



The Voice of Private and Independent Rail Freight Companies

The European rail freight market
– achievements and challenges

Warsaw – 17 November



The ERFA rail freight development study is based on extensive stakeholder interviews, research and expert opinions

Foundations of this study

- Stakeholder Interviews with Key Industry Players



- Analysis of Industry Reports and Studies
- Expert Opinions (100+ years of rail freight expertise)

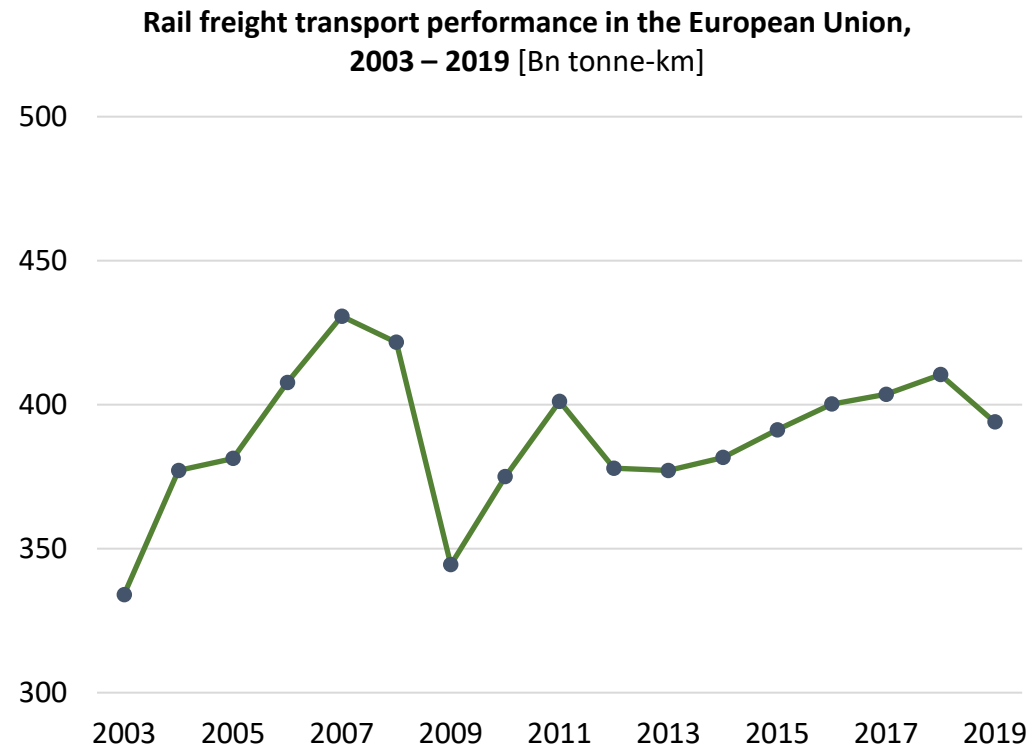
Comments

- Study was conducted between December 2021 and March 2022 by ECM Ventures
- C-level Stakeholder interviews served as a basis to identify issues that hinder:
 - a competitive rail freight market
 - service enhancements
 - further rail freight growth in Europe
- The study recommends measures to further improve rail freight offering and advance the sustainability agenda of transport sector in the EU



The rail freight market rebounded post the 2009 crisis, but had not recovered to its 2007 peak when the 2020 pandemic arrived

Development of Rail freight in Europe (EU 27)



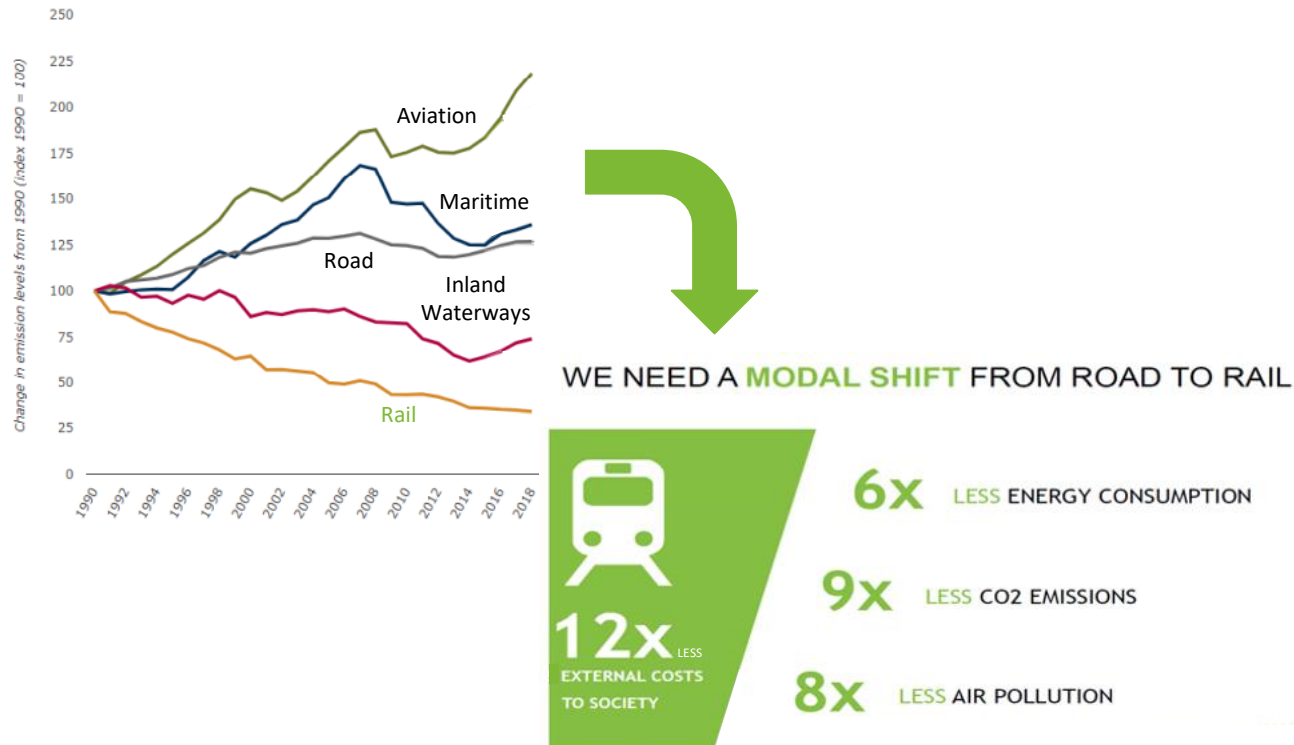
Comments

- Despite a strong rebound in 2010/11 overall volume did not reach pre-crisis levels of 430 billion tonne-kilometers
- In fact, the remarkable growth for rail freight recorded since the 1990s came to a stop in 2008/09 and the market stagnates since 2011 and rail freight modal share stayed at 17-18%
- Rail freight does not appear to be a success story under this perspective
- **This study focuses on growth drivers and obstacles for future development**



The rail sector reduced greenhouse gas emission by ~60% since 1990, but more efforts are needed to reach *net zero* by 2050

Greenhouse Gas Emissions by Mode of Transport EU 27



Comments

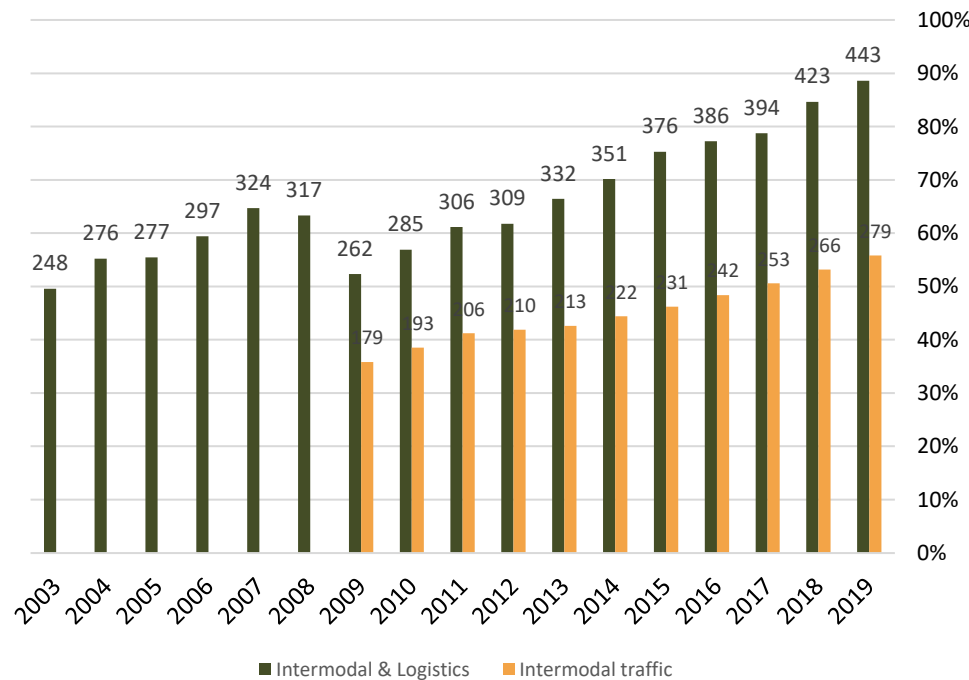
- The rail sector has reduced its carbon emissions by nearly 60% from 1990 to 2018, while the road sector increased carbon emissions by >25%
- The impact of “low emission” rail transport can be further increased with a strong shift of freight from road to rail towards **30% modal share in 2030**
- More efforts are needed to make rail “net zero” in 2050 (electrification, hydrogen, etc.)

Intermodal & logistics, up by 69% from 2009 to 2019, are driving rail freight growth and had reached 443m tonnes pre-Covid

EU Intermodal & Logistics 2003-2019

[Mn tons]

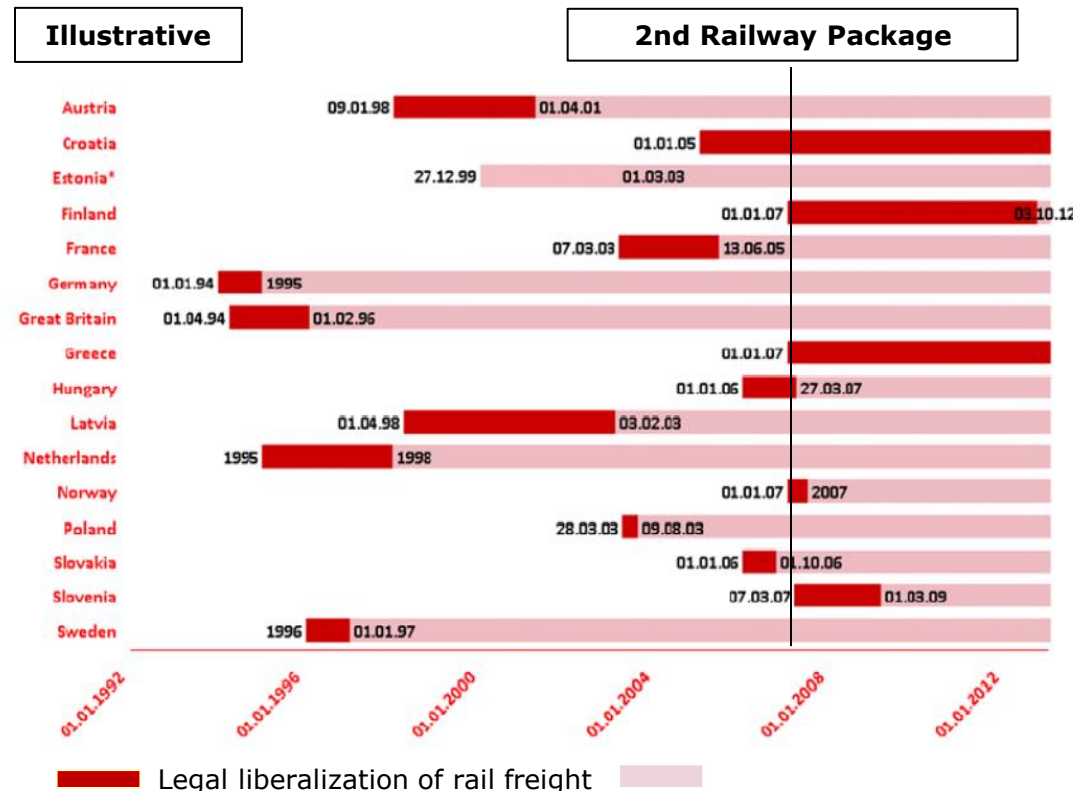
Comments



- Intermodal and logistics (incl. mail & parcels) was the key growth driver for rail freight over the last 20 years
- In 2019 about 443 million tons of cargo were carried by intermodal and logistics trains
- This trend is expected to continue to 2030, while legacy rail commodities keep declining (esp. fossil fuels, like coal, oil & gas)
- **Intermodal and logistics trains have become a sustainable alternative to road on long-haul routes and are expected to grow further**

Liberalization and appearance of first new entrants in European countries varied widely – early adopters enjoyed high benefits

Liberalization and appearance of new entrants



Source: Independent Regulators Group 2013; ECM Ventures Analysis

Comments

- Germany, United Kingdom, The Netherlands, Sweden and Austria opened their rail freight markets in the mid-Nineties
- Rail freight growth and modal share was stimulated by increasing competition, higher efficiency and customer service
- Most countries followed in 2003-2007 (2nd Railway Package) and observed similar benefits with a delay of 10 years
- Liberalization of freight rail stopped the trend of decline in modal share and partially reversed this trend**

Rail freight market liberalization led to competition and helped improve offering and effectiveness in three phases

Phase 1

- Early adopters of rail liberalization
- First new entrants appear (mostly former industrial or port railways)
- Incumbents widely ignore the starting competition
- Pioneer customers ready to give some traffic to new entrants
- Neglectable market share (<5%)
- Rail freight market in decline

Phase 2

- Fast followers and laggards (must do)
- Business model and offerings of new entrants widely accepted
- Shippers, logistics players and intermodal operators prefer the “better choice”
- Incumbents complain about “cherry-picking” and respond with lower prices
- Challenger market share grows to 25+%
- Strong growth of EU rail freight market

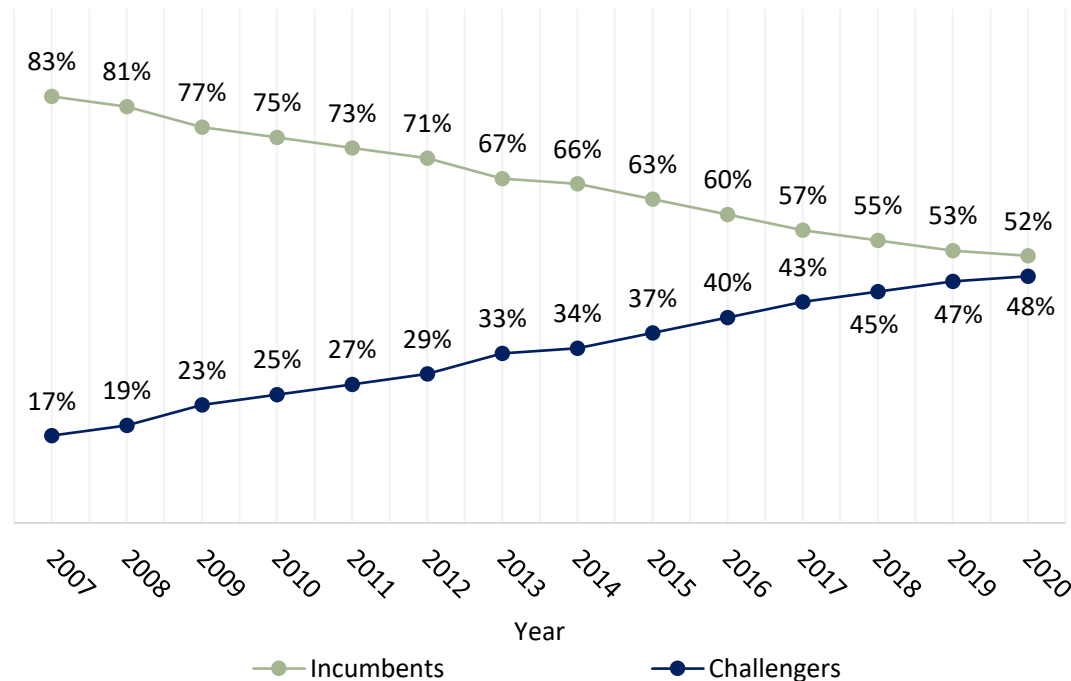
Phase 3

- New entrants merge or are acquired by large international players (helped by recession)
- In many markets customers have the choice between several challengers and the incumbent
- Attractiveness of rail freight offering greatly increased (all players)
- Challenger market share of about 50%
- Rebound after 2009 crisis



Challengers have steadily gained share vs. incumbents and now represent nearly half of the EU rail freight market

Rail freight competition in Europe



Source: IRG Rail Market Monitoring Report 2020; ECM Ventures Analysis

Comments

- A massive shift of market share from incumbents to challengers took place:
 - In 2007, only about 17% of rail freight (based on ton-kilometers) was moved by challengers.
 - In 2020 their market share reached 48%.
 - In several EU markets the incumbents have lost their dominance, or have disappeared following privatizations
- **This trend is expected to continue for the next decade – rail freight will be a very competitive market with more and more private sector players**

The European Rail Freight Market - Competitive Analysis and Recommendation



European Rail freight is a competitive market now shaped by challengers (new entrants & foreign operations of incumbents)

Country	National Incumbent	Foreign Operations of Incumbents	International New Entrants	National New Entrants
	n.a.			
	n.a.			
	n.a.			

Market penetration by challengers is significant in most member states

Rail freight competition in Europe



Comments

- Different developments can be noted:
 - In France, Switzerland and Austria the incumbents defended a high market share between 64-67%
 - In Italy, Poland and Germany the market share of incumbents dropped below 50%
 - In the Netherlands and Belgium there are no incumbents any longer, as all freight rail operations are privatized
- It is expected that the market share of challengers will further increase
- **What is behind this dramatic shift away from incumbents?**

1) For Switzerland market share information is only available for transalpine flows (mostly transit traffic)
Source: IRG Rail Market Monitoring Report 2020, National Regulators; ECM Ventures Analysis

In contrast with incumbents, challengers are distinctively sharper, simpler, and better...albeit on a narrower offering

	Incumbents		Challengers
Business Model	Multi-segment	↔	Focused
Offering	Broad range (Wagonload, block train, etc.)	↔	Limited (intermodal, block train)
Geographic Focus	(Inter-) National Network	↔	Selective (corridor, regional network)
Operating Model	Numerous complex legacy processes	↔	Lean and agile
Cost Position & Service Levels	High structural costs and service level issues	↔	Cost competitive and better service levels
Culture	Public service mindset	↔	Service-oriented and responsive



Challengers are efficient, growth-focused, and drive innovation in customer service and deployment of new technology

Driving operational efficiencies

- Focus on one operating model and standardized production processes
- Geographic focus (corridor, regional perimeter)
- High assets and resources productivity maximize sector capacity
- Multisystem locomotives, international drivers, single operating centre

Enabling and driving market growth

- Response to and anticipation of (further) growth in select market segments
- Scalable business model with an ability to expand capacity relatively quickly
- Ready to invest in new customer relationships and transport flows / contracts

Establishing new levels of customer service

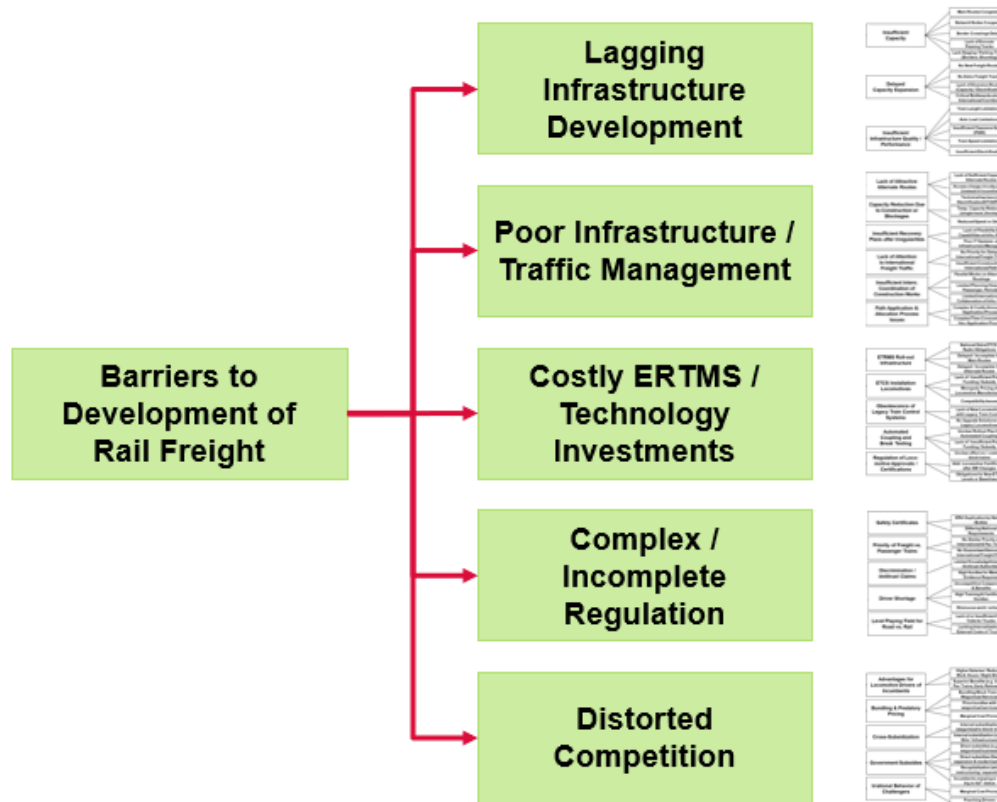
- One-stop-shop approach for all commercial & operational customer relationships
- Online tracking & tracing of trains established as standard already 10 years ago
- Rapid information and alternative solution to customers when disruptions occur

Pioneering new solutions / offerings

- Readiness to co-create solutions with customers (e.g., rail logistics offerings)
- Introduction of and broad use of new technologies (multi-system locomotives, hybrid locomotives for last-mile, automated coupling, extra-long trains)

ERFA interviews highlight the need for improvements in infra- structure, technology and fair competition to boost rail freight

ERFA Interview Outcome (*issues tree*)



Comments

- Based on stakeholder interviews, desk research and expert opinion an *issues tree* describing “Barriers to Development of Rail Freight” was developed:
 - 5 Main Categories
 - 24 Sub-Categories
 - 63 Key Issues
- The *issues tree* analysis established the basis for recommending measures to support strong rail freight growth for the next decade

Ten improvement measure to boost rail freight based emerged from the issues analysis (page 1 of 2)

- 1 **Enhanced TEN-T 2030 plans, and maximized train capacity**
 - Implementation of TEN-T 2030; Monitoring by EU
 - Ensure required standards (740m, 22,5 tons, P400)
 - Consideration of long-term rail freight capacity needs
 - Better connections to/from ports and key O&Ds
- 2 **Focused Debottlenecking**
 - EU 'task force' to debottleneck key routes and nodes
 - Coordination of Capacity and Construction Managers
 - Minimize capacity reduction due to construction works
- 3 **Enhanced management of planned and unplanned infrastructure constraints**
 - Investment priorities for alternate routes / deviations
 - Strengthening international contingency management
 - Access charge regime w/o extra fees for deviations
- 4 **Corridor quality management & leadership, monitoring and ETA instruments**
 - Improvement of international path construction
 - Strengthen international corridor organization
 - Improve international planning of construction works
 - Quality measured by Estimated Time of Arrival (ETA)
- 5 **Effective and efficient digital management of international path capacity**
 - Timetable Redesign (TTR) and digital capacity mgmt.
 - EU monitoring and transparent, public information
 - International planning/alignment of construction works

Ten improvement measure to boost rail freight based emerged from the issues analysis (page 2 of 2)

6

Safe-guarded capacity for freight trains

- Safe-guard 30% modal share target
- Introduce transparent concepts/plans for freight paths
- Ensure sufficient capacity (pre-defined paths)

7

European ERTMS standard and consistent deployment

- Create a fully-harmonized ERTMS standard
- Prohibition of national specialties in ERTMS
- Ensure competition/choices of on-board units (OBUs)

8

Antitrust regulations enforced

- Antitrust authority Rail & Road established at EU level
- Only regional complaints to be dealt at national level
- Ensure level playing field and fair competition

9

Unbundling of public service operations (with subsidies) from open market business

- Unbundling of freight services (wagonload vs. block train) separating PSO from open market business
- PSO contracts to be tendered or supplied by the national Infrastructure Manager (with open access)

10

End direct subsidies for or recapitalization of state-owned freight railway undertakings

- EU state aid directives for full separation of business
- Prerequisite for receiving recapitalization or subsidies
- Traffic-related incenting modal shift from road to rail



With recommended actions rail freight challengers can continue shifting cargo from road to rail to achieve EU green deal targets

The European Green Deal



Role of Rail Freight and Challengers

- Railways, especially challengers, have to further invest in assets and technology, increase efficiency and customer service
- Infrastructure managers have to focus on TEN-T implementation, debottlenecking, digitization, improving construction work, capacity planning and management
- Regulators and competition authorities have to secure fair capacity allocation, harmonized and open ERTMS standards, fair competition and new state aid rules
- **With this rail freight can succeed in shifting cargo from road to rail and thrive towards 30% modal split in 2030**

Development of TEN-T Network – Negotiations ongoing in European Parliament and European Council



Key Points

- In November 2021, European Commission proposed revision of TEN-T Guidelines
- Revised text will define infrastructure priorities for coming decade
- Strong focus of European Parliament in three number of areas of note to freight transport:
 - Clearer rules on infrastructure priorities
 - Stronger enforcement on non-compliance
 - Introduction of short-term capacity management rules for freight



European Commission Work Programme for 2023 – Key Legislative Revisions on the Horizon



Two Important Packages

- Greening Freight Package
- Revised text will define infrastructure priorities for coming decade
 - Capacity Proposal
 - Weights and Dimensions Directive
 - Combined Transport Directive
- Mobility Package
 - Common European Mobility Data Space
 - Regulatory Framework for Hyperloop
- Both Packages Expected in Q3 2023





**Thank you
for your
attention!**

info@erfarail.eu

www.erfarail.eu

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