

Position Paper

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Rail's Vital Role in Enabling the Future of EU Defence

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It is widely acknowledged that **the EU and its Member States are facing increased security threats**, underscored by the unlawful invasion of the territory of Ukraine.

Enhancing the EU's preparedness to deter and address such threats has become a top priority on the EU's political agenda. The Niinistö report¹, the political guidelines² of the European Commission President and consequently the mission letters to the relevant Commissioners³ provide important information and guidance for the way ahead, emphasizing the necessary coordination with NATO.

Preparedness demands an **enhanced response from the European transport system today**, which will need to extend its services beyond the ones it already offers for civilian purposes. These include enabling the swift movement of military convoys for exercises during peace or crisis response, as well as advancing the EU's defence capabilities and industry, to bolster its autonomy in this area.

Railways are a robust and reliable instrument of providing mobility services to the EU's citizens and industry. They are particularly well suited for the EU's defence industry logistics, including the provision of materials and placing of new military assets, as well as for the movement of existing military assets and convoys, particularly in a time of crisis.

Rail is the best prepared land-based system to deal with the specific characteristics of military assets, which are **heavy, oversized and dangerous in nature**. Military convoys often require the mobilization of a **big volume of cargo**, particularly in times of crisis. A Leopard 2 or an Abrams tank can weigh 70 tonnes. European roads are generically suited for trucks weighing up to 40 tonnes. The large scale transport of such assets over longer distances within European territory requires railways, whether for deliveries from the EU Industry or ports, planned military exercises or responses to a crisis directly impacting the EU territory.

At the same time, the **railway system must be resilient enough** to continue providing the essential services that underpin the EU's economy while also enhancing its competitiveness and meeting the increased demands of the military forces. This includes withstanding potential attacks such as hybrid and cyber threats. Therefore, protecting this critical infrastructure should be a priority, as well as strengthening the interconnections and interoperability of each transport network, creating redundancies as well as improving the resilience within the organizations. **A railway system prepared to handle security threats serves as a deterrent to those threats.**

¹ [Safer Together Strengthening Europe's Civilian and Military Preparedness and Readiness](#)

² [Europe's choice. Political guidelines for the next European Commission 2024-2029](#)

³ [Mission Letters of the Commissioners Designate \(2024/2029\)](#)

1 – Improving civilian and enhanced military transport services requires a systemic approach to the railway system

For the railways to provide the several desired services for civilian and military purposes, without creating significant disruptions, whether in a direct crisis scenario or not, **a systemic approach to the entire railways system is essential.**

There is an estimated 94% overlap between civilian and military networks, which highlights the dual use of the network. Therefore, **enhancing military transport capabilities within the network requires the urgent implementation of already identified measures** to significantly improve the performance of the network. Any other approach will compromise the level of services provided.

The EU and its Member States need to **enhance coordination and strive to remove bottlenecks, vulnerabilities, missing links, isolated portions of the network and increase transport capacity**, in particular by pursuing the objectives and targets of the TEN-T (Trans-European Transport Network) regulation, as well as effectively implementing the Single European Railway Area. Special attention is needed for priority corridors designated for military movements and the regions exposed to higher risk or lacking the necessary interconnections and interoperability with the EU network. This is particularly the case in the Baltic states, facing additional investment and operational challenges due to the difference in railway gauge.

Therefore, the EU and its Member States need to coordinate and pursue efforts in order to:

1. **Improve the overall interoperability of the railways system as a whole**, an agenda the railways system has long sought, and has the instruments to deal with, as identified in CER's Manifesto "On track for Europe 2024-2029"⁴. This includes the resolute further deployment of *European Railway Traffic Management System* (on board units and trackside) and across the board implementation of the *Technical Specifications for Interoperability* (TSI) as fundamental measures, alongside with *train driver training* and development of robust communication IT tools, improving cross-border operation of trains while ensuring that the overall safety requirements are upheld.
2. **Increase capacity in the network by:**
 - a) **constructing new railway lines and closing infrastructural gaps, especially across borders, as required in the TEN-T regulation**, investing *in new railway lines fit for purpose* (ensuring the circulation of 740m long trains, a P400 profile at least 22,5 ton/axle load and when feasible the recommended 25ton/axle, notably in identified priority corridors and) and *new terminals* particularly to complete or create connections to the *EU's ports* and other *multimodal and intermodal terminals*, providing adequate loading and unloading capabilities as well as establishing *connections to and between existing lines* to increase flexibility by offering different alternative routes. Taking into account the Union Action Plans on Military Mobility of March 2018 and November 2022⁵, an assessment is needed, to adapt the TEN-T network to reflect the military use of the infrastructure. Based on the gap analysis, the inclusion of *additional railways should be considered in*

⁴ CER Manifesto "On Track for Europe 2024-2029"

⁵ Military Mobility Action Plan 2.0

the *TEN-T* network to enhance the synergies between civilian and military transport rail services.

- b) **renovating and where possible upgrading the existing network in line with the requirements of the TEN-T regulation**, ensuring that the *existing railway infrastructure* enables the operation 740m long trains, that bridges and tunnels on relevant corridors are fit for the loads and dimensions of military assets as appropriate, adapting them to the specifications for dual use rail infrastructure. Investments should include the *modernization of interlocking and signalling systems* in the sections of the network lacking interoperability with the EU network. Additionally, these investments should also target *existing terminals* (notably those serving the *EU's maritime and inland ports*) to enable the loading and unloading of military assets, develop a capable and modernised *network of sidings, secondary lines* which connect the rail network to military industrial sites and *military facilities, supply warehouses* and *fuelling points*.
 - c) **improving capacity management** in the EU network to facilitate the operation of trains in *swift cross border movements*, streamlining and to the extent possible simplifying EU and National procedures, also by establishing flexible border section agreements until the full implementation of the Single European Railway Area. *Implementing the rail infrastructure capacity management regulation*, can provide capacity gains through improved planning and coordination of capacity within the EU (particularly in cross-border movements also needed for military convoys) resulting in a 4% increase in the existing European railway network.
 - d) **pursuing the implementation of the digital enablers**, such as the further deployment of the *European Traffic Management System* (ERTMS), and others such as *Digital Automatic Couplers* (DAC), allowing for increased loads and longer trains.
3. **Replenish the rolling stock adapted to the transport of military assets** needed to serve the EU's defence industry and for the military movement of convoys, including *special purpose vehicles*, such as those capable of operating in different operational environments or adapted to specific needs including for the transport of specialised military personnel and medical support. *Traction* solutions will be needed to operate cross-border in alternative scenarios i.e. locomotives equipped with internal combustion engines in the case of a wide scale shortage of the electric power system. Sufficient and appropriate *wagons are also needed for the transport of military assets* with EU certification duly *specified in the TSI*, as well as a fit for purpose network of maintenance, parking and fuelling facilities.
4. **Enhance resilience of the railway infrastructure and management systems**, by developing and implementing a strategy *that protects critical railway infrastructure and its support systems* from direct actions (from hybrid attacks including cyber-attacks) that could damage or impede operations and enhance the *cyber security* of the railways system. Moreover, there is a need to ensure the *continuity of critical operations* through redundant systems as well as rapid restoration of the critical infrastructure in the event of a crisis.

2 – Increase financing, mainstreaming railways into defence programmes and adopting efficient procurement will be key

There is a need to raise decision makers awareness of the value of railway services, particularly for defence purposes, where road infrastructure and is not a suitable alternative. This has to be taken into consideration for strategic investments in the transport infrastructure, for the purpose achieving an *enhanced security* level but *also for pursuing long-term objectives of the EU* in essential policies such as, energy efficiency, decarbonization of the economy as well as the technological and energy autonomy of the EU.

In light of the current security risks, the EU and its Member States, when in accordance with their specific constitutional arrangements or international treaties, are called to **strengthen and mobilise financing through EU and particularly through national budgets**. Military Mobility as well as related strategic projects, will require further support under the current Multiannual Financial Framework (MFF). Upscaling the role of rail transport will need to be increasingly mainstreamed into the objectives and measures in the 2028/2034 MFF, taking into account the several traffic flows and services provided, particularly in the priority corridors defined for military purposes.

Dual use projects in the context of the EU's MFF have proven to be a relevant instrument, which should be substantially strengthened in the following EU budget, allocating more resources and a possibly a higher co-funding rate from the EU. As this paper demonstrates, the concept of dual use goes beyond investments in adapting infrastructure for 740m trains, or bridges and tunnels. Therefore, a clarification of the dual use requirements set out in the specific regulation⁶ is urgently needed as it defines the basis an eligibility of measures under EU-funding. Investments are essential to enable the provision of the railway services. Projects fitting in any of the 4 categories mentioned above should be eligible for financing. Specifically, ERTMS should be part of the Annex of this Regulation, which defines criteria for dual-use eligibility. Additionally, support to install onboard units is crucial to fully operationalization of the system.

Mainstreaming defence needs into relevant transport policies, programmes and funding instruments within the EU, will enhance efforts to strengthen the EU's security objectives. Given the overlap between civilian and military services that railways can provide, as well as their contributions and co-benefits to other EU policies (namely energy efficiency and decarbonization) these synergies should be recognised and rewarded accordingly. This should be reflected in the successors to the appropriate budget lines, including the Connecting Europe Facility, Regional and Cohesion funds, leveraging Member States' own mobilization of resources and other funding sources.

A EU strategy to support and accelerate the replenishment of the insufficient rolling stock fleet (including special purpose vehicles) will be crucial. This could be achieved through centralised aggregate procurement frameworks, which could provide certainty to the industry, spur competition and reduce costs through the economy of scale. Procurement requirements should recognise the specificities of the railway assets that serve military purposes and should be streamlined and simplified as much as possible. The EU and its Member States should **mobilise adequate funding and establish the appropriate requirements for procurement**

⁶ Commission Implementing Regulation (EU) 2021/1328 of 10 August 2021 specifying the infrastructure requirements applicable to certain categories of dual-use infrastructure actions

processes adapted to the acquisition and operational maintenance of rolling stock. This involves defining provisions regarding property, conditions of use, storage and maintenance over time, including for special purpose vehicles as well as for those that may be used for civilian purposes, in full compliance with anti-trust requirements. The EU should strive to **adopt or update the adequate technical specification** and ensure **quick certification processes** are set in place, promoting a harmonised approach by all Member States.

Ensuring **the readiness of railway infrastructure assets, rolling stock and the necessary personnel** as well as making provisions for contingency maintenance, requires adequate framework contracts with Infrastructure Managers and Railway Undertakings. This will guarantee the swift mobilization of the needed resources for the transport operations, where a valid solution could be to establish stand-by contracts.

3 – Enhanced Cooperation for better understanding of needs and efficient planning of military logistics and activities

Improved understanding and cooperation at all levels, will contribute to facilitate operation planning and execution. The EU and its Members States should strive *to streamline administrative procedures* in order to accelerate the needed regulatory clearances to enable the swift, large scale, cross-border movements of military assets and convoys, as reiterated in the EU's Military Mobility Action plans. In this context it may be necessary to consider the procedures for extraordinary shipments, establishing priorities as appropriate for military convoys.

Therefore, there is a need to **create a functional governance system** (at the EU and Member State level, as well as with relevant institutions such as NATO) to *enable military and civilian regular coordination* and cooperation, involving the representatives of the railway system but also other critical modes (port infrastructures and sidings). A steering structure could prove to be essential for coordinating actions particularly during a crisis.

Regular coordination between military and civilian stakeholders, will have beneficial effects on *planning and implementing investments and performing railway operations*. Providing selected actors with appropriate access to regularly updated information on the railway's assets and operational conditions, can decisively contribute to shorten the timeline for planning and executing military movement to the bare minimum.

About CER

The Community of European Railway and Infrastructure Companies (CER) brings together railway undertakings, their national associations as well as infrastructure managers and vehicle leasing companies. The membership is made up of long-established bodies, new entrants and both private and public enterprises, representing 78% of the rail network length, 81% of the rail freight business and about 94% of rail passenger operations in EU, EFTA and EU accession countries. CER represents the interests of its members towards EU policy makers and transport stakeholders, advocating rail as the backbone of a competitive and sustainable transport system in Europe. For more information, visit www.cer.be or follow us on Twitter [@CER_railways](https://twitter.com/CER_railways) or [LinkedIn](https://www.linkedin.com/company/cer).

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