

Capacity Regulation: More and better-quality train paths for freight

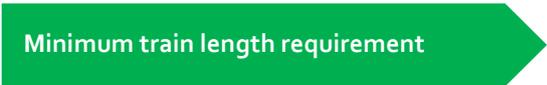
The European Commission's proposal for a new Rail Infrastructure Capacity Management Regulation has been highly anticipated by the users of rail freight transport, and as such Combined Transport Operators. Combined Transport accounts for about half of the tonne-kilometres of rail freight activities, and intermodal is the most dynamically performing production system of rail freight. Combined Transport employs intermodal transshipment techniques, which enable the most efficient insertion of non-road modes of transport – such as electric rail freight and waterborne vessels – into long-distance unimodal road transport.

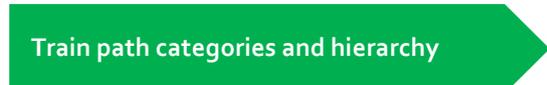
The proposed new Rail Infrastructure Capacity Management Regulation has been introduced as part of the Greening Freight Transport Package because **freight needs more and better-quality train paths** to deliver the modal shift needed to achieve European climate, energy and transport policy objectives. Growth in the number of passenger trains seen during recent years absorbed all available rail infrastructure capacity, which turned many lines into "highly utilised" or even "congested". Yet, only intermodal freight trains delivered meaningful modal shift.

Socio-economic and environmental cost benefit analysis has been introduced as a decision-assisting tool for infrastructure managers and capacity allocation bodies. Decision-making should be improved in 3 areas:

- Capacity allocation during the timetabling process;
- Bypass capacity design and allocation during force majeure and maintenance works-related TCRs; and
- Traffic management situations.

UIRR proposes the following key changes to improve the proposed Capacity Regulation from the perspective of rail freight operations:

- 1. Introduce a minimum train length requirement for train path applications on highly utilised or congested sections of line:** rail infrastructure is designed and built to carry heavy and long trains, therefore light weight and short trains should only be allowed if capacity utilisation allows it.

- 2. Remove constraints on bypass capacity design:** rail infrastructure managers should not be limited to defining bypass solutions on their own network but, if sensible, involve neighbouring networks. The bypass should take into consideration other modal alternatives.

- 3. European train path categories and hierarchy:** European train path categories should be offered in the Regulation such as an "express freight train", which should command superior timetable speed, punctuality and reliability KPIs to guide traffic management decisions.


The Combined Transport sector supports the position put forward by ERFA, the European Rail Freight Association, on the proposed Capacity Regulation¹.

Changes explained

1. Minimum train length requirement on “highly utilised” and “congested” lines

- **Designed for heavy and long trains.** The TEN-T railway network is built with a 22,5t axle load, 740-metre-long and at least 2000 tonne criteria required. Electrification makes rail even more energy efficient and quiet. Digital train control systems contribute to the superior safety record. Grade-separated road-rail crossings and noise barriers further improve the safety and noise performance. Yet all these contribute to increased investment costs of rail infrastructure. In case a train running on such a sophisticated network was only 100 metres long, and it would carry perhaps less than a busload of passengers, this would be found uncompetitive if compared to a 740-metre-long 2000-tonne freight train through a socio-economic and environmental cost benefit analysis.
- **Construction costs of railway lines** that satisfy the TEN-T requirements are multiple times what they used to be 50 years ago. The “NIMBY” – not in my back yard – effect also curtails ambitions to build additional railway lines, or even new tracks along existing lines. More railway transportation performance can be obtained at a lower price by extending the length and weight of trains using the infrastructure compared to the costs and complexity of building new railway lines.
- **The costs of railway rolling stock**, needed to put higher capacity trains on the network, are much lower than the costs of constructing a new railway line, or even adding new tracks to an existing line. A small adjustment to the current ratio of passenger trains to freight trains could easily be compensated in terms of passenger transport capacity by making passenger trains longer. A punctual and comfortable journey is more preferred over short and stuffed trains by the typical passenger.

For the above reasons, UIRR proposes that a **minimum train length** of 200-metres (or longer) is introduced as a requirement for all train path applications along sections of line that is “highly utilised” or “congested”. This would substantially add to the number of train paths required by rail freight and their quality.

The impact assessment of the Capacity Regulation found that a 4% growth in the number of train paths will result from the new TTR digital capacity allocation process. The complete build-out of 740-metre train length will also add capacity. An additional 10 p.p. of train paths would be enough for rail freight to achieve the modal shift expected of it.

2. Constraints on bypass capacity design and capacity allocation: the current practice of infrastructure managers when designing bypass routes and designating train path capacities is constrained by the desire to provide a rail-based bypass solution on their own network. These constraints should be resolved in the Regulation.

- **Rail-based bypass solutions:** whereas cargo carried in a freight train cannot be transferred to trucks, passengers can more easily use buses instead of trains. Passengers can transfer to a bus at most train stations and stops. In case of shorter train connections, passenger can even be offered an end-to-end bus alternative. The use of buses to replace passenger trains is a widespread practice in several Member States.

¹ <https://erfarail.eu/uploads/ERFA%20POSITION%20-%20Railway%20Infrastructure%20Capacity%20in%20the%20Single%20European%20Railway%20Area-1694591104.pdf>

- **Own-network constraint** on bypass solutions: the RNE Contingency Management Handbook already foresees the cooperation of neighbouring infrastructure managers in case of a force majeure occurrence. The same method should be used when designing the bypass solutions around planned disruptions such as works on the infrastructure.
- **Allocation of rail bypass capacities** to different applicants: should consider the peculiarities of the various users, including the length, weight and loading gauge requirement of the trains. It has been observed that if passengers are forced to use other modes during a disruption such as a strike, they return to the trains as soon as the services resume. The same does not stand for freight customers. It takes a considerable effort to convince an economic actor to build up a supply chain around rail freight. Once the decision is made, it is typically followed by investments and operational adjustments needed to accommodate the rail supply chain. No matter how much early warning is given of a capacity limitation, the shifting of large volumes of cargo from rail freight to another solution requires considerable effort. If a supply chain disruption of the sort is forced, it typically results in a prolonged shift that is immensely difficult, costly and time-consuming to reverse. Therefore, the needs of freight users of the infrastructure should be taken into consideration with a greater emphasis, just as Switzerland's Federal Office of Transport has done after the recent derailment incident in the Gotthard Base Tunnel, when it allocated all available infrastructure capacities to P400 freight trains.

UIRR proposes the use of the business process described in the RNE Contingency Management Handbook coupled with a perspective on non-rail bypass for passenger services when designing bypass capacities. The Regulation should also require that non-rail alternatives are primarily explored for passenger services while securing the passage of as many timetabled freight trains as possible.

3. **European train path categories and their hierarchy:** UIRR has long been asking the legislator to define European train path products. The proposed Regulation makes the following differentiation:

Train type	Single network	Multiple network
Freight train	x	x
Suburban and regional passenger train	x	x
Long-distance passenger train	x	x

- **Multiple network trains or single network trains.** The proposal correctly defines a priority for "*multiple network trains*" (a.k.a. cross-border or international trains) over "*single network trains*" because multiple network trains typically cover a longer distance and therefore deliver more socio-economic and environmental benefits, while their passage from one network to another requires a close cooperation between the two infrastructure managers involved.
- **Information of train traffic controllers.** Train traffic controllers rarely have information on the impact of their decisions in case of multiple network trains. Often, a seemingly innocent decision by a traffic controller can result in a very long delay upon arrival for a long-distance multiple network freight train.
- **Prioritisation of trains.** Whereas some multiple network freight trains may be carrying bulk cargo with a greater punctuality tolerance, others – namely intermodal freight trains – may be awaited by several dozens of trucks for the final mile connection to the final destination of the cargo. Moreover, intermodal trains compete with road-only transport, therefore they must deliver punctuality performance comparable to trucking if wishing to remain competitive.

UIRR proposes to introduce at least one additional freight train type, the “**express freight train**” – following the example of the German infrastructure manager, DB Netze². The express freight train should have guaranteed timetable speed, punctuality and reliability KPIs in return for a surcharge. The legislator should specify the priority of express freight trains, especially their multiple network variants in the Regulation.

Organisational and structural choices

Repealing the Rail Freight Corridor Regulation should not result in a reduced attention on the peculiarities and the resulting needs of freight trains – especially the multiple network (a.k.a. border-crossing or international) types. **The boundaries for rulemaking by the European Network of Infrastructure Managers (ENIM) and the Network Coordinator should be defined by the legislator.**

The **controlling influence of railway undertakings, authorised applicants, as well as terminals** and other service facility managers over the new rules to be created by ENIM should remain pursuant to the well-established Railway and Terminal Advisor Groups (RAG/TAG) defined in the Rail Freight Corridor Regulation or could even be reinforced.

Socio-economic and environmental cost benefit analysis is a method already used in some Member States. The lack of experience in most Member States, however, supports the need for the European Commission to draft an implementing regulation on how it should be used in everyday operations.

What is Combined Transport asking for?



The new Rail Infrastructure Capacity Management Regulation should deliver the following to ensure the necessary increase in the quality and the quantity of train paths made available to freight trains:

1. **Minimum train length requirement** on highly utilised and congested lines.
2. **Removal of constraints on bypass capacity design** to apply the process defined in the RNE Handbook for cooperation of neighbouring infrastructure managers and to take into consideration primarily the busing alternative for passenger trains.
3. **Allocation of bypass capacities based on the peculiarities of the service type** with an emphasis on the flexibility and loyalty of passengers versus the constraints of economic actors who decide to base the functioning of a supply chain on rail freight.
4. **Definition of European train path categories and their hierarchy** in the Regulation to help the creation of freight trains with the parameters required by economic actors, shippers and consignors.
5. **Defend and reinforce the organisational and structural achievements of the past decade** by maintaining the controlling influence of railway undertakings and authorised applicants, as well as service facility managers, primarily terminals, over the rulemaking by ENIM.
6. **Adopt an implementing act on the socio-economic and environmental cost benefit analysis** to define a harmonised European methodology for this important decision-supporting tool.

² See ‘Express’ or ‘Schnell’ freight train choices on p.12

https://fahrweg.dbnetze.com/resource/blob/9728804/912151ca28a0ca82e68ebddoede31c3d/broschuere_tps_2022_engl-data.pdf