

EU transport infrastructure

Further delays and some cost increases, but a reinforced governance framework is in place for the future (an update of ECA special report 10/2020)



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OF AUDITORS

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01

Main messages

Why this area is important

- 01** The [trans-European transport network \(TEN-T\)](#) is the backbone of the Europe-wide network for road, rail, inland waterway, sea and air transport. Megaprojects, which are large transport projects often with a cross-border dimension, are key to closing gaps in the network, removing bottlenecks, and facilitating cross-border mobility.
- 02** In 2020, we published a [special report](#)¹ that assessed the Commission's role in the transport megaprojects along the TEN-T network, including the provision of EU co-funding. We called these 'transport flagship infrastructures' (TFIs). TFIs are generally implemented through a collection of smaller projects and actions, which individually receive EU co-funding. We found that the TFIs we examined faced major delays, cost increases, weak coordination between member states, and weaknesses in the Commission's oversight. As a result, we considered that the 2030 deadline for the completion of the core of the EU transport network (the most strategic nodes and links to be completed as a matter of priority) was at serious risk.
- 03** Since 2020, the EU has been significantly affected by the COVID-19 pandemic and Russia's war of aggression against Ukraine. The eight TFIs faced the same challenges, as well as needing to adapt to an evolving regulatory framework. Furthermore, some of the TFIs were subject to unexpected technical challenges such as geological constraints in the excavation of tunnels, which contributed to additional costs and delays.

¹ [Special report 10/2020](#): "EU transport infrastructures : more speed needed in megaproject implementation to deliver network effects on time".

- 04** The aim of this report is to provide an update on key data and observations of our [2020 special report](#) to inform stakeholders and the public about developments that occurred since. We have also reviewed progress made by the Commission in implementing its recommendations. More details on the objectives and methodology of this update are provided in [Annex I](#).

What we found

- 05** We conclude that since the publication of our [2020 special report](#), the combined cost of the eight TFIs we reported on has further increased. This has been mainly driven by significant cost increases for two TFIs, while the other six TFIs contributed to a limited extent to the total increase (costs increased for two TFIs and decreased for four). We observed additional delays in the implementation of five TFIs. Given the fact the TFIs are key transport links, this implies that the 2030 deadline for the completion of the EU core network will not be met. The revised [TEN-T Regulation](#) adopted in 2024 introduced further legal provisions covering the Commission's oversight of the implementation of the network. These have the potential to address some of the issues identified in our previous report. However, it is too early to assess how the new provisions will be used in practice, and in any case the changes will mostly be relevant for projects that started later than the TFIs we audited.
- 06** To address the shortcomings identified in our [2020 special report](#), we made four recommendations to the Commission, consisting of twelve sub-recommendations. Out of these sub-recommendations, the Commission implemented fully or in part the six it had accepted at the time. It did not take any action for the six it did not accept.

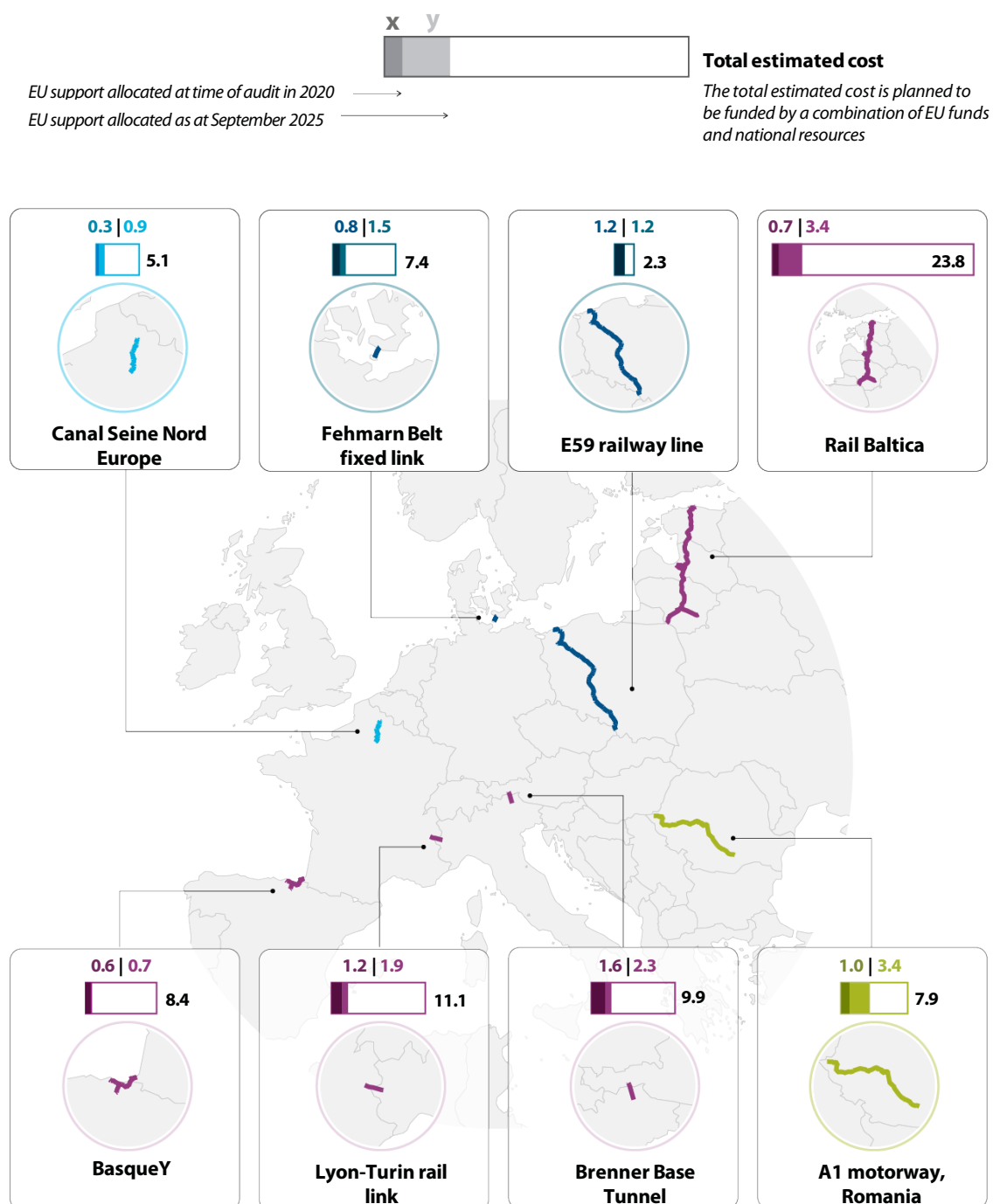
A closer look at our observations

The 2030 TEN-T core network completion deadline will not be met, and there are further significant cost increases for two TFIs

07 We updated the figures concerning the total estimated costs and the EU co-funding amounts² ([Figure 1](#)) for the eight TFIs covered in our [2020 special report](#).

² [Special report 10/2020](#), table 1.

Figure 1 | Total estimated cost and allocated EU co-funding for the eight TFIs



Note: All amounts are in billions of euros. Total cost amounts are the latest available official cost estimates. Such estimates can be based on different reference years.

The colour of the TFIs reflects the respective modes of transport involved: purple for rail, light blue for inland waterways, green for road and blue for more than one mode of transport.

Source: ECA based on information from the Commission, national authorities, and project promoters.

- 08** Most of the TFIs we audited had received additional grants (for a total of € 7.9 billion) since our [2020 special report](#). This increase in the EU co-funding is not an automatic consequence of the increase in the total cost of each TFI, as the EU co-funding is not allocated as a fixed percentage of the total cost.

Significant further cost increases for two TFIs

- 09** Megaprojects often experience significant changes in scope between the time of their original design and conception, and the time construction work starts or even during completion. This, together with unexpected project complexity and unplanned events (paragraph [03](#)), often leads to cost increases compared to original estimates³. In our [2020 special report](#) we had reported an overall real (i.e., net of inflation) cost increase for the eight TFIs of 47 %, compared to the original estimates⁴.
- 10** We updated the cost analysis to November 2025 based on information from the project promoters ([Table 1](#)). For comparison purposes with our [2020 special report](#), and to take into account inflation across the implementation timeline, we have reindexed all cost estimates at 2019 values without taking into account actual payment schedule. The figures presented in [Table 1](#) are therefore not directly comparable with the cost figures presented in [Figure 1](#).

³ Flyvbjerg, B., “What You Should Know About Megaprojects and Why: An Overview”, *Project Management Journal*, 45, 2, April/May 2014, p. 9.

⁴ [Special report 10/2020](#), table 3.

Table 1 | Overview of the cost developments for each TFI (million euros)

Transport Flagship Infrastructure	Special report 10/2020		Status in November 2025		
	Original estimate (in 2019 values) (a) ¹	Latest estimate (in 2019 values) (b)	Revised estimate (in 2019 values) (c)	% increase compared to SR 10/2020 estimate (c/b – 1)	% increase compared to original estimate (c/a – 1)
Rail Baltica ²	4 648	7 000	18 189	+ 160 %	+ 291 %
Lyon-Turin rail link	5 203	9 630	11 828	+ 23 %	+ 127 %
Brenner Base Tunnel	5 972	8 492	8 373	- 1 %	+ 40 %
Fehmarn Belt fixed link ³	5 016	7 711	7 630	- 1 %	+ 52 %
Basque Y	4 675	6 500	6 888	+ 6 %	+ 47 %
Canal Seine Nord Europe	1 662	4 969	5 400	+ 9 %	+ 225 %
A1 motorway	7 244	7 324	6 410	- 12 %	- 11 %
E59 railway line ⁴	2 113	2 160	1 737	- 20 %	- 18 %
Total	36 533	53 786	66 455	--	--
Total increase				+ 24 %	+ 82 %

Notes:

All cost figures have been reindexed at 2019 values using the year-appropriate price deflator from the Commission's [AMECO database](#).

¹ The original estimate is the earliest existing one for each TFI, which can correspond to a different scope or level of maturity of its design. As an example, the Lyon-Turin rail link was initially envisaged as a single-tube tunnel and afterwards designed as a two-tube tunnel; similarly, the estimate presented for the Canal Seine Nord Europe was identified before feasibility studies were conducted.

² The revised estimate refers to the completion of the entire TFI by 2030. The project has since been split into phases ([Box 1](#)).

³ The estimate was not revised by the project promoter since our 2020 special report. The different new value reflects only the indexation.

⁴ Costs excluding the Świnoujście-Szczecin section as in our 2020 special report.

Source: Commission, national authorities, and project promoters.

11 The latest estimate of the total costs for all eight TFIs together is now almost double that given originally. The additional cost increase for all TFIs over the last five years, net of inflation, was 24 %. This increase has mainly been driven by significant cost increases for two TFIs: Rail Baltica ([Box 1](#)) and the Lyon-Turin rail link.

- 12** For the other six TFIs, the overall variation in cost estimates only accounts for around 10 % of the total additional increase. For example, the Canal Seine Nord Europe, for which in 2020 we had reported the highest percentage cost increase compared to the original estimate, has now witnessed a further cost increase of 9 %. In two cases, the A1 motorway and the E59 railway line, the latest cost estimates – when accounting for inflation – are actually lower than the original ones.

Box 1

Rail Baltica: costs more than doubled since 2020

At the time of our [2020 special report](#), the official cost estimate for Rail Baltica was € 5.8 billion (in 2017 values). In our report, we pointed out that, based on the information then available, costs might further increase and showed a risk-adjusted total cost of € 7 billion.

In 2024, the project promoter for Rail Baltica performed a new analysis and concluded that the estimated total cost of the full TFI had risen to € 23.8 billion at 2023 prices. The main reasons identified in the analysis were the lack of maturity and detail of the previous estimates (which accounted for around half of the increase) and changes in the project scope and design. A joint audit report⁵ from the national audit institutions of the three Baltic countries involved largely confirmed this analysis.

Importantly, the promoter highlighted the risk that the new estimate might still not be fully accurate, as there were mature design studies (on which the estimate was based) for only one third of the total distance. As regards the timeline, the project partners decided to split the TFI into two phases: a first one involving only a single-track railway (for a total cost of € 15.3 billion) to be completed by 2030, and a second more complete one without precise timing. Due to the prolonged timeline for the works, it is likely that, after completion of the second phase, the cost of the TFI will be higher than € 23.8 billion.

The 2030 completion deadline for the core network will not be met due to further delays

- 13** Megaprojects are often characterised by long implementation timelines, and many experience delays compared to original planning⁶. They are also exposed to external

⁵ National Audit Office of Estonia, State Audit Office of Latvia, National Audit Office of Lithuania: “[Review on the Rail Baltica project](#)”, Joint review Tallinn, Riga, Vilnius, 11 June 2024.

⁶ Flyvbjerg, B., *op. cit.*, pp. 9-11.

factors, as described in paragraph 03. In our [2020 special report](#) we reported an average delay of 11 years for the eight TFIs we examined⁷. We updated this analysis to November 2025, and identified further delays ([Table 2](#)).

Table 2 | Delays affecting each TFI

TFI	Original plans ¹		Special report 10/2020	Status in November 2025		
	Implementation timeline (years)	Estimated opening year	Estimated opening year	Revised estimated opening year	Delay compared with special report 10/2020 (years)	Delay compared with original plans (years)
Lyon-Turin rail link	7	2015	2030	2033	3	18
Brenner Base Tunnel	9	2016	2028	2032	4	16
Fehmarn Belt fixed link	10	2018	2028	2029	1	11
Basque Y	4	2010	2023	2030 ²	7	20
Canal Seine Nord Europe	10	2010	2028	2032	4	22
Average					4	17
Rail Baltica	10	2026	2030	n/a ³	yes	> 4
E59 railway line	<i>varies by section</i>			n/a	n/a	n/a
A1 motorway	<i>varies by section</i>			2029	n/a	n/a

Notes:

As the implementation timelines of the E59 railway line and A1 motorway TFIs vary by section, we did not compute delay figures at the level of the TFI.

¹ The original plans are the earliest that exist for each TFI, which can correspond to a different scope or level of maturity of its design. As an example, the original estimated opening year for the Canal Seine Nord Europe was identified before feasibility studies were conducted.

² While the Commission has indicated to us 2030 as likely completion date, information from the project promoters points to a 2035 completion date.

³ No estimated opening year is available for the full TFI. The first phase of the TFI is estimated to open in 2030.

Source: Commission, national authorities, and project promoters.





⁷ [Special report 10/2020](#), paragraph 53 and picture 5.

- 14** Our analysis shows that the five TFIs for which we could obtain the required information experienced an average further delay of 4 years compared with the situation at the time of our [2020 special report](#). This brings the average delay to 17 years for the five TFIs, compared to the original planned timeline.
- 15** For Rail Baltica, the previously reported delay is destined to increase further, as the latest plan at November 2025 was to have only a first phase of the project ready by 2030. However, we could not quantify this increase, because no implementation timeline exists for the second phase ([Box 1](#)). Similarly, for the E59 railway line, no information was available at the time of this update on when the full TFI will be completed.
- 16** The implementation delays may have an impact on the functioning of the TFIs themselves, as well as on the EU's transport network. We updated our risk assessment of the likely state of implementation of the network⁸, considering the estimated completion dates of each TFI. We looked at whether the TFIs themselves are likely to be fully in service by 2030 and whether their access lines and connecting infrastructures are also likely to have been upgraded by the same date, to guarantee full network effects. Finally, we assessed whether the 2013 TEN-T requirements for freight railway lines are likely to be met along these sections by 2030 ([Figure 2](#)).

⁸ [Special report 10/2020](#), table 2.

Figure 2 | Likely state of implementation of the TFIs by 2030

Assessment is as at November 2025

	TFI fully in service by 2030		TFI and connecting infrastructure fully in service by 2030		TEN-T rail freight requirements fulfilled by 2030, incl. connecting infrastructure	
	SR 2020	Update 2025	SR 2020	Update 2025	SR 2020	Update 2025
Rail Baltica						
Lyon-Turin rail link			 ¹			
Brenner Base Tunnel					 ²	
Fehmarn Belt fixed link			 ³		 ⁴	
Basque Y		 ⁵			 ⁶	
Canal Seine Nord Europe					not applicable	
E59 railway line						
A1 motorway, Romania					not applicable	

¹ We assessed a low likelihood for the section of the infrastructure in France and a medium likelihood for that in Italy.² We assessed a low likelihood for the section of the infrastructure in Italy, a medium likelihood for that in Germany and a high likelihood for that in Austria.³ We assessed a low likelihood for the section of the infrastructure in Germany and a high likelihood for that in Denmark. We maintain this assessment for the update.⁴ We assessed a low likelihood for the section of the infrastructure in Germany and a high likelihood for that in Denmark. We maintain this assessment for the update.⁵ While the Commission has indicated to us 2030 as likely completion date, information from the project promoters points to a completion date only in 2035.⁶ We assessed a medium likelihood for the section of the infrastructure in France and a high likelihood for that in Spain.

Note: TEN-T requirements include electrification, at least 22.5 tonne axle load, minimum speed of 100 km/h, at least 740 m train length, 1 435 mm track gauge, and use of the European Rail Traffic Management System.

Source: ECA, based on Commission, national authorities, and project promoters.

17 For most TFIs, the situation deteriorated further compared to when we prepared our previous special report. Three of the TFIs (the Brenner Base Tunnel, Lyon-Turin fixed link and Canal Seine Nord Europe) have now an official completion estimate beyond 2030,

which means that the 2030 deadline for the completion of the EU TEN-T core network will not be met. In 2020, Rail Baltica was expected to be fully completed by 2030; the TFI now has no implementation timeline for its full completion (paragraph 15). For one TFI, the A1 motorway in Romania, on the contrary, the outlook had improved: all sections are now expected to have been opened before 2030.

- 18 Taking all the TFIs and their connecting infrastructure together, we maintain our overall conclusion from 2020 that most of the audited TFIs were unlikely to be fully in service by 2030. Most of the TFIs also face additional delays in connection with compliance with the rail freight requirements from the 2013 TEN-T Regulation, in force at the time of our previous audit.
- 19 In our 2020 special report we also noted on how delays linked to planning and implementation could result in additional costs. This was the case of the Fehmarn Belt fixed link, where the contract signed by the Danish authorities with the project promoter allowed the promoter to claim certain contractual fees (such as running costs of the consortia or change in material prices) in case the start of the work had to be delayed due to a lack of permits. Since this delay materialised, the clause was applied to avoid the need to dissolve the contracts and launch a tendering procedure to conclude new contracts. At the time the promoter informed us of its intention to claim such fees for EU co-funding⁹.
- 20 During our update, the Commission has informed us that a request for reimbursement, including this type of costs, had since been submitted by the project promoter and accepted by CINEA (the Commission's executive agency in charge of managing the EU grant). The total amount funded by the EU budget so far in relation to the costs linked to the delayed start of works was € 14.8 million.

Reinforced governance recently introduced, while previous legal provisions have rarely been used

- 21 In our 2020 special report, we highlighted the limited legal tools at the Commission's disposal to react to delays in the implementation of the EU core transport network. We also pointed out the Commission had still not made use of the tools available, such as Article 56 of the 2013 TEN-T Regulation¹⁰. We also provided the Commission with a set of

⁹ Special report 10/2020, paragraph 44.

¹⁰ Special report 10/2020, paragraph 26.

recommendations aimed at improving the financial management of the EU co-funding going to megaprojects.

22 In 2024 the [TEN-T regulation](#) was significantly revised. It introduced a new set of objectives, completion deadlines, as well as legal provisions for the Commission to oversee the network implementation (see [Annex II](#) for an overview of the main changes from the previous version).

23 In preparing this update, we verified:

- whether the Commission has made use of the Article 56 procedure since 2020;
- whether the new or amended legal provisions of the [2024 TEN-T regulation](#) have the potential to address two of the horizontal sources of delays highlighted in our [2020 special report](#), namely (i) complex cross-border coordination and (ii) permit-granting in member states; and
- whether the Commission had implemented our 2020 recommendations.

The Commission used legal provisions to react to delays in network completion only once

24 Under Article 56 of the [2013 TEN-T regulation](#), the Commission may ask member states to explain the reasons behind significant delays in completing the core network, and then start a consultation with a view to resolving them. In our [2020 special report](#), we noted that the Commission had never used this legal provision¹¹. All of the selected TFIs for which we received timing estimates have incurred further delays in implementation (paragraph [13](#) and [Table 2](#)); for three of them it is now evident that they will only become operational after the 2030 deadline. However, the Commission informed us that no Article 56 procedure had been launched for any of the TFIs covered by this update. Overall, the Commission has used this procedure since our [2020 special report](#) only once for another megaproject in France.

¹¹ [Special report 10/2020](#), paragraph 26.

The 2024 TEN-T Regulation provides the Commission with further legal provisions to oversee the implementation of the network

- 25** The [2024 TEN-T Regulation](#) introduced new requirements and legal provisions for the Commission to oversee the completion of the transport network by the member states ([Annex II](#)). We consider that this constitutes (together with a related [Directive on streamlining permit-granting measures](#) adopted in 2021) a potential improvement in addressing the two main sources of delay (paragraph [23](#)) identified in our [2020 special report](#). However, the effectiveness of these provisions will ultimately depend on their active use by Commission and subsequent compliance with them by member states. In any case, these provisions are mostly relevant for projects in the planning phase, and will therefore have only a limited impact on those in our sample.
- 26** The [2024 TEN-T Regulation](#) strengthens the governance framework to address cross-border coordination issues. The integration of core network corridors and rail freight corridors into European transport corridors is likely to place greater emphasis on operational considerations in the planning process. The role of the European coordinators, who support the Commission in overseeing the completion of the core network by the member states, has also been enhanced, and now includes a formal consultation in the allocation of EU co-funding to the infrastructure projects along the respective corridor.
- 27** The new Regulation widened the scope of Commission's implementing acts. These are binding legal documents addressed to member states and include provisions on the timelines and governance of specific projects. We had already assessed the implementing acts in our [2020 special report](#) as a positive tool for the Commission to strengthen its oversight of the completion of the core network¹². Under the previous legal framework, these acts could be issued only for projects with a cross-border dimension. Now, though, the implementing acts will cover entire transport corridors, and can focus on sections or projects along the core network depending on need.
- 28** Moreover, the [2024 TEN-T Regulation](#) introduces a new legal obligation for member states to align their national transport plans with EU priorities. National transport plans must take into account the European coordinators' work plans and any adopted implementing act. Member states are required to submit these plans to the Commission, which will then issue a formal – although non-binding – opinion.

¹² [Special report 10/2020](#), paragraphs 75-78.

- 29** While the [2024 TEN-T Regulation](#) does not itself contain provisions that improve the permit-granting procedures, it builds on a [2021 EU directive](#) on streamlining permit-granting measures. The Directive requires member states to reduce the burden of permits for projects along key sections of the EU core network, by appointing a single contact point for project promoters, simplifying procedures, and establishing a maximum timeframe for issuing a decision (with limited exceptions). For cross-border permit-granting procedures, European coordinators have the right to receive information on the procedure, and to request progress reports if delays occur.
- 30** However, the impact of the Directive depends to a large extent on proper and timely transposition into national legislation. At the time of this update, the Commission had infringement procedures opened with five member states in connection with the transposition of the Directive.

Most of 2020 recommendations accepted by the Commission have been implemented

- 31** In our [2020 special report](#) we made twelve sub-recommendations to strengthen long-term planning, management and oversight of TFIs' investments. The Commission fully or partially accepted six of these sub-recommendations.
- 32** In [Chapter 3 of our 2023 annual report](#), we already reported on the progress and timeliness of the sub-recommendations the Commission accepted. We found that four of them had been implemented on time, either completely or substantially so. Implementation of the other two was delayed and therefore only partially completed. There was no further development or action by the Commission on the remaining six sub-recommendations it had not accepted.
- 33** Since the publication of our 2023 annual report, we noted some progress in the implementation of a sub-recommendation to further develop the implementing decision tool (4a): the Commission has adopted new or updated legal acts covering the Canal Seine Nord Europe, Rail Baltica and Lyon-Turin TFIs ([Annex III](#)).

This report was adopted by Chamber II, headed by Mrs Annemie Turtelboom, Member of the Court of Auditors, in Luxembourg at its meeting of 3 December 2025.

For the Court of Auditors

A handwritten signature in blue ink, appearing to read 'Tony Murphy', with a small horizontal line at the end.

Tony Murphy
President

Annexes

Annex I – About the audit

- 01** In 2020 we published a [special report](#) assessing the Commission's role in ensuring that EU co-funded megaprojects with a cross-border dimension (which we called Transport Flagship Infrastructures (TFIs)) were well planned and efficient. For the purposes of the audit, we selected in our sample eight TFIs crucial for achieving the EU's objective of completing its core transport network by 2030.
- 02** In that audit we concluded that the network was unlikely to operate at full capacity by 2030, as six of the eight TFIs, together with their access lines and connecting infrastructure, were not likely to be operating at full capacity by that deadline. This was due to a combination of issues:
- national priorities and administrative procedures differed widely across member states, slowing the progress on cross-border links. The Commission had only limited legal tools to enforce agreed commitments and had not made full use of them;
 - the planning quality required improvement, with traffic forecasts often overly optimistic or poorly coordinated across borders. Member states did not use cost-benefit analyses effectively as decision-making tools for entire projects, undermining transparency and reliability;
 - implementation was inefficient, with an average construction time for a TFI of 15 years. It was also marked by large cost overruns and long delays compared with original timelines; and
 - the Commission's oversight of the completion of the core network corridors by the member states remained distant, focusing largely on outputs rather than on results or long-term sustainability. While the then-recent introduction of implementing decisions represented a positive step forward, these instruments remained too limited in scope and enforceability to guarantee a timely completion of the network.
- 03** To address these shortcomings, we made four recommendations to the Commission, consisting of twelve sub-recommendations ([Annex III](#)).

- 04** In 2021, we published a [review](#), comparing the EU framework for the delivery of megaprojects with similar frameworks in other countries. In that context, we also benchmarked the budget and schedule overrun of six of the eight TFIs against a population of several hundred transport projects implemented worldwide. We concluded that the majority of the projects had smaller deviations between actual costs and their estimated budgets than the global average. However, most of the six projects experienced on average longer delays than comparable projects worldwide.
- 05** The present report provides an update on the developments of key elements of our [2020 special report](#) from its publication to November 2025. We focus mainly on the changes in the cost and time schedules of the eight TFIs, as well as on the Commission's role in overseeing the TFIs. When relevant, we also covered developments occurring in other mega projects on the TEN-T core network. The work also covered how the [2024 revision of the TEN-T Regulation](#) could potentially improve issues identified in the [2020 special report](#).
- 06** As far as the implementation of the network against the rail freight TEN-T requirements is concerned, it should be noted that our updated assessment still relates to the ones from the [2013 TEN-T Regulation](#). Since publication of our [2020 special report](#), a revised TEN-T regulation came into force (paragraph [22](#)) including updated technical requirements for the core network ([Annex II](#)). For this update report we did not assess the impact of these new requirements, as they were not part of the scope of the original audit.
- 07** The update is based on the desk review of information provided by the Commission, national authorities and project promoters in charge of the respective TFIs in Spain, Poland and Romania. We also analysed publicly available information. We did not carry out on-the-spot visits or interview project authorities or stakeholders. Our [audit methodology](#) complies with the international standards on auditing issued by the [International Organization of Supreme Audit Institutions \(INTOSAI\)](#).
- 08** We re-examined the level of implementation for all the recommendations included in our 2020 special report to determine whether there had been any change in the actions and measures taken by the Commission. For the recommendations that had been accepted, we assessed changes compared to the last follow-up carried out in 2024 for the [2023 annual report](#).
- 09** We applied the same methodology of the 2020 audit, to ensure comparability of results. We explicitly identified those limited cases where a different methodology had to be applied.




















Annex II – Main changes introduced by the 2024 TEN-T Regulation




















Area	Changes compared to 2013 text
General: Deadlines for completion of the network	<p>Confirmation of core and comprehensive networks deadlines (2030 and 2050 respectively).</p> <p>Further identification of an extended core network (previously part of the comprehensive network) to be completed by 2040.</p>
General: Identification of priority corridors	Creation of nine European transport corridors (which include sections on core and comprehensive networks), replacing the existing core network corridors (focusing on infrastructure aspects) and rail freight corridors (focusing on operations).
General: Alternative fuels infrastructure	New requirement to include facilities for alternative fuels among infrastructure standards for inland and maritime ports, airports, roads and urban nodes.
Rail freight: Minimum standards for intermodal units	New requirement to allow for the circulation of freight trains carrying standard semitrailers up to 4 m high by 2040.
Rail freight: Transport infrastructure requirements (22.5 t axle load, 100 km/h line speed for freight and the possibility of running trains with a length of 740 m)	<p>Extension of the existing infrastructure requirements for rail freight (22.5 t, 100 km/h and 740 m) to:</p> <ul style="list-style-type: none"> — the core network by 2030; — the extended core network by 2040; and — the rest of the comprehensive network by 2050.
Passenger rail: Minimum line speed	New requirement of a minimum speed for passenger railway lines of 160 km/h for the core and extended core network by 2040.
Rail: European Rail Traffic Management System	<p>New requirements to:</p> <ul style="list-style-type: none"> (a) deploy the European Rail Traffic Management System on the extended core network by 2040 and the comprehensive network by 2050; and (b) decommission existing class B systems on the core network by 2040, on the extended core network by 2045 and on the comprehensive network by 2050.
Inland waterways: Good navigation status	New requirement, applicable to the inland waterways on the core network, of ensuring “good navigation status”, i.e. efficient, reliable and safe navigation for users (including minimum waterway requirements and levels of service), to be further defined in Commission implementing acts.

Area	Changes compared to 2013 text
Road transport: Rest areas	Amendment of the existing requirement to envisage rest areas every 100 km on the core network by 2030 and along the comprehensive network by 2050, to now envisage rest areas every 60 km by 2040 along the core network and the extended core network.
Freight multimodality: Market analysis for terminals	New requirement for member states to conduct a market and prospective analysis on multimodal freight terminals on their territory. Based on that analysis, member states must also draw up an action plan for the development of a multimodal freight terminal network.
Implementation and monitoring: Commission Implementing Acts	Increase of the Commission's power to adopt implementing acts (which are to become compulsory for each corridor work plan and optional for sections of the corridors, regardless of whether they are cross-border or purely domestic).
Implementation and monitoring: Role of the European coordinators	Strengthening of the role of the European coordinators, whose role is to involve themselves closely with the rail freight governance ¹ (and monitor the performance of rail freight services) and who have the right to be consulted by the Commission to make sure projects examined for Connecting Europe Facility funding are consistent with the corridor work plan priorities.
Implementation and monitoring: Alignment of national strategies with TEN-T	New requirement for national transport and investment plans to be coherent with the priorities and deadlines set out in the regulation and the corridor work plans. Reinforcement of the obligation to send the draft plans to the Commission as soon as possible after the consultation on the public plan is launched and new possibility for the Commission to issue an opinion.
Other: Risk to security or public order	New requirement for member states to notify the Commission of any appropriate measures adopted to mitigate a potential risk to affect infrastructure on the TEN-T network on the grounds of security or public order.

¹ Article 8 of [Regulation \(EU\) 913/2010](#).

Annex III – Follow-up of ECA recommendations in SR 10/2020

Recommendations to the Commission		Acceptance	Implementation by April 2024	Change until November 2025
Level of acceptance:  accepted;  partially accepted;  not accepted. Level of implementation:  fully;  in most respects;  in some respects;  not implemented.				
(1) Revise and apply the current tools to enforce long-term planning				
(1a) Put forward proposals to include better enforceable legal tools, including an extension of the perimeter for adopting implementing acts, so as to address any significant delays in starting or completing work on the core network				-
(1b) Put forward proposals to reassess the relevance of the technical requirements of the core and comprehensive network, taking into account the remaining time frame and lessons learnt from the problems observed in relation to the delivery of past and ongoing projects				-
(1c) Put forward proposals to introduce provisions to strengthen the coherence between national transport plans and the TEN-T commitments, in order to ensure the proper enforcement and implementation of the TEN-T regulation				-
(1d) Follow-up on its “streamlining proposal”, by supporting the Member States in their planning and procurement and in setting up of one-stop shops to reduce administrative burden. For cross-border TFIs, it should promote the use of common tendering procedures				-
(2) Require better analysis before deciding to provide EU co-funding for megaprojects (similar to TFIs)				
(2a) For direct management, require a sound, comprehensive and transparent overall socio-economic cost-benefit analysis for individual megaprojects as a whole (similar to TFIs), in addition to the detailed section-specific ones. Such cost-benefit analyses should look at a higher strategic level than the individual project or section being implemented and also cover ancillary infrastructure				-
(2b) For shared management expenditure, advocate to managing authorities the adoption of the same requirements before providing EU support to megaprojects				-

Recommendations to the Commission		Acceptance	Implementation by April 2024	Change until November 2025
Level of acceptance:  accepted;  partially accepted;  not accepted.				
Level of implementation:  fully;  in most respects;  in some respects;  not implemented.				
(3) Strengthen the Commission’s management of EU co-funding for actions that are part of megaprojects (similar to TFIs)				
(3a) Prioritise actions that are part of megaprojects which are missing links and bottlenecks that have been established as key priorities in the Corridor Work Plan				-
(3b) Steer the selection of actions that are part of megaprojects so as to increase the management efficiency and avoid artificial competition with other projects. To ensure coherence and consistency, the Commission should promote, for each megaproject, a single grant agreement per multi-annual financing period. Such an agreement should include all actions which are mature enough to be implemented in full within the multi-annual financing period				-
(3c) Address the weaknesses identified in the TFI implementation by the Member States and increase the effectiveness of EU co-funding; make early and proactive use of all available tools to ensure timely completion of the network, and set up dedicated competence centres to assess the quality of the documents prepared by project promoters and to coordinate efforts in steering and guiding them				-
(4) Build on the experience of implementing decisions, and strengthen the role of the European Coordinators				
(4a) Further develop the new implementing decision tool, by proposing such an implementing decision for each cross-border TFI to be co-funded in the 2021-2027 period. These decisions should clarify the rules and the responsibilities of all parties including the Commission; include a statement of expected results (e.g. modal shift, traffic forecast objectives) and milestones, and a commitment on the part of all member states to share ex post evaluation results with the Commission				Slight improvement (no category change)
(4b) After the new legal base suggested in Recommendation 1 (a) is adopted, also propose an implementing decision for each TFI with “cross-border impact”				-
(4c) Propose strengthening the role of the European Coordinators by enhancing the enforcement of the Corridor Work Plans; by allowing their presence at key meetings of management boards; and by improving their role in terms of communication of the TEN-T policy objectives				-

Source: ECA.

Abbreviations

Abbreviation	Definition/Explanation
TEN-T	Trans-European transport network
TFI	Transport Flagship Infrastructure

Glossary

Term	Definition/Explanation
Trans-European transport network	Set of road, rail, air and water infrastructure development projects implementing the trans-European transport network policy, including a high-speed rail network, a satellite navigation system and smart transport management systems.
Transport Flagship Infrastructure	In ECA Special Report 10/2020, any EU co-funded transport infrastructure with an allocated total eligible cost above one billion euros. In addition, the following characteristics applied: a significant amount of EU co-funding had to be allocated or paid (without a quantitative threshold); the TFI should have been relevant for the transport network in the EU (in particular regarding cross-border links), and it was expected to deliver a transformational socio-economic impact.

Replies of the Commission

<https://www.eca.europa.eu/en/publications/sr-2026-02>

Timeline

<https://www.eca.europa.eu/en/publications/sr-2026-02>

Audit team

The ECA's special reports set out the results of its audits of EU policies and programmes, or of management-related topics from specific budgetary areas. The ECA selects and designs these audit tasks to be of maximum impact by considering the risks to performance or compliance, the level of income or spending involved, forthcoming developments and political and public interest.

This performance audit was carried out by Audit Chamber II – Investment for cohesion, growth and inclusion, headed by ECA Member Annemie Turtelboom. The audit was led by ECA Member Annemie Turtelboom, supported by Eric Braucourt, Head of Private Office and Guido Fara, Private Office Attaché and Head of Task; Gediminas Macys, Principal Manager; Manja Ernst and Rafal Gorajski, Auditors; Zsofia Kelemen, trainee. Luc T'Joen, Head of Task of ECA special report 10/2020 and retired official, also provided input. Richard Moore provided linguistic support. Alexandra Damir-Binzaru provided graphical support.



From left to right: Manja Ernst, Gediminas Macys, Guido Fara, Eric Braucourt, Annemie Turtelboom, Rafal Gorajski.

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Megaprojects are key to the completion of the EU trans-European transport network. In 2020, we published a special report showing major delays, cost increases, weak coordination between member states, and weaknesses in the Commission's oversight. This report provides an update, taking into account developments since then. We observed a further increase in the combined cost of the megaprojects, mainly driven by two of them, and additional delays which imply that the EU core network will not be completed by the 2030 deadline. In 2024, new legal provisions were introduced with the potential to improve the Commission's oversight of the implementation of the network, although the changes will mostly be relevant for projects that started later than the megaprojects we audited.

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