

CONNECTING EUROPE

A transport funding and financing that is adapted to the challenges ahead

TEN-T Coordinators' Position Paper



APRIL 2024

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Executive summary

A sustainable, smart and competitive Europe, linked up with the wider world, depends on a solid transport sector with a resilient infrastructure. The trans-European transport (TEN-T) network constitutes the backbone of our Single Market, along which persons and goods can move seamlessly. Its completion will bring prosperity and security to the EU.

The successful and timely completion of TEN-T depends on a reinforced governance and a strong cooperation with all stakeholders, as well as a balanced mix of funding and financing.

The various exogenous shocks of the recent past - Brexit, Covid, the war in Ukraine and now in the Middle East - have revealed how vulnerable Europe is. Our military mobility is still very much constrained. Extreme weather events due to climate change are increasingly affecting our continent with growing economic impacts, while our infrastructure is not yet adapted to these new conditions. The EU will have to become resilient, both to the changing geopolitical environment and to the changing climate.

To meet this challenge will require mobilizing sufficient financial resources, both private and public. The EU has a key role to play in creating the right conditions to attract the necessary investments. This requires a thorough reflection on the required regulatory approach and the various funding and financing instruments. In this position paper, we provide several recommendations to this end.

The EU has put in place one of the most successful combinations of instruments for implementing a Single Transport Market by integrating a high-quality, interoperable infrastructure, consisting of the TEN-T and supported by the Connecting Europe Facility (CEF). With a new TEN-T Regulation under finalisation, the tasks ahead of us are clearly defined and the next two rounds of the Multiannual Financial Framework (MFF) will allow to close the gaps that hamper the proper functioning of the Single Market, along the TEN-T core, extended core and comprehensive networks.

First of all, we need to be able to meet the investment needs with a focus where it matters most: cross-border projects that allow to make a network out of the current patchwork. Many of these are under construction and will see the ribbon cutting moment under the next MFF (Fehmarn, Rail Baltica, Brenner, Lyon-Torino); others are in the pipeline and shall be speeded up to ensure their fast realisation (Lisbon-Madrid, Bordeaux-Vitoria, Montpellier-Perpignan, Berlin-Prague, Vienna-Bratislava-Budapest, etc). This acceleration must also concern all investments on the future military mobility corridors that will allow to enhance the dual use resilience that is needed dearly.

We need to ensure the resilience of infrastructure which is at high risk because of climate change and build an infrastructure for a safer Europe, capable of meeting the needs of military mobility and an evolving Single Market. What Europe needs is therefore not a mere continuation of CEF, but a reinforced EU funding programme with an even clearer focus and a project-based approach selecting the best projects contributing to the priorities defined at EU level. The use-it-or-lose-it principle should be maintained to ensure that only mature projects are co-funded by the EU, and with the guarantee that all grants are fully used for these priorities.

As the backbone instrument for the connectivity across borders, the successor of CEF shall be paired with all other instruments that have been, and shall continue to contribute to national infrastructure projects – notably Cohesion Policy Instruments and the Recovery and Resilience Facility (RRF) or its successor, in good complementarity. In order to better deliver on this coherence of instruments, CEF in itself is the guarantee for doing what Member States always put as a last resort and for which centralised management is the sole guarantee. The other instruments shall become driven by higher conditionalities, in order to shape nationally prone investments by the reforms that allow to optimise the Single Market. For transport, these entail open access for operators to the TEN-T, accelerated permitting, procurement and thus implementation. With open access and competitive markets, the EU transport acquis shall allow to fully exploit the connectivity offered by the

TEN-T. Public authorities should exert their powers by implementing these regulatory reforms, which should also increase competition and facilitate new market entry. By focusing on projects with high European added value, and particularly cross-border projects, CEF will itself facilitate the achievement of the reforms that Member States should implement. For example, the completion of the major cross-border railway projects and the European Rail Traffic Management System (ERTMS) will contribute to the creation of a single railway market, and therefore to the implementation on the ground of the 4th railway package.

Public authorities must step in financially to bring transport infrastructure projects forward. Such public intervention shall target what is strictly necessary, to avoid market distortions. Faced with many conflicting demands, public support should be well-targeted, cost-efficient, and temporary. To reduce the burden on their budget, public authorities at all levels should explore innovative approaches to leverage private investments in transport infrastructure. The potential to raise debt via dedicated bonds, and to leverage it for investments, should be further explored. In this context, we very much welcome the recent political agreement reached by European Parliament and the Council in February 2024 on the new economic governance framework. Notably, the new rules stipulate that the national co-financing for EU-funded projects with high added value will be excluded from the “expenditure indicator” used to monitor a Member States’ adherence to the Stability and Growth Pact (SGP). The introduction of this provision will serve as a significant incentive to unlock national investments in projects of high EU added value, such as our crucial cross-border TEN-T infrastructure projects.

Finally, in view of the magnitude of the investment needs, the potential to raise transport revenues and user fees should be better exploited. It is important that such charges and levies are earmarked for new transport investments, to foster a more self-sustaining transport policy.

Kurt BODEWIG and Carlo SECCHI, editors

Also on behalf of

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Foreword and acknowledgements

The present position paper is presented by all eleven TEN-T Coordinators to share their experiences, express their views on the challenges for EU transport infrastructure policy and to provide a set of recommendations on workable solutions for ensuring effective funding for the EU transport infrastructure network. It is also the result of fruitful discussions with the European Commission, including with Eurostat on the public budget and debt rules in May 2023, and with the European Investment Bank in October 2023. The purpose of this report is to provide further guidance to the European Institutions and to the Member States at this crucial moment for the completion of the TEN-T and while a new European Parliament and Commission take their place in 2024.

Given the substantial infrastructure investments needs, European Coordinators Prof. Kurt Bodewig and Prof. Carlo Secchi (together with the late European Commission Vice-President Henning Christophersen) previously presented reports in 2015, 2018, and 2019, exploring innovative funding schemes. With the core network nearing completion by 2030, the eleven TEN-T Coordinators have decided to relaunch a reflection on transport infrastructure investments. Their aim is to identify key needs and challenges and propose recommendations to augment overall investment in transport infrastructure. This paper also contributes to preparations for the new Multiannual Financial Framework (MFF), highlighting the significance of funding transport infrastructure and its EU added value.

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Abbreviation list

AFIR	Alternative Fuels Infrastructure Regulation
bn	billion
CEF	Connecting Europe Facility
CER	Community of European Railway and Infrastructure Companies
CINEA	Climate, Infrastructure and Environment Executive Agency
CO2	carbon dioxide
DG MOVE	Directorate General for Mobility and Transport of the European Commission
DNSH	Do No Significant Harm
EC	European Commission
EFTI	Electronic freight transport information
EIB	European Investment Bank
ERTMS	European Rail Traffic Management System
ETS	Emission Trading System
EU	European Union
EUR	euro
GDP	gross domestic product
GVA	Gross Value Added
HaDEA	Health and Digital Executive Agency
HEU	Horizon Europe
IF	Innovation Fund
IFI	International Financial Institutions
ITS	Intelligent Transport Systems
JASPERS	Joint Assistance to Support Projects in European Regions
KPI	key performance indicator
MFF	Multiannual Financial Framework
NATO	North Atlantic Treaty Organisation
NPBI	National Promotional Banks and Institutions
PPP	Public Private Partnership
RIS	River Information System
RRF	Recovery and Resilience Facility
RRT	Rail Road Terminal
SCF	Social Climate Fund
SESAR	Single European Sky Air Traffic Management Research
SME	small to medium-sized enterprise
TEN-T	trans-European transport network
TFEU	Treaty on the Functioning of the European Union
VTMIS	Vessel Traffic Monitoring & Information Systems

1 TEN-T as the backbone of the Single Market and essential for the twin transition



1.1 The importance of transport and mobility

Often dubbed the “backbone of the economy”, transport is essential for the well-functioning of the internal market and key to growth and competitiveness, by providing the physical networks and services for the free movement of people and goods. A well-functioning transport system has been and remains a key instrument to boost European integration, ensure territorial cohesion across the Union and develop strong supply chains in support of the EU economy, industry, and trade.

In 2021, companies whose main activity is the provision of transport (and transport-related) services accounted for **around EUR 636 bn in Gross Value Added (GVA) equalling about 5% of total GVA in the EU**. In that same year, private households in the EU-27 spent EUR 880 bn or roughly 12.1% of their total consumption on transport-related items. Around 10 million EU citizens, or some 5.3 % of the total workforce, are directly employed by the transport and storage services sector (including postal and courier activities).¹ These figures are testimony to the importance of the transport sector for the EU economy. And yet, they do not capture the real value of transport connectivity which is essential for almost all other economic activities and jobs, cohesion and the competitiveness of the EU in the world.

1.2 A network that delivers



Central to the EU’s transport strategy, is the trans-European transport network (TEN-T). The TEN-T comprises the EU’s main railways, inland waterways, and roads, linking urban nodes, maritime and inland ports, airports, and terminals. It dates back to early 1990s, having its legal basis in the Maastricht Treaty and its first concrete implementation at the 1994 Essen European Council, and has since been a cornerstone for the further integration of the Member States. The current Article 170 of the Treaty on the Functioning of the European Union (TFEU) prescribes that the Union shall contribute to the establishment and development of trans-European networks in the areas of transport, telecommunications, and energy, so that EU citizens, economic operators and regional and local communities can derive the full benefit from an area without internal frontiers.

The development of this network has been further implemented by the TEN-T Regulation, a revision of which is expected to be adopted by the co-legislators in May 2024. The overall objective of TEN-T policy is the establishment of one multimodal Union wide network of high-quality standards. The TEN-T should moreover strengthen the social, economic, and territorial cohesion of the Union and contribute to the creation of a single European transport area which is sustainable, efficient, and resilient and which increases the benefits for its users and supports inclusive growth and competitiveness.

The TEN-T Regulation sets timelines for the completion of the TEN-T core network (2030), which consists of the main arteries for all transport modes and accounts for the highest traffic density, the extended core network (2040) and the TEN-T comprehensive network (2050). The completion of the TEN-T core network will unlock significant social and economic benefits through travel time savings and improved accessibility.

¹ European Commission, Directorate-General for Mobility and Transport, *EU transport in figures – Statistical pocketbook 2023*, available here: https://transport.ec.europa.eu/facts-funding/studies-data/eu-transport-figures-statistical-pocketbook/statistical-pocketbook-2023_en

A 2018 report² found that completion of the TEN-T core network by 2030 would lead to a **1.6% growth in EU GDP**. The economic impact can also be shown in relation to the level of investments. The GDP multiplier of the TEN-T investments amounts to 3.3, which indicates that **for every euro invested in this network, 3.3 euros of additional GDP are created**. In terms of employment, **for every billion invested into the TEN-T core network between 2017 and 2030 an average of 13,000 additional job-years are generated**. Completing the TEN-T core network by 2030 will position the EU as a more interconnected and competitive economic bloc, offering benefits to citizens, businesses, and the environment while supporting the achievement of broader EU policy objectives.

All key EU industrial policy acts, such as the Net Zero Industry Act and the Critical Raw Materials Act, underscore the importance of a highly efficient transport system in promoting increased sales and trade within the Union. This is particularly crucial as Europe aims to strengthen its strategic autonomy and competitiveness.

Moreover, harmonisation of standards, both within the EU and with neighbouring countries, and investments in EU cross-border projects and towards those neighbouring countries will open new market opportunities and foster trade. Infrastructure development and harmonisation with our neighbours is a key policy objective in view of the future enlargement of the EU, as enabler for the integration of new Member States.³

Historically, the focus of TEN-T policy has been on tackling the cross-border missing links between Member States and improving interoperability of the national transport networks through harmonisation and standardisation.

“Bringing the Baltic states into the European railway network is strategically, economically, and symbolically valuable. A single gauge will make us safer and stronger. It can help to shift long-distance transport from road to rail for the environment. It could enable us to export Ukrainian grain to the world through the Baltic ports, which is difficult today because every gauge breaks adds dozens of euro per tonne to the logistics costs. The social value of easier travel to and within the Baltic states is priceless.”

Catherine Trautmann



The lack of cross-border connections and interoperability between European transport systems has many different historical reasons. Since a large part of the European mainland transport infrastructure was developed long before the European Union was established, it was often conceived for local purposes or with national objectives in mind. In an era when nation states still imposed tariffs on most of the products exported to or imported from their neighbours, cross-border road connections were often deliberately kept limited to allow efficient border controls and avoid the smuggling of contraband as much as possible. In an era of rampant inter-state conflict and widespread distrust, national railroads were often deliberately designed to be non-interoperable with those of neighbouring states, to slow down enemy troops in the eventuality of war. That for instance explains the different track gauge in-between Western European nations that developed their railway systems in the middle of the turbulent 19th century, but perhaps even more evidently in-between the Western and the Eastern European countries. Decades of non-cooperation and non-coordination between countries on the European mainland meant they developed standards for their national transport networks in isolation. In an open internal market, such differences became problematic barriers to trade and the

free movement of goods. Therefore, under impetus of the EU’s TEN-T policy, from the 1990s onwards EU countries started harmonising their transport standards (e.g., 740m train length, line electrification, 22.5 train axle load, etc.). However, the costs of better connecting the main EU transport networks and making them fully interoperable remain significant.

In addition, the EU’s transport network is ageing fast. While transport infrastructure has a long service life – infrastructure built over the next decade will remain in service well into the second half of the century and beyond – large parts of Europe’s current transport network have been developed shortly after the second World War, or even before then. The revised TEN-T Regulation contains minimum quality standards for maintenance and project life cycle standards, to ensure a high-quality transport network.

“Poor and inadequate rail maintenance causes prolonged speed reductions, significantly reducing the network’s capacity. For example, routes leading to Ukraine lack spare slots for additional traffic and suffer from insufficient service levels.”

Mathieu Grosch



² European Commission, Directorate-General for Mobility and Transport, Fermi, F., Bellodi, L., Martino, A. et al., *The impact of Ten-T completion on growth, jobs and the environment – Methodology and results – Final report*, Publications Office, 2019, <https://data.europa.eu/doi/10.2832/374574>

³ See for instance the PHARE and ISPA pre-accession programmes, which were set up to assist the applicant countries of Central and Eastern Europe in their preparations for joining the European Union

1.3 The investment needs for completing TEN-T



The investment needs associated to the realisation of the TEN-T core network by 2030 are estimated at around EUR 515 bn.⁴ In addition, the **investment needs to implement the new TEN-T requirements for the core network and for the completion of the extended core network** are estimated at approximately EUR 330 bn until 2040. This would bring the **total investment needs to complete the core and extended core TEN-T to EUR 845 bn during the next fifteen years.**



While the total investment costs for the **main cross-border projects** are estimated to amount to EUR 200 bn, around EUR 110 bn of this total remains to be invested, including for completing the Fehmarn Belt fixed link, the Lyon-Turin base tunnel, the Seine-Escaut canal, Rail Baltica and the Brenner base tunnel. From the total of around EUR 140 bn needed to complete the national major projects with EU relevance, key to realise the European Transport Corridors, around EUR 100 bn remains to be invested.

On top of this, another EUR 65 bn will be needed to make the TEN-T smarter and more sustainable. This notably includes investments in the digitalisation of the network (SESAR, ITS, EFTI etc.) and for the

deployment of alternative fuels infrastructure (to meet the targets of the Alternative Fuels Infrastructure Regulation⁵).

These costs also do not include the **costs of maintenance⁶, which for TEN-T are expected to increase drastically in the coming decade** in view of the ageing of the network.

Finally, the network's non-completion also implies additional costs. For example, as far as interoperability is concerned, for the railway sector alone **costs of non-interoperability**, that alone are estimated to amount to at least EUR 2 bn per year or over EUR 12 bn in present value over the period 2024-2030.⁷

“ERTMS is the most modern and safest rail signalling system. The fact that there has been no train accident with a train equipped with ERTMS on an ERTMS-equipped track speaks for itself.

Deploying ERTMS and not removing the national (so-called Class B) system will cost some EUR 22 bn of maintenance costs by 2040!”

Mathias Ruete



1.4 An additional challenge: making TEN-T more resilient



The completion of TEN-T is also ever more relevant from a geopolitical perspective. Recent **events have evidenced weaknesses in the EU's transport connectivity**. Brexit for instance revealed Ireland's reliance on the UK Landbridge to have easy and fast access to the EU mainland. This served as a reminder of the importance to develop sufficient

alternative transport routes to avoid potential disruptions in the EU's supply chains for essential goods.

More recently, the European transport network has been facing significant challenges in the context of Russia's war of aggression against Ukraine. This war revealed several shortcomings in the European transport system and, most notably, in relation to our connections with Ukraine. In particular Ukraine's exports by land faced limitations as a result of insufficient border crossings, saturated roads, and the differences in rail track gauge. While the EU acted quickly to launch Solidarity Lanes, these need to be made permanent through the extension of four TEN-T Corridors into Ukraine. This should provide more robust transport alternatives in the longer run.

“In light of Russia's war of aggression against Ukraine, the Baltic Sea – Adriatic Sea Corridor is more important than ever for military mobility to respond to crises emerging at our borders and beyond. CEF co-funds dual-use transport infrastructure in the entire Union, and it is crucial that these investments are accelerated with a reinforced budget to allow for the swift and efficient movement of goods, passengers and our armed forces.”

Anne Jensen



⁴ This amount takes into consideration the new requirements of the revised TEN-T Regulation, expected to enter into force in May 2024.

⁵ AFIR - (EU) 2023/1804 of the European Parliament and of the Council of 13 September 2023 on the deployment of alternative fuels infrastructure, and repealing Directive 2014/94/EU, along with EU transport digitalization.

⁶ Their calculation for the entire European network would necessitate up-to-date data on the condition of the infrastructure and associated maintenance expenses. Moreover, they can vary significantly depending on the specific locations, types of maintenance issues, and the extent of neglect. While the Union does not finance maintenance directly, it could support digitalization efforts aimed at improving infrastructure quality: for example, infrastructure status-monitoring sensors could help plan preventive maintenance more efficiently and thereby avoid unplanned repairs and their related costs.

⁷ European Union Agency for Railways, Agency Briefing Note 'Costs of Non-Interoperability', March 2023, available here: <https://www.era.europa.eu/system/files/2023-11/Costs%20of%20non-interoperability-2023%20-%20Briefing%20note-final.pdf>

The war in Ukraine also highlighted the critical importance of smooth **military mobility** across our continent. The TEN-T, and particularly the core network corridors, must be designed for both civilian and military use. Where necessary, the network must be upgraded to suit these dual-use requirements, for instance for the transportation of heavy military materiel. The EU must continue its good cooperation with NATO to agree on the standards and procedures necessary to allow the reinforcement and sustainment of military convoys along the TEN-T, in peacetime, crisis and wartime. The network effect must be put to strategic use enabling rapid reaction even when some corridors are not fully available. Sufficient alternatives must be developed and sustained, to create the necessary redundancy and foster network-wide resilience.

Today, up to forty daily flights connect Lisbon and Madrid, two European capitals with little over 500km between them. The completion of the new high-speed rail line could bridge the distance with a travel time of approximately 3 hours. Moreover, improved rail connections will avoid the emission of hundreds of thousands of tons of CO2. A high-speed train consumes 5 times less than a car and 27 times less than an airplane per passenger-km. As for freight traffic, a train consumes 3.6 times less than road transport per ton-km and 54 times less than an airplane.

Carlo Secchi



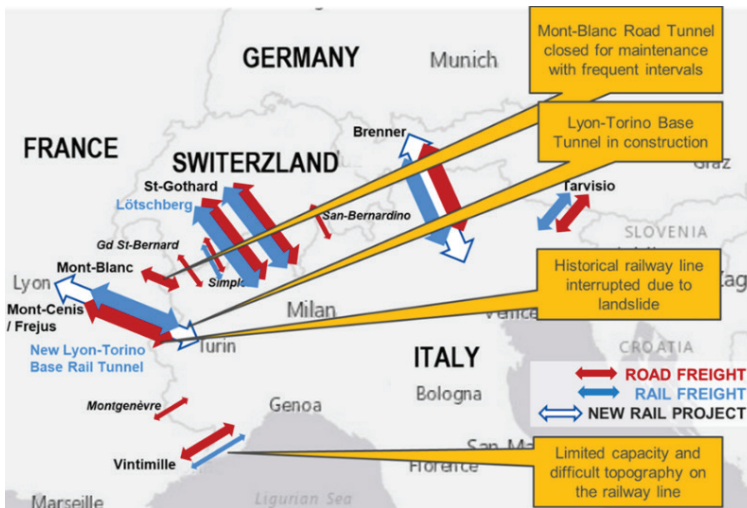
Also **climate change poses new challenges** for the economy and for the transport system. Global warming is already having important effects on our societies and climate adaptation measures become inevitable. As far as the transport sector is concerned, climate change is having a more visible and disturbing impact on transport assets and infrastructure every year, and these impacts are expected to further intensify in the future. For example, infrastructure in coastal areas could be affected by sea level rise, heat tolerance for railway tracks needs to account for a projected higher maximum temperature rather than historical values, frequent droughts hinder the navigability of our inland waterways, and so on. Since an overall assessment of the vulnerability of TEN-T to the impacts of climate change was thus far missing, the European Commission is currently conducting a study to identify major climate resilience risks on this network, as well as the corresponding adaptation measures and their costs. The study will help determine the investments needed to increase the resilience of TEN-T to climate change. The impact of climate change on existing, and ageing, transport infrastructure will also be examined in the study. Finally, the study will try to identify the measures and investments that are most urgently needed to keep the infrastructure network operational and maintain its reliability.

Notwithstanding the increased sense of urgency to adapt to the changing climate, being responsible for about a quarter of the EU's greenhouse gas emissions, transport must become more sustainable quickly if the EU is to meet its ambitious climate targets. This requires the **deployment of alternative fuels infrastructure** to accelerate the transition to zero-emission alternatives in all modes of transport. But decarbonisation also requires a more holistic approach, by **shifting more passengers and freight to the least polluting forms of transport, such as rail or waterborne transport**. The TEN-T Regulation therefore includes several provisions to develop a high-performance rail passenger network across Europe, notably through reinforced railway standards and obligations to connect larger airports to the railway network allowing for long-distance services. Finally, considering the amount of construction works planned on the TEN-T in the coming years, it would be a great opportunity to lead by example and perform these works in the most sustainable manner, in particular as regards CO2 emissions.

“The floods that occurred in Belgium, Germany, the Netherlands, Luxembourg, and France in summer 2021 caused some EUR 38 bn in damages, of which EUR 1.3 bn are attributed to rail infrastructure in Germany alone. Furthermore, frequent summer heatwaves repeatedly caused lower water levels on the Rhine River, leading to significant financial impacts. In 2018, this resulted in EUR 2.7 bn losses for the Netherlands and Germany. In addition, irregular low-water levels in some cases resulted in a long-term shift back from inland waterways to road transport.”

Paweł Wojciechowski





“Following a landslide in August 2023, the only transalpine line capable of catering rail freight transport between France and Italy, the Fréjus rail tunnel, was closed for repair works expected to last until summer 2024. Its coincidence with planned maintenance works on the Mont-Blanc tunnel, meant freight transport between the two Member States was severely limited all throughout autumn 2023. This situation is testimony to the lack of resilience in our transport system and reminds us of the urgency to finalise the new Lyon-Torino railway link.”

Iveta Radičová



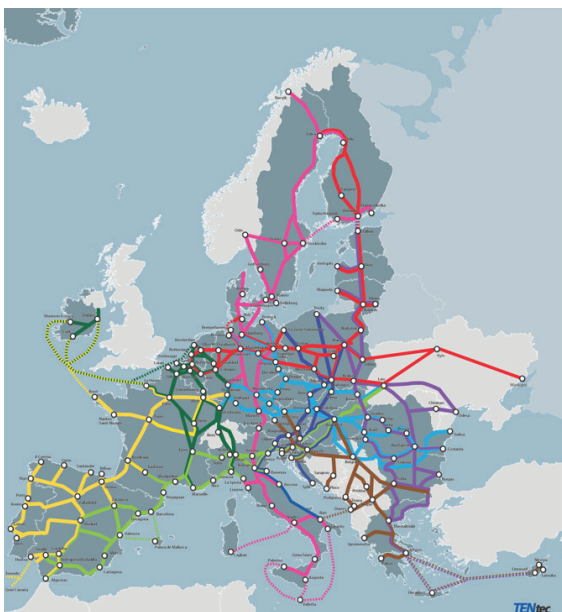
Finally, also the **digitalization of TEN-T** (e.g., through ERTMS, SESAR, VTMS, RIS, and others) will enhance the monitoring and management of traffic flows, allowing for better adaptation to changing weather patterns and other exogenous shocks. In so doing, it will help the network become more resilient to climate change and geopolitical events. Additionally, these digital systems will improve the overall efficiency and coordination of the transport networks, leading to reduced energy consumption and lower emissions. Finally, digitalization will improve the cybersecurity and safety of transport systems, making them more capable of withstanding geopolitical disruptions and unforeseen events.

2 Recommended way forward to complete the TEN-T

To efficiently deploy the transport network and ensure its optimal functionality, it is essential to comprehensively address all stages of network development and associated technologies. This requires an assessment of the full spectrum of transport projects, from research projects such as those related to among other innovative traffic management, to large-scale transport infrastructure projects and other transport facilities. In this respect, it is important to consider the diverse range of investors, including public (both national and EU), private and a combination of both, together with the various financing and funding instruments that support transport projects.



2.1 Finding new ways to finance TEN-T



Despite these expected social and economic benefits, **the TEN-T transport network is today still far from complete**. Many projects planned to be completed by 2030, and most notably cross-border sections, risk to be substantially delayed if strong measures are not taken today, both at national and EU level. The picture differs strongly between transport modes: while the TEN-T road network is largely finished, the rail network remains very fragmented, in particular for high-speed rail. Also multimodal connections, for instance to connect rail and road to ports and airports, are often lacking.

As shown in section 1.3, it is estimated that approximately EUR 845 bn will need to be invested into the TEN-T during the next fifteen years only to remain on track with the milestones of the TEN-T Regulation. This figure excludes any additional investment costs required for making the network more climate resilient, and the regular maintenance costs.

It can be expected that public budgets will be under heavy constraints, due to the geopolitical developments (war in Ukraine and conflicts in the Middle East), economic instability (inflation, scarcity of resources, lack of strategic autonomy), climate change (with

increasing frequency of natural disasters). In these circumstances, it will be challenging to meet the budgetary requirements of the sustainable and smart transition, including for the transport sector.

Faced with these budgetary constraints on the one hand, and mounting challenges on the other, the EU and its Member States must find new ways to finance their transport priorities, including the completion of the TEN-T.

2.2 Attracting more private investments

Primarily, it must be acknowledged that the public sector cannot bear the necessary investments into the TEN-T alone. This implies that **all options to attract more private financing must be explored to the fullest**.

Figure 1: bankability of transport investments



Many transport investments are currently not profitable and too risky for private investors. In general, airports, roads, ports, freight terminals and major passenger hubs are considered the most profitable transport infrastructures. Thanks to their flexibility, limitless network coverage and interoperability they trigger a high utilisation rate and can therefore often be built and operated by private parties without any, or with only limited public support. On the other side of the spectrum are innovation and proof-of-concept projects, cross-border projects, major infrastructure projects such as mountain tunnels and large bridges and rail infrastructure. Such projects usually experience difficulties to attract private financing due to their important level of risk, their high upfront costs, or their short-term lack of profitability.

As can be seen on Figure 1, in between these two ends are projects for the deployment of high-speed rail infrastructure, the development of alternative fuels (such as sustainable maritime and aviation fuels), the roll-out of alternative fuels infrastructure and the uptake of alternative fuels fleets. It is particularly these types of projects that can become self-sustainable given the right policy framework and investment conditions. As it concerns investments into environmentally friendly transport solutions, a better internalisation of external economies (costs and benefits) into all modes of transport would increase their cost-competitiveness.

2.2.1 De-risking private investments through regulatory reforms

In addition to high upfront costs or a lack of short-term profitability, the biggest barrier to private investments in major transport infrastructure and (high-speed) rail projects, is the high level of risk that comes with these. In particular the uncertain and unstable legal framework has been named as one of the biggest risks. Public authorities could exert their powers in many ways to mitigate it.

The TEN-T policy explicitly includes the development of enabling framework conditions, and in particular the creation of the regulatory, technical, administrative, and operational conditions that are necessary to allow highly-performant, safe and uninterrupted traffic and information flows. There is a wide range of regulatory interventions that can be explored to improve investment conditions in TEN-T.

The first regulatory intervention, that is particularly relevant for large transport projects that often span over a long implementation period, is to **provide legal certainty regarding the public backing for those projects**. If the public sector explicitly expresses itself in favour of a certain project, or even commits to a specific timeline for a project, this creates the confidence that administrative hurdles will ultimately be overcome. This is precisely what the Commission wishes to achieve with the new TEN-T policy of **adopting implementing acts for each European Transport Corridor** covering its main cross-border sections as well as a limited number of other specific projects on national sections which are key for the functioning of the corridor (Art. 54.1 of the Regulation). The aim of these legally binding implementing acts is to ensure a coherent prioritisation of infrastructure investments by establishing timelines for the completion of the identified projects. Such transparent planning is also expected to have spill-over effects. By creating certainty about corridor projects, the Implementing Acts also create certainty for linked transport investments which are expected to be positively impacted by increased traffic flows (and therefore revenues) on that corridor.

On a similar note, and more particularly linked to investments into more sustainable modes of transport, is the **EU Taxonomy**. The EU taxonomy is a cornerstone of the EU's sustainable finance framework and an important market transparency tool. It helps direct investments to the economic activities most needed for the transition, in line with the European Green Deal objectives.

“Public procurement procedures can cause delays, risking the loss of EU funding. To address this, targeted technical assistance should be established to support Member States in project planning, preparation, and implementation, ensuring efficient and lasting capacity transfer. Considering the geopolitical context, extending this advisory support to Ukraine and Moldova may be worth considering.”

Inés Ayala Sender



Public authorities should modify the legal framework to explicitly **facilitate and accelerate administrative procedures linked to public interest projects, in particular the permitting, concession, and public procurement procedures**. In this vein, the EU in 2021 adopted the ‘smart TEN-T directive’⁸ with the ambition to streamline measures for advancing the realisation of the trans-European transport network and to make the procedural process clearer for project promoters, in particular as regards permit granting and public procurement. Taking it one step further, the European Council in 2022 agreed that the planning, construction and operation of renewable energy production plants and installations is presumed to be in the overriding public interest. This will allow such projects to benefit from a simplified assessment for several environmental obligations included in specific EU directives.⁹ A further extension of this public interest presumption into the domain of transport policy, in particular for the deployment of alternative fuels infrastructure, should be further explored.

Another approach to de-risk private investments, is to make projects more attractive for investors, by increasing the likelihood of their profitability in the medium to long term. One such option has already been discussed at length in the previous chapter and is a core objective of TEN-T policy: increasing interoperability. Interoperability is achieved through **harmonisation and standardisation**, which help products reach sufficient volume to benefit from economies of scale, thereby driving production costs down. It is particularly relevant for transport assets, but also applicable to transport infrastructure.

Public authorities should also make transport projects more attractive by **addressing the problems created by market failures (i.e., external economies) more systematically** through fiscal stimuli in favour of projects that are in the public interest, and in line with the EU’s transport and environmental policy ambitions. Most evidently, public authorities should:

- **better internalise the external costs** (such as environmental costs, congestion, accidents), by implementing the ‘polluter pays’ and ‘user pays’ principles. This would boost investments in the sustainable alternatives. As suggested by the Sustainable and Smart Mobility Strategy, this could for instance be achieved through carbon pricing and infrastructure charging mechanisms. A similar effect can be achieved by better internalizing “**positive external economies**” (such as environmental and climate benefits) through incentives. Examples are the ferrobonus or marebonus, where freight operators are incentivised to use respectively rail or sea-shipping to forward their goods. Such schemes however have a different impact on public finances, except where they are supported via cross-financing.
- **increase the use of cross-financing**, for instance by using highways tolls to partly finance railway projects.

“Eco-incentive measures can also provide an additional form of financing. Through Motorways of the Sea, we have studied and developed a common methodology for eco-incentive schemes to support the development of sustainable freight transport services. Such an approach can help bridging the funding gap to develop innovative and sustainable projects. Several Member States have now already introduced such a scheme (e.g. MareBonus) or are further exploring their potential.”

Kurt Bodewig



Closely related are active public policies that are explicitly intended to promote environmentally friendly modes of transport. For instance, the Commission in its Sustainable and Smart Mobility Strategy targets that, by 2030, within the EU all scheduled collective travel for journeys under 500km should be carbon neutral. Similarly, to boost freight transport, Switzerland incentivizes combined transport methods for example by means of a system of tolls and fees for heavy duty vehicles that transit through the Alps and by investments in the development and improvement of intermodal infrastructure including

“Finding alternative sources to fund large infrastructure projects is crucial to alleviate national and European budgets. The solution applied on my corridor, to cross-finance the Brenner Base Tunnel and its access routes with parts of the income collected from tolls on heavy goods transports on the parallel highways, can be considered a good practice in this regard.”

Pat Cox



⁸ Directive (EU) 2021/1187 on streamlining measures for advancing the realisation of the trans-European transport network (TEN-T)

⁹ ST/14787/2022/INIT, COUNCIL REGULATION (EU) 2022/2577 of 22 December 2022 laying down a framework to accelerate the deployment of renewable energy, OJ L 335, 29.12.2022, p. 36–44, available here: Regulation - 2022/2577 - EN - EUR-Lex (europa.eu)

rail terminals and efficient transshipment facilities both within and outside of Switzerland (notably also in the Netherlands, Belgium and Italy for instance).¹⁰ Such policies can equally make sustainable transport modes more attractive for private investors.

A more general market reform to attract more public financing is to boost competition and innovation, by **improving market access for new entrants**. In its Sustainable and Smart Mobility Strategy, the Commission for instance announced that it would assess whether current rules on track access charges offer the right incentives to boost competitive markets and the attractiveness of rail.¹¹

Key recommendations from this section

- *Public authorities should offer legal certainty to investors by creating a more stable investment framework and implementing market reforms where necessary. They should notably cooperate to operationalise the new possibilities offered by the TEN-T regulation (implementing decisions for the corridors, ERTMS and European maritime space).*
- *Further harmonisation of standards is needed to benefit from economies of scale.*
- *Internalisation of external costs and positive external economies will make green investments more attractive.*
- *Public authorities should increase the use of cross-financing, where transport revenues are earmarked for transport investments.*
- *Fostering competition leads to innovation by new market entrants.*

2.2.2 Exerting public means to boost innovation and leverage private investments

Even when all possible regulatory reforms to attract more private financing have been carried out, it is likely that certain highly important public interest transport investments will still not materialize. Figure 1 above indicates that this could be the case particularly for innovation and proof-of-concept projects, cross-border projects, major transport infrastructure and some rail infrastructure projects. These are tainted by either a high level of risk, high upfront costs, a lack of profitability in the near future or a combination of these. In those cases, it is important that the public sector steps in to provide the necessary financial incentives to private investors.

Most obviously, the public sector may decide to **bear a part of the transport investment by co-funding the infrastructure**, e.g., by means of grants. Another, less intrusive option, is for the public sector to reduce the financial risk of transport projects by providing **guarantees or via equity instruments** directly or indirectly through financial institutions with a public mandate. A third option is for the public sector to act as an intermediary for better loan conditions, e.g., through the **issuance of bonds** (as in the case of the NextGenerationEU Green Bonds, the proceeds of which were dedicated entirely to the financing of green investments). A fourth, and the least intrusive option, is to support projects by means of **loans**, as is done by multilateral and national promotional banks whose capital is commonly provided by the public sector.

The EU financing strategy is to help new and innovative technologies mature with co-funding in the initial stages, to then gradually diminish and ultimately to be phased out wherever possible. Combining or blending of public and private funds is promoted to ensure that the private sector gradually takes on more risk and technological developments become more market driven. In later stages loans or guarantees could be used to raise private sector appetite where necessary. In all cases, specific attention should go to building in safeguards to avoid overcompensation and market distortions, in particular in the case of projects whose profitability is highly dependent on uncertain events in the future. In line with EU State aid rules, awarding aid to projects on the edges of bankability is best performed by means of a competitive bidding procedure, which results in the lowest impact on the public budget.

Moreover, particularly for transport projects on the edge of bankability, such as (high-speed) rail infrastructure projects or alternative fuels infrastructure projects, public authorities should explore innovative financing solutions. For example, significant high-speed rail projects such as Bordeaux-Tours, Catania-Palermo, or Porto-Lisbon have demonstrated a potential for attracting private investments. Such approaches should be further developed to help reduce the burden of transport investments on the public sector.

A more classic example of cooperation between the public and the private sectors is a **public-private partnership (PPP)**. This cooperation model, which is more amply described in a dedicated paper by the European Investment Bank (EIB) and Eurostat¹², deserves to be revitalized. The same applies to **concessions** which are very important instruments involving the private sector in the realisation of important infrastructure, suitable to pay back the investment through tolls or other means.

Also the **extension of blending (combination of public/private funds) to new types of projects**, especially those with faster returns on investment, should be explored. Where possible, public authorities should aim for lower co-funding rates combined with higher co-financing from the private sector, not necessarily limited to financing institutions but rather increasing private equity investments.

¹⁰ For more details, please see this CER essay on 'The Swiss experience to support modal shift': CER_Essay_SBB_FINAL.pdf

¹¹ COM/2020/789 final, COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS Sustainable and Smart Mobility Strategy – putting European transport on track for the future, point 86, available here: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020DC0789>

¹² EIB & Eurostat, A Guide to the Statistical Treatment of PPPs, September 2016, available here: https://www.eib.org/attachments/thematic/epcc_eurostat_statistical_guide_en.pdf

An example of an innovative strategy to make transport investments more financially attractive to private investors, would be for public authorities to offer **in-kind compensation** to private investors. This could for instance consist of the transfer of lands near new railway stations for real-estate developments or the award of concessions in those stations for commercial activities.

European co-funding can also be used to leverage national public funding for investments that are not commercially viable in the mid- to long-term, such as transport innovation or major transport infrastructure. Further, it is worth mentioning that the recent political agreement reached by EU co-legislators in February 2024 on the new economics governance framework is very promising for the major TEN-T infrastructure projects. Specifically for projects co-financed by EU funding programs, the new agreement stipulates the exclusion of national co-financing from the “expenditure indicator” used to monitor a Member State’s adherence to planned fiscal adjustments. This exclusion from the expenditure indicator is a very significant incentive to promote investment with high EU added-value, for instance on our most important cross-border TEN-T infrastructure projects, co-funded by EU programmes, as it ensures that the fiscal adjustment is made on items other than co-financed investment.

The public sector should also take on a more proactive, **advisory role**. This is particularly important for SME’s, who often do not find their way in the legislative and regulatory maze. In this respect, the Sustainable and Smart Mobility Strategy called on Member States to designate one-stop shops for businesses to provide easier access to finance, notably through clearer communication and guidance, dedicated administrative support, and simplified financial support schemes.¹³

At EU level, the InvestEU Advisory Hub and JASPERS provide advisory and technical support to help facilitate investments in various sectors. Their primary role is to assist project promoters, such as businesses, public authorities, and other organizations, in preparing and structuring investment projects (i.e., capacity building, networking, technical expertise, project development assistance). At national level, national promotional banks perform a similar role. These are public financial institutions which pursue investments in projects with a broader public policy objective. Access to these advisory institutions, in particular for SMEs, should be further facilitated, both at national and at EU level.

Key recommendations from this section

- *Where highly important public interest transport investments do not materialize, public authorities should step in and incentivize private investments by means of grants, guarantees or equity. More generous instruments are usually also the most intrusive and should be reserved for the riskiest projects, while authorities should abstain from providing aid to more mature, market-ready technologies as this could lead to market distortions.*
- *Public authorities, including the EU, should explore innovative approaches to leverage private investments, including by revitalising proven concepts like PPPs, concessions and blending.*
- *The Commission, but also national authorities, should better direct the private financial market to green transport opportunities, by further developing and improving their advisory roles.*

2.3 Increase own resources

The leveraging of private investments implies the presence of budget to use as a lever. In view of the strain on both the national and EU budgets, and the magnitude of the investment needs, more revenues will need to be collected.

In particular, the EU will have to assess how its own resources can be increased. For transport, this implies looking critically at all possible sources of income through the application of the user pays and polluter pays principles, including external-cost charges and congestion charges collected through the application of the **Eurovignette directive**. Also, revenues obtained from the auctioning of **Emission Trading System (ETS)** allowances should be considered as part of this exercise.

In return, transport revenues should also be earmarked for transport investments (new, maintenance, upgrades) to facilitate cross-financing.



13 COM/2020/789 final, COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS Sustainable and Smart Mobility Strategy – putting European transport on track for the future, point 86, available here: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:%3A52020DC0789>

Key recommendations from this section

- *The EU should explore possibilities to increase its ‘own resources’, through the wider application of the polluter pays and user pays principles, e.g., from charges levied directly via the Eurovignette, or from own revenues obtained for instance through ETS.*
- *Transport revenues and user fees should be earmarked for transport expenditures, to facilitate cross-financing.*

2.4 More effective EU funding

Despite the huge, and successful TEN-T investments already leveraged with EU funds (approximately EUR 140 bn) since 2014, the future investment needs are so immense that the EU must seek to further optimise its expenditure. This not only requires the EU to ensure its support schemes are targeted to the projects with the most important spill-over effects, but it also requires a thorough review of the EU support schemes themselves, with the aim to further simplify and optimise them to benefit from cross-sectoral synergies.

2.4.1 Simplified

Today, the conditionalities throughout the EU’s funding instruments, such as climate proofing or exclusions related to the implementation of the Do No Significant Harm (DNSH) principle, are not designed and applied in the same manner. This is prejudicial to the transparency of the Union’s funding schemes and leads to problems of accessibility, in particular for SME’s. **The funding conditionalities should be dealt with in a common way** as far as possible via harmonised and simplified technical assistance. This would also lead to efficiencies in the administration: it would allow funding schemes to refer to general conditionalities rather than requiring different services to develop their own funding conditionalities. It would also allow more easy and therefore faster eligibility checks if conditions are harmonised across instruments.



The Commission should moreover **promote more simplified forms of funding** where possible to accelerate project implementation, for example through increased use of lump sums, unit costs, etc. This would considerably simplify, streamline and reduce the time needed for the financial management of projects, including payment procedures, both at Commission and beneficiary level. For example, compared to the ‘traditional’ system of calculating the grant amount on a detailed budget of estimated actual eligible costs per cost category, a unit contribution shortens the time needed to calculate grant amounts and prevents amendments related to budget variations. At the same time, unit contributions strongly increase the focus on the quality of the performance and output of projects. An increased use of the performance-based funding approach, as applied in the Recovery and Resilience Facility (RRF), would lead to further simplification.

2.4.2 Synergetic

EU funding support to transport, energy and digital networks should better reflect the growing interdependency between these sectors: the transition to greener road, air, and waterborne sectors necessitates the production of new, alternative fuels, increased electricity generation and more resilient energy grids; ports are no longer mere transport facilities but transition into energy hubs; military mobility networks must be cybersecure. In some cases, the internal set-up is suboptimal to fully benefit from synergies: for example, currently CEF is implemented through two different agencies (CINEA for transport and energy part and HaDEA for digital). The Commission should seek to improve its cooperation and coordination on funding schemes across policy domains. It is therefore essential to keep EU support to the transport, energy and digital networks under a single funding programme and to allow greater flexibility to support integrated projects within that programme. In addition, the complementarity with other EU funding instruments should be reinforced (Cohesion Policy Instruments, Horizon Europe, Innovation Fund, InvestEU, RRF).

2.4.3 Better Targeted

Finally, in view of the limited budget at EU level, a **clear prioritisation** must be made of the projects with the most EU added value against those that are best handled at national level or left to the private sector.

As we have seen in section 2.2 above, the private sector and Member States often under-invest in innovation and cross-border projects since these are riskier in terms of implementation and in terms of return on investments.

With new challenges emerging, the EU should also carefully examine what role it can play to tackle these. It can be assumed that private sector appetite to invest in network resilience, military mobility as well as interoperability is low, as these would not immediately result in returns on investments. However, from a societal perspective these investments are pressing, and inaction will lead to higher costs. It should be carefully assessed to what extent these investments are best borne by Member States or by the EU, or where both can be complementary. Coordination by the EU will in any case be necessary, as both

“CEF enables cross-border projects such as the Seine Escaut project with the canal Seine Nord Europe, spanning three Member States. CEF not only financed the project but also established a coordinated and timely framework through its rules. Similarly, other major cross-border projects like Rail Baltica, Lyon Turin and Brenner tunnel owe their existence to CEF’s support.”

Péter Balázs



control mechanisms ensure compliance with EU standards and sound financial management. The “use it or lose it” principle – to be seen as a “solidarity clause” - allows the reallocation of funds from underperforming or delayed projects to other high EU added value projects. A recent survey conducted for the Commission among nine Member States returned very positive feedback regarding CEF, confirming the aforementioned. CEF co-funding was broadly perceived as leading to more stability regarding long-term, strategic decisions at national level, since the fear of losing EU financial support shielded CEF co-funded projects from common project risks like an alternation of governments or general budget cuts. And when two or more Member States jointly commit to a CEF project, the multilateral engagements increased project stability even more. Respondents argued that - in the absence of EU funding - the implementation of certain large cross-border projects would have been postponed or not launched at all. The application procedure was praised for its simplicity, and particularly the absence of any requirement to elaborate/agree/sign extra programming documents with the Commission, allowing projects to start earlier than they would in other funding programmes. CINEA monitoring tools were considered very effective in diagnosing possible threats in project implementation and responding to them in a timely manner.

Key recommendations from this section

- *The conditionalities of EU funding instruments should be harmonised and simplified, to make the EU funding schemes more transparent and accessible to external stakeholders. The Commission should moreover promote more simplified forms of funding and, where appropriate, extend the application of the performance-based funding approach.*
- *EU funding instruments should become more transversal – across policy domains. Funding priorities should be better aligned, notably to reflect the growing interdependency between the transport, energy and digital networks.*
- *The Commission should further strengthen the focus of centrally managed EU grant schemes towards projects with the highest EU added value. This concerns EU cross-border projects, military mobility, and interoperability. These priorities should be supported by appropriate budgetary envelopes.*

building resilience and military mobility require a network approach: investments in one part or section of the network are useless if they are not complemented by necessary investments in other parts or sections of the network.

This is where centrally managed EU funding instruments, such as Horizon Europe (HEU) and CEF, have a pivotal role to play. These instruments with their precisely targeted funding are mission critical for many EU policies. Through high policy steering they focus on the projects with the highest EU added-value, overall EU network benefits and cross-border connections. Directly managed funding instruments encourage Member States to invest in projects today instead of delaying them for lack of resources or national interest. Central management, with robust KPIs and detailed oversight by Executive Agencies such as CINEA, is key to the success of these instruments. These

3 Next MFF: a transport funding that is adapted to the needs

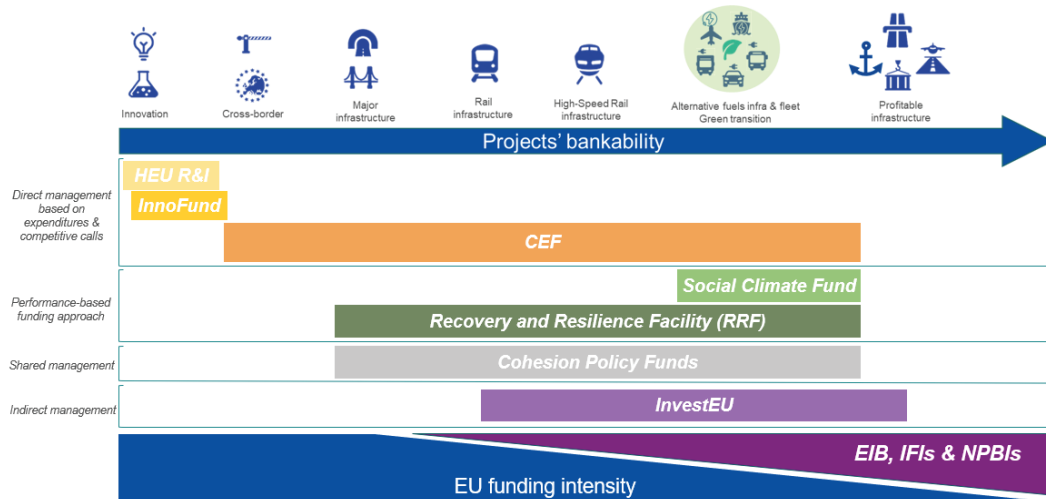
3.1 Review of transport-relevant EU funding instruments



The next MFF will come at a critical juncture for completing the TEN-T core network and, at the same time, for putting the transport sector on the right track to become smarter and more sustainable. Out of the EUR 200 bn estimated total investment costs for the **main cross-border projects**, around **EUR 110 bn** (or approximately 55%) remains to be invested during the next 10 years. Similarly, out of the EUR 140 bn needed to complete the national major projects with EU relevance, key to realise the European Transport Corridors, around **EUR 100 bn** (more than 70%) remains to be invested. Since the core network must be completed by 2030, the bulk of the remaining investments will therefore take place in the coming 10 years. While the budget of the MFF 2021-27 dedicated to the TEN-T was already significantly increased compared to the MFF 2014-20 thanks to the additional budget stemming from NextGenerationEU (from EUR 54 bn to EUR 87 bn), a further increase is necessary considering the aforementioned investment needs.

Moreover, to address this investment challenge successfully, the EU and its Member States will need to tread new ground. From innovative approaches to attract more private financing, to exploring new options to increase the EU’s own resources, to developing new instruments to address new challenges. A thorough review of the existing funding instruments and their objectives is also needed, to avoid funding gaps and overlaps, and ultimately ensure an EU funding that is better targeted at the investment challenges ahead.

Figure 2: Overview of current EU funding instruments with their objectives



Building on Figure 1, Figure 2 provides an overview of the current EU funding strategy. It shows the funding instruments that are currently in place at EU level, indicating which transport investments they seek to promote, and counterposes them to the bankability of transport projects. The EU funding intensities decrease from the most innovative technologies on the left-hand side, to move towards loans granted by the EIB, International Financial Institutions or National Promotional Banks and Institutions in later stages.

When we analyse the strengths and weaknesses of the existing EU funding schemes in Figure 2, we can make the following analysis and recommendations (from left to right):

1. Horizon Europe (HEU)

Horizon Europe is and shall remain essential for Research and Innovation in transport, and indispensable for nurturing future solutions. The currently applied cluster approach has been widely perceived as successful. Links between various parts of HEU should be further improved and clarified. However, there is much room for simplification and synergies. Reflection is needed on the extent to which certain parts of Horizon Europe would not also or better fit with other instruments. For example, on “Urban” instruments: on the one hand, cities must retain their role as policy laboratories and breeding grounds for green mobility solutions (under HEU), while on the other hand, many urban ‘solutions’, such as electric buses, are more mature and could be better pursued with other funding instruments.

2. Innovation Fund (IF)

The Innovation Fund remains a key instrument for the development of Green Deal innovation technologies. Functioning as a bridge between Horizon Europe and CEF, in the field of transport it is particularly relevant for research and development into new alternative fuels, particularly for maritime and aviation applications. Being entirely funded on the basis of ETS cross-financing, an extension of its scope to other European Green Deal transport priorities should be explored (e.g., cross-border projects). Reflection is also needed on the extent to which the Innovation Fund could become a partner for blended approaches.

3. Connecting Europe Facility (CEF)

CEF has been a key EU funding instrument for the development of transport infrastructure. However, to cope with the massive investment needs caused by climate change and geopolitical instability, it is necessary to go beyond the structure and objectives of the current programme. To meet the new challenges that Europe will increasingly face over the coming years – ensuring the resilience of infrastructure which is at high risk because of climate change and building an infrastructure for a safer Europe, capable of meeting the needs of military mobility – the successor of CEF should be reinforced to become the key funding instrument for the interconnection of the Single Market and security of Europe.

This new programme should pursue a stronger focus on cross-border infrastructure and infrastructure with cross-border impacts, including cross-border programmes for interoperability and multimodality (such as ERTMS and ITS, which should be developed as EU industrial projects). Without central management similar to CEF, cross border projects risk being postponed or not launched at all, while ERTMS needs an alliance of EU industry to build synergies and push down the costs for the digitalisation of the network. The new programme must provide the required investment certainty to complete the ongoing EU flagship projects that have been kick-started with the help of CEF, such as Rail Baltica, the Lyon-Turin railway tunnel, the Brenner Base Tunnel, the Fehmarn Belt fixed link, etc.¹⁴

This approach, together with the “use-it-or-lose-it” principle that enables the redistribution and recycling of unspent EU funds, can be expected to optimise budgetary efficiency.

An EU-coordinated approach to the investments in dual-use EU military mobility corridors is vital: scarce funding must be directed to where it is most needed to close the gaps in the priority corridors, identified in close cooperation with NATO. Therefore, military mobility shall be a fully-fledged pillar of the programme which will succeed CEF, with the clear ambition of enabling short-notice and large-scale movements of military personnel and materiel across the EU in the event of crises. In view of the high interest of Member States, the maturity of the project portfolio and the resulting high oversubscription rate, the military mobility envelope of the successor of CEF should be drastically increased.

But EU funding has its limits: projects submitted by the Member States for funding in response to the CEF I and II calls represented on average 3 to 4 times the EU budgetary allocation. This is a missed opportunity: the highly mature project pipeline should be harnessed to rapidly realise investments that generate GDP and employment.

4. Recovery and Resilience Facility (RRF)

While the RRF itself will phase out by 2026, it has brought many valuable innovative ideas and approaches to EU funding that should be translated into other funding instruments. This concerns not least the conditionalities applied by RRF: as already mentioned here above, conditionalities such as climate proofing and DNSH should be harmonised across instruments as much as possible to simplify applications and control.

In the RRF, the Commission endorses, and the Council approves the national RRF plans setting forth clear milestones and objectives for the disbursement of EU funding, while leaving a certain degree of autonomy to Member States for the financial implementation of the projects. National projects need to be in line with the Commission’s country-specific recommendations and must ultimately be agreed by the EU.

This funding approach is therefore highly efficient for national transport investments (such as national sections of the TEN-T), alternative fuels infrastructure, climate resilience, intermodal projects (ports, RRT, links to airports), and safe and secure parkings. The Commission should examine to what extent this funding approach can be further extended to these kinds of investments. Moreover, the broader use of the performance-based funding approach would allow to make payment disbursements conditional upon the implementation of transport policy reforms at national level, to accelerate the complete implementation and correct transposition of the EU transport acquis. Such reforms should include all the regulatory, technical, administrative and operational conditions that are necessary to allow highly-performant, safe and uninterrupted traffic and information flows.

¹⁴ As mentioned in section 1.2, almost half of the cross-border project investments have already been completed thanks to the leveraging effect of CEF I and CEF II.

5. Cohesion Policy Instruments

Cohesion Policy Instruments¹⁵ are important complements to CEF. They should focus on national / urban transport priorities in close complementarity with the successor of CEF and other EU funding instruments.

6. InvestEU

InvestEU is and should remain the key funding instrument to maximise the leveraging of private investments in the transport sector. InvestEU and the successor of CEF should be communicating vessels: InvestEU should support the financial closure of projects supported by grants and complement funding priorities not fully covered under the successor of CEF. Their priorities, as defined in their respective legal bases and the Investment Guideline, should remain well-aligned. InvestEU's project portfolio demonstrates its capacity to support various transport priorities, including in relation to the completion of the TEN-T, but most notably for fleet deployment, transport innovations and the greening of transport (and related energy investments, such as for electric vehicle battery manufacturing plants).

The focus of InvestEU should remain on catalysing private financing for vehicles, fleets and rolling stock, national high-speed rail infrastructure, alternative fuels and possibly other areas that are suitable for a repayable form of support. The set-up of specific blending instruments should be pursued in these fields. In addition, the granting of performance guarantees should be extended, given the market needs and high leverage effect for large infrastructure projects.

7. Social Climate Fund (SCF)

The Social Climate Fund is a new instrument that is currently under development, with an implementation period from 2026 to 2032 and a budget of EUR 65 bn. It aims to address the social impacts of the ETS revision on vulnerable households, transport users, and micro-enterprises affected by energy or transport poverty.¹⁶

In terms of transport funding, this fund should ensure complementarity with CEF and its successor by supporting for example projects for the development of recharging infrastructure, the development of public and collective transport (including the relevant infrastructure) and shared mobility in particular to better connect areas that are not covered by the core and comprehensive networks.

The fund should prioritize the decarbonisation of transport fleets to complement CEF investments (and those of CEF's successor) aimed at making the TEN-T more environmentally friendly. The fund should focus on providing financial assistance or tax incentives for the decarbonization of logistics fleets, the establishment of a second-hand market for zero-emission vehicles, the procurement of environmentally friendly bus fleets for urban transport, etc.

Finally, to improve the mobility of vulnerable groups, the SCF should also be able to support where justified public transport infrastructure for railways and waterborne transport.

Key recommendations from this section

- *CEF should evolve towards a programme focusing on projects with high EU added value but that, based on experience, are not always priorities for Member States: **cross-border infrastructure projects, dual-use projects to improve military mobility and interoperability (ERTMS, EU-wide industrial projects)**.*
- *To create investment certainty for large **cross-border projects**, an important part of the successor of CEF's budget should be earmarked for flagship projects. A **climate tracking of 70%** should be pursued for the selection of projects. **Military mobility** should become a fully-fledged pillar of the successor of CEF.*
- *The "**RRF-style**" **performance-based funding approach** should be applied more broadly, in particular for **national transport investments (such as national sections of the TEN-T), alternative fuels infrastructure and climate resilience**. The broader use of the performance-based funding approach shall allow to make payment disbursements conditional upon the implementation of **transport policy reforms** at national level, to accelerate the complete implementation and correct transposition of the EU transport acquis.*
- *In order to help bring technologies quicker to the market, **blending should be promoted** – also in new areas of EU funding. In particular certain funding priorities under InvestEU could be pursued through blending instruments.*

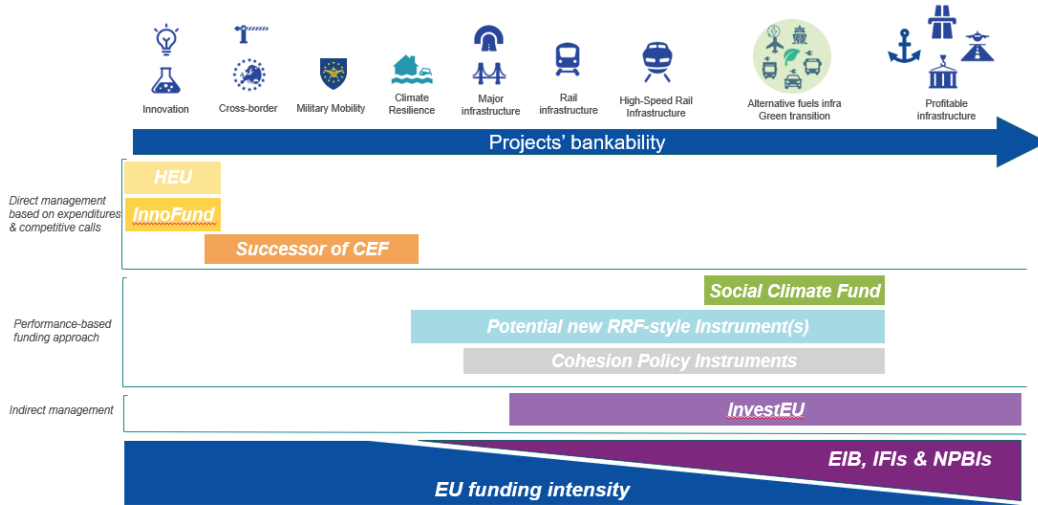
¹⁵ European Regional Development Fund (ERDF), Cohesion Fund (CF), Just Transition Fund (JTF), etc.

¹⁶ Transport poverty means individuals' and households' inability or difficulty to meet the costs of private or public transport, or their lack of or limited access to transport needed for their access to essential socioeconomic services and activities, taking into account the national and spatial context.

3.2 A proposed new set-up of EU funding instruments

Taking account of these recommendations, under the new MFF a simplified set-up of the portfolio of EU transport funding instruments could look like the one proposed in Figure 3 below.

Figure 3: Proposed set-up of EU funding instruments under the new MFF



In the new set-up, Horizon Europe and the Innovation Fund should continue their respective roles as catalysts of research and innovation. The reinforced successor of CEF would complement them to complete the Commission’s arsenal of directly managed funding instruments. More than before, the successor of CEF would focus on projects of strategic network importance, that risk not taking place without EU supranational steering: cross-border infrastructure projects, upgrades of dual-use infrastructure for military mobility, and investments in interoperability (ERTMS; EU-wide industrial projects). EU support for more nationally oriented transport investments could be pursued more generally through performance-based funding instruments. The Cohesion Policy Instruments and potential new RRF-style instruments would continue to pursue their respective roles, while the Social Climate Fund that is currently under development will support the decarbonisation of transport with a social dimension, focused on abating transport poverty. Finally, InvestEU should remain the key EU fund to leverage private investments in close-to-market sustainable transport technologies, though with a more targeted focus on clean vehicles, fleets and rolling stock, and the development of national high-speed rail and alternative fuels infrastructure.

4 Key Recommendations for the EU's transport financing

1. To meet the investment needs to make TEN-T climate-resilient and fully capable to support **military mobility**, the Commission should **reinforce the successor of the Connecting Europe Facility to become the key instrument for the interconnection of the Single Market**, with a clear focus on cross-border projects and priorities.
2. **Military mobility should become a fully-fledged pillar of the successor of CEF as a contribution to the security of Europe**, backed up by sufficient funding to urgently close the “gaps” on EU Military Mobility Corridors which will be defined in 2024 in close cooperation with NATO.
3. **The successor of CEF should operate under the same principles and conditions as the current CEF: project-based approach allowing the Commission to select the best projects contributing to priorities defined at EU level** (cross-border projects, dual-use projects for military mobility and interoperability); use-it-or-lose-it principle to ensure that only mature projects are co-funded by the EU.
4. To create investment certainty for large cross-border projects, **part of the successor of CEF's programme budget should be earmarked for cross-border flagship projects identified on the basis of the revised TEN-T Regulation**, with a clear focus on the projects that will deliver under the next MFF. The central management is most appropriate to prioritise and accelerate projects of high EU importance.
5. **Funding instruments should become more complementary and transversal** – across policy domains. EU funding support to transport, energy and digital networks should better reflect the growing interdependency between these sectors. For example, for military mobility Europe needs a coherent network in transport, energy and telecommunications.
6. The “RRF-style” **performance-based funding approach** should be applied more broadly, in particular for **national transport investments (such as national sections of the TEN-T), alternative fuels infrastructure and climate resilience**. The broader use of the performance-based funding approach shall allow to make payment disbursements conditional upon the implementation of **transport policy reforms** at national level, to accelerate the complete implementation and correct transposition of the EU transport acquis.
7. **De-risking and leveraging private investments** is essential. Funding instruments like **Invest EU** are crucial and need to be **closely aligned with policy-driven projects**, such as greening of fleets or building high-speed rail infrastructure.
8. To help Member States and private actors plan their transport investments, the Commission should **provide more long-term legal and funding certainty about projects**, for instance through the use of Implementing Decisions for TEN-T Corridors. The available EU funding should be aligned with the priorities and timelines included in such Implementing Decisions.

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