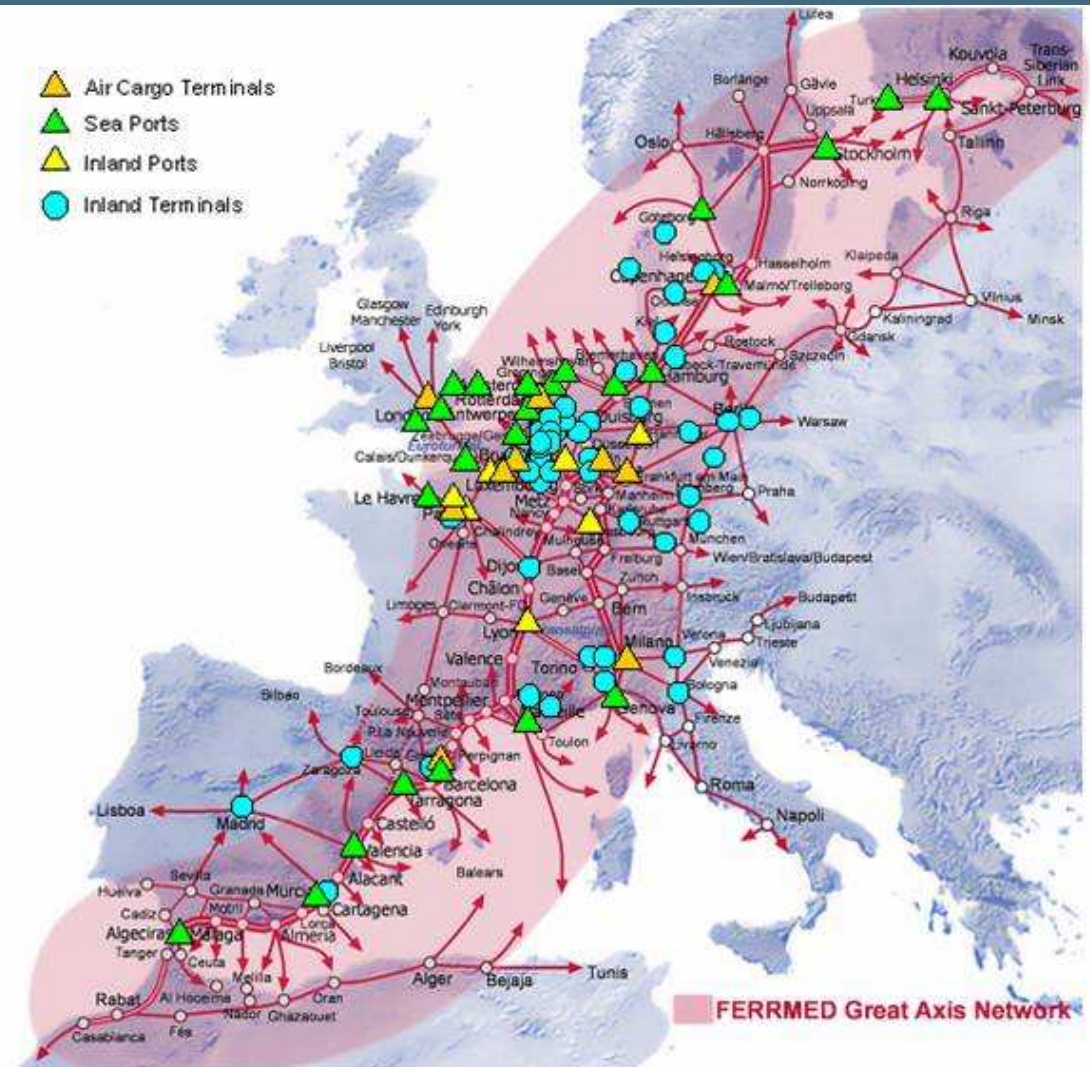
• Bottlenecks solutions:	17.1	bn €
• New lines:	16.4	bn €
• City by-passes:	12.8	bn €
• FERRMED standards:	56	bn €
• ERTMS:	14.3	bn €
• Automatic couplers:	7.4	bn €
• Rolling stock:	630	mil €
• Electric reinforcement:	724	mil €
• Terminals (Ports + Inland):	51,7	bn €
• <b>Total:</b>	<b>177.7</b>	<b>bn €</b>



- Priority 1 measures:
  - Standard track gauge / Taragona-Castello new line / Solve bottlenecks (capacity) / Loading gauge (UIC B1 in existing, UIC C in new) / Automatic coupling system / Noise barriers
- Priority 2 measures:
  - Reinforcement of electricity power / ERTMS / City by-passes / Missing links / Freight train length increase / Terminals
- Priority 3 measures:
  - Electrification of remaining lines / Axle load increase

# Freight Terminals

- Terminals should be examined together with the development of corridors.
- Lack of terminals:
  - France, Spain, Germany and Italy
  - Sweden, Netherlands, Switzerland and Belgium
  - Minor needs in all countries influenced by FERRMED Rail Network
- Needs increase due to the promotion of the Axis.



- Full FERMED Scenario:
  - EIRR: 11.09%
  - BCR: 1.99
- The next step should be to establish a programme of priority projects.
- Individual feasibility studies (project by project) are anyhow a prerequisite for financing of specific projects.
- Discussions with International Financing Institutions should start in short-term.





- Lack of network capacity for rail freight: Regulatory and administrative reforms are needed.
- Parallel lines for freight and passenger rail traffic.
- Priority to city by-passes.
- Set more fair priority rules.
- Develop efficient and unified charging structure.
- Achieve full liberalization.
- Achieve free competition.
- Establish freight “preference” corridors.
- Management at corridor level should be examined.



- Noise
- Emissions
- Identification of potential conflicts
  - Protected Sites
  - Design (EIA)
  - Environmental management during construction

- Main operating problems include:
  - Lack of coordination between the different ports and terminals.
  - Time consuming approval procedures for rail traffic.
  - Lack of interoperability in international rail traffic.
  - The priority of passenger rail traffic over freight.
- Suggested future actions:
  - Solution is needed on electricity issues.
  - Need for legal framework changes.
  - Need for legislation changes and capacity increase.
  - Free competition.

- Expectation for growth in European markets and additional demand for freight transport during the period 2008 – 2025.
- Expect the gradual implementation of the FERRMED standards until 2025.
- Positive attitude towards the implementation of FERRMED standards. Difficulties in the FERRMED standards implementation, mostly due to financial reasons.
- FERRMED Great Axis Network is considered as an ambitious and important project which will enhance EU economy.



# THANK YOU

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