

Quick wins: improving capacity and operations with small means

ERFA highlight a list of “quick wins” for the Rail Freight Corridors – relatively SMALL investments in quality than can result in BIG improvements on the performance of rail

ERFA calls for CEF funding to be made available to each RFC for small investments which can boost rail's competitiveness through operational improvements and removing bottlenecks. The problems on the corridor are well known. Now action is needed to overcome them.

The list included below is non-exhaustive and mainly focused on the Rhine Alpine corridor. This paper serves to initiate a discussion within the sector on where the priority investments lie for the corridors.

Investment in quality of the rail network is needed:



Lack of homogeneity in railway lines' performances, in particular linked to maximum axle load and maximum train length

Problem	Solution
Train tonnage – The maximum freight tonnes in Italy is 1600 gross tonnes. In the rest of Europe there is no real limit. Physics (<i>gradient and speed</i>) are normally the limit. Generally you find a gross weight between 1600-2000t.	Via regulatory change introduce a regular train weight of 2000 tonnes. There is no need for a risk assessment (ITALY) for trains up to 2000t.
Train length of 450 to 550 metres in Italy	Via regulatory change increase train length to 750 metres. This change would involve limited investment to upgrade the infrastructure.
Lack of harmonisation for train lengths along the Rhine Alpine Corridor	At the moment the train length along the Rhine-Alpine corridor is limited by the Italian infrastructure. However in the future (>2020) the minimum factor will be the German infrastructure (640 m). Due to a signalling system (CIR ELKE) there is a restriction in the edge of the axis counter.
Lack of freight-focused infrastructure evolution	It is important to measure infrastructure performance in order to build pressure. One idea is to create a KPI % of the 740m network availability.

2 Driver obligation in Italy, creating additional costs with no additional safety benefit

Problem	Solution
In Italy there is the requirement for 2 drivers in the locomotive or one driver and a multipurpose agent for shunting operations. Most of the infrastructure has the SCMT system Yet RUs are taken to court for reducing the two-driver rule.	Adopt the standard practice valid in the rest of the EU, where only one driver is required.

RU need predictable pricing regimes that also enable competition with road transport over long distances

Problem	Solution
<p>Lack of consistency in how track access charges are calculated. EU legislation is clear that charges must reflect the cost directly incurred by the running of the train service. There is limited scope in rail freight for mark-ups.</p> <p>E.g in Netherlands the IM wants to shift income streams from passenger to freight trains due to more wear and tear caused by freight trains In Germany the door is also open to this (<i>TPS 2017</i>) due to the limited increase of regional passenger track access charges, enabled by the strong nature of passenger subsidies. (Regionalisierungsmittel).</p>	<p>Enforcement of the legislation and recognition that freight should not subsidise passenger services.</p>

High cost of loco drivers undermine rail's competitiveness

Problem	Solution
<p>Limited pool of drivers for locomotives and high costs for registering licences.</p> <p>Due to language barriers, lack of international recognition of licences and high administrative costs for amending licences.</p>	<p>Simplification of licensing system</p> <p>The creation of an international register of licences to create a wider pool of drivers.</p> <p>The B1 language competency on drivers restricts their ability to work across borders</p> <p>EU-wide deployment of interoperable ERTMS + digital communication replacing language communication could improve availability of drivers.</p> <p>Simplify process in Germany whereby national register, where a new registration needs to be made each time a driver adds a qualification. The procedure takes 4h/ licence and costs 150 euros per act.</p>

Facilitate renting of drivers

Problem	Solution
<p>In Italy it is not possible to rent drivers from certified agencies.</p>	<p>Adopt the best practice from Germany, Austria, Switzerland and the Netherlands where law allows RUs to rent drivers from specially certified agencies.</p>

Safety Certificate in Italy

Problem	Solution
<p>The Italian NSA, ANSF, requires renewal of the certificate from 6-20 months, and does not follow the standard 3 year term.</p> <p>The objective is to reduce the involvement of the NSA in the event of any problems.</p>	<p>Risk management should be promoted instead of risk adversity.</p> <p>Cooperate with ERA to understand whether their new involvement in safety certification will create a standard authorisation of 5 years.</p>

ECM responsibility in Italy

Problem	Solution
<p>ANSF does not recognise the role and responsibility of the ECMs. As RUs refuse to carry out the responsibilities of ECM, this creates deviations from the ANSF advice and corrections to the SC.</p>	<p>Work together with ERA to ensure ANSF abides by EU legislation and best practice on ECMs.</p>

Improved coordination of track works in order to reduce disruption to RUs

Problem	Solution
<p>Lack of coordination between IMs and with the RUs on big maintenance works leads to heavy disruptions for RUs.</p>	<p>RUs must have more influence on the corridor management in order to allow better planning of maintenance works that minimise disruptions</p> <p>A financial incentive for IMs could be adopted for the corridors E.g look at best practice from UK national network aimed at minimising disruption.</p> <p>Possessions regime – compensation for RUs in the event of planned possessions: The regime recognises that operators can incur costs and revenue losses when disruptive engineering possessions are taken on the railway. It is mainly operates as a ‘liquidated sums’ regime, where compensation (and bonus) payments are largely determined by formula, set in advance. This reduces transaction costs in the industry, because the alternative would be to</p>

	<p>negotiate the financial impact of each incident after the event.</p> <p>In case of rerouting, the track access charge should be the same as via the original stretch. Also RUs incur higher costs because of reroutings (loco round trips, drivers etc.)</p> <p>KPI for % of the network/corridor out of service due to works?</p> <p>Use digital agenda to improve communication with RUs – ensure all disruption works are published online.</p>
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Overcoming bottlenecks

Problem	Solution
Bottlenecks on the network create huge inefficiency losses and undermine the reliability and performance of rail services.	Overrun tracks with moving trains - system for more capacity between city bottlenecks. Create a 20 km overrun track with the option of 2-4 x 740 m trains running with slow speed. So that high speed trains can use the track to overtake freight trains. Normally all 2-4 trains have to be overtaken. They have to wait total downtime will be at about min. 5-7 min plus speed reduction and acceleration. Total procedure will be 15 min plus higher energy consumption. The time difference of 20 km 60 km/h instead of 100km/h is 8 min.

Create more bypass routes to better manage capacity

Problem	Solution
Lack of capacity and better management of freight versus passenger priorities	<p>Freight Bypass routing – several bypass routings on the N/S Axis are possible on the actual available tracks without big investments and may be for only freight</p> <p>1. RHEIN SIEG Strecke</p>

	<ul style="list-style-type: none"> a. Problem: more track Length (costs), height 2. FRENCH (SIBELIT) <ul style="list-style-type: none"> a. Problem: height 3. OST Korridor (Hamburg Regensburg) <ul style="list-style-type: none"> a. Problem: not fully electrified
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Data interface between IM and energy provided

Problem	Solution
	In the core network well integrated loco stabling tracks – best would be with a electricity connection. This could reduce empty rides

“Freie Durchfahrt”

Problem	Solution
“FreieDurchfahrt” – in Germany there was a system of free passing in place, which meant you could run with heavier trains and would not be stopped in a hilly area. Normally no freight train has to stop, because every start causes a high energy consumption and produces standstill time. The option of “freieDurchfahrt” could potentially increase capacity because it lets the trains run without stopping. However the option of “freieDurchfahrt” is not possible anymore.	Reinstate the possibility of “FreieDurchfahrt and establish it as an EU standard for trains which are running at the tonnage limit.