Infrastructure delayed is transport denied

by Przemysław Myszka

The European Court of Auditors (ECA) has released an update to its 2020 special report that inspected eight so-called 'transport flagship infrastructures' (TFIs) – mega-projects of the Core part of the Trans-European Transport Network (TEN-T). That publication and its latest update share the same conclusions: taken together, the TFIs are (seriously) delayed and cost (far) more than initially calculated. While the 2020 report considered meeting the 2030 deadline for the Core Network to be at serious risk, the update does not beat about the bush: the EU's most fundamental transport infrastructure won't run at full capacity come the next decade.

Most of the eight TFIs are cross-border projects, probably best exemplified by Rail Baltica, which crosses the Baltic States (and, symbolically, also history as it sports the European 1,435 mm gauge). Others, like the E59 railroad that goes all the way from north to south of Poland or the west-east A1 motorway in Romania, address the particular country's vitally missing links; links of both domestic as well as transit traffic potential.

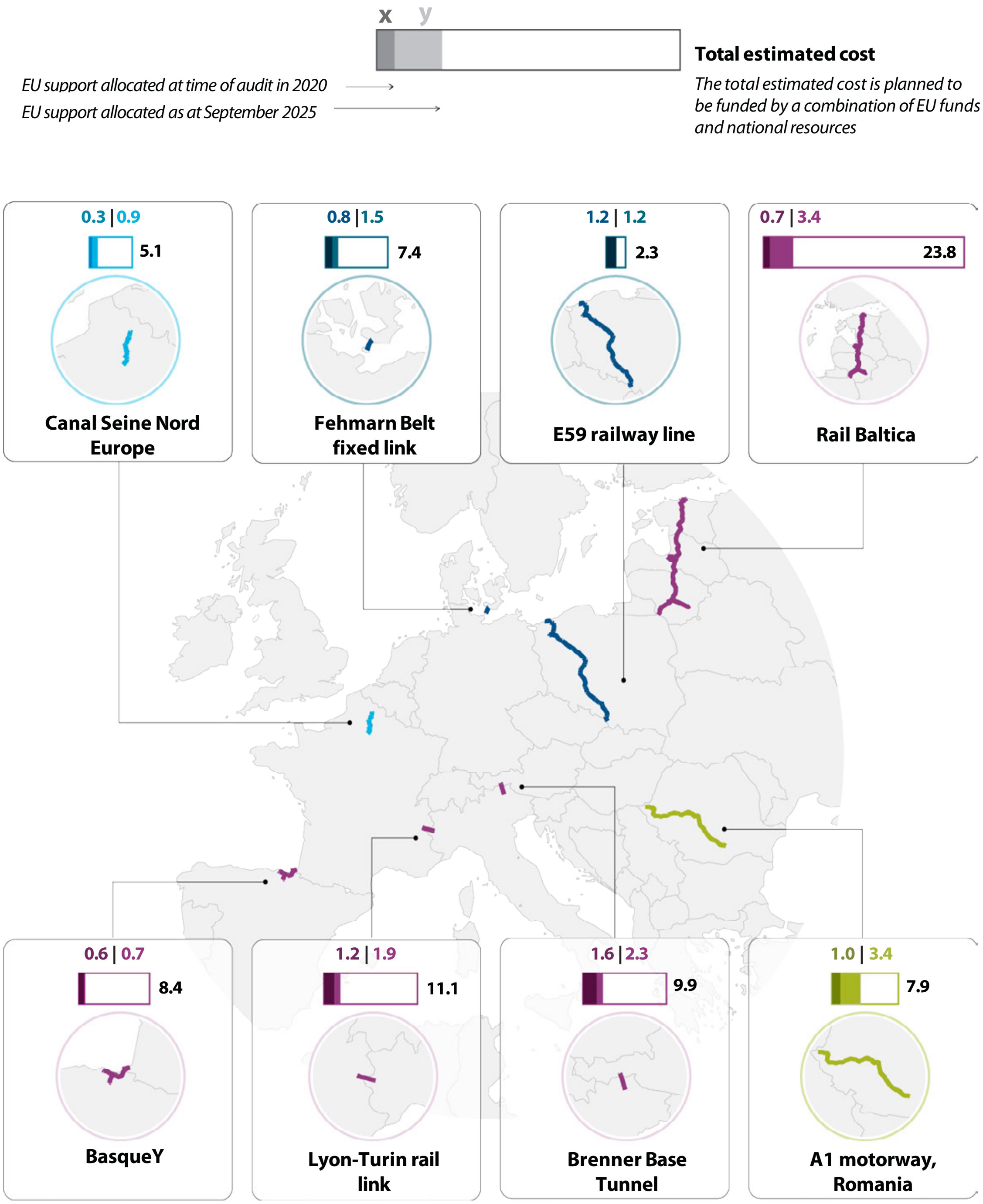
But mega-projects don't bear their name only because they involve the setup of hundreds of kilometres of railways (and associated infrastructure) or digging a tunnel beneath the Baltic Sea (which, interestingly, has given birth to a purpose-built seaport in Denmark, Rødby Tunnel Port, for the construction of the Fehmarn Belt fixed link; it handled 1.01 million tonnes in 2024, that's a not insignificant 43.7% year-on-year increase, of which boulders, sand, and gravel accounted for 869,000 tonnes). Projects are also 'mega' because they, ECA's paper reads, "[…] 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 […], often leads to cost increases compared to original estimates."

Money pit(s)

The 2020 special report noted an overall real (net of inflation) cost increase of 47% for the eight TFIs regarded as a whole vs the original estimates. The update takes that figure to 82%, with +24% increase over the last five years. Though this number does injustice to two mega-projects, the mentioned E59 and A1, the cost of which actually went down compared to their original estimates. On the other hand, Rail Baltica (+291%), Canal Seine Nord Europe (+225%), and the Lyon-Turin rail link (+127%) are the real culprits (that is not to say a 52% increase for the Fehmarn Belt fixed link can be shrugged off just like that).

In the update, ECA gave Rail Baltica an investigative look. The official cost estimate for the project was €5.8 billion (in 2017 values). The 2020 report spoke of a risk-adjusted total of €7.0b (in 2019 values). A 2024 analysis by Rail Baltica's project promoter brought the estimated cost of the full TFI to €23.8b (at 2023 prices). The keyword here is 'full.' The analysis was based on mature design studies, which sounds reassuring, but these covered only one-third of the railroad. This brings us to the second word that deserves special attention, namely 'road' – as in 'one' rail line. The original ambition of Rail Baltica, to be a two-track railway, was downgraded to a single track, presumably ready for the 2030 deadline at the expense of €15.3b (project promoter's evaluation). No wonder that

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.

ECA concluded the Rail Baltica thread by saying, "Due to the prolonged timeline for the works, it is likely that, after completion of the second phase [adding the second rail track], the cost of the TFI will be higher than €23.8 billion." That, or maybe we may very well see pigs flying first (with their tails forward).

The main reasons behind this inflated inflation? "[…] the lack of maturity and detail of the previous estimates (which accounted for around half of the increase)

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.

and changes in the project scope and design." Also, "[EU] Member States did not use cost-benefit analyses effectively as decision-making tools for entire projects, undermining transparency and reliability." The update also speaks of "overly optimistic" traffic forecasts, which might be a bit puzzling since none of the analysed TFIs have yet flipped their status to online. But perhaps that's the reason behind down-scaling Rail Baltica: damage control. Still, according to Rail Baltica's website, the route is expected to serve over 15 million passenger trips/year, plus more than 9.0 million tonnes of (commercial) cargo/year (and up to 55,000 tonnes of military shipments/day if need be). That is a lot on its own (Baltic) terms, and a rather hard row to hoe given the fact that traditionally the Baltics handled east-west cargo trade (chiefly

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	*varies by section*			n/a	n/a	n/a
A1 motorway	*varies by section*			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.

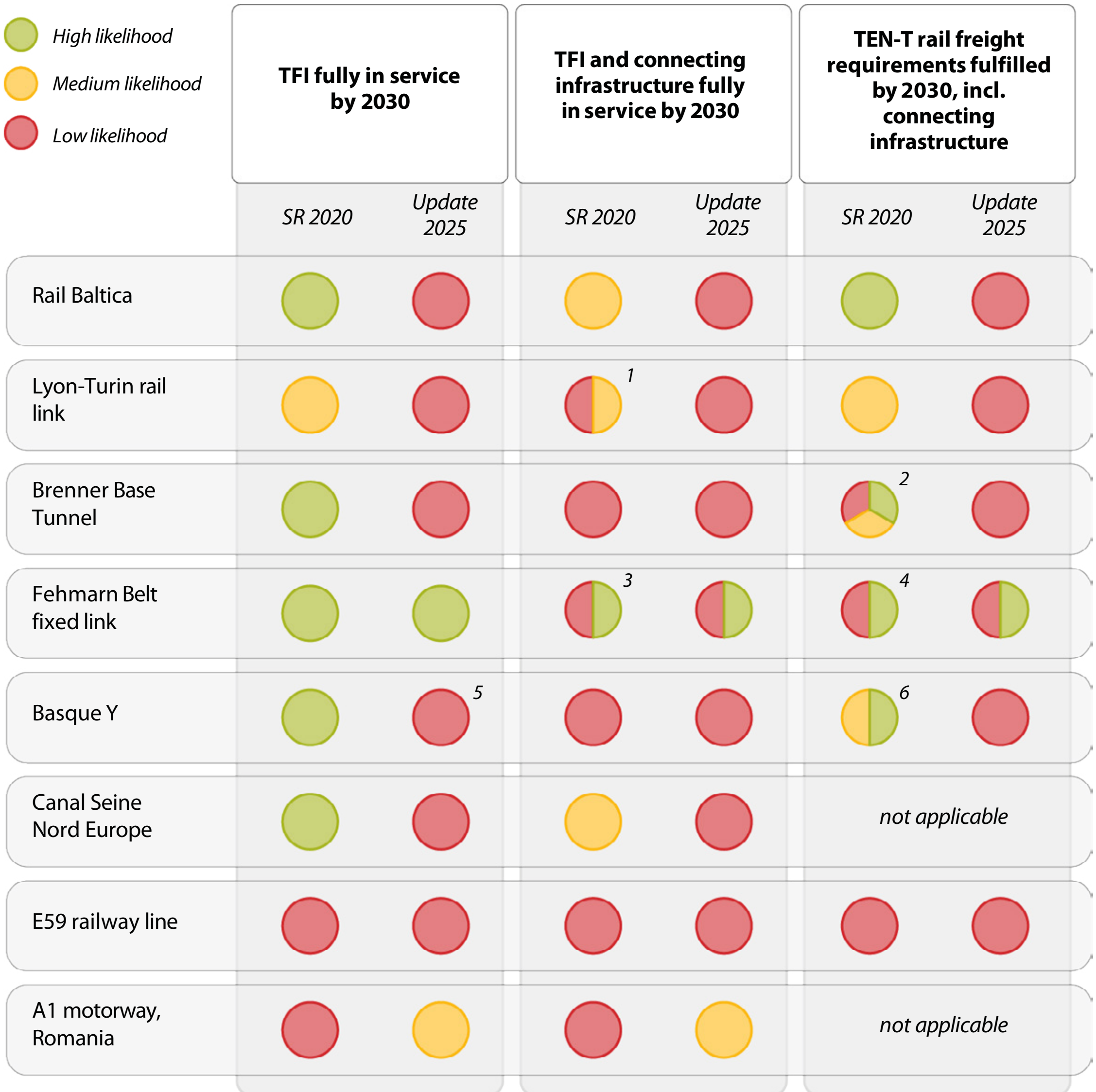
Source: Commission, national authorities, and project promoters.

bulk goods in trade with Belarus and Russia). Except for the Tallinn-Helsinki trade lane, other regional ro-ro services are also horizontal, with Finland already connected to continental Europe by well-established shipping routes. Geographically, shipments of containerised freight are what links the Baltics with Europe that's south-west of them. Following the loss of east-west cargo, (state-owned) rail companies in Estonia, Latvia, and Lithuania are struggling to reinvent themselves (and dissecting their pain points would itself require a talking-the-hind-leg-off-a-donkey article).

I remember talking to one Latvian transport & logistics expert, who shared a few fascinatingly disturbing stories about and around Rail Baltica, including an unfinished bike ramp that's supposed to connect to a new (also unfinished) bridge over the Daugava River, two RB works done, at least partially – but most importantly, carried out ahead of confirming Rail Baltica's layout in Riga. That very first support and street overpass (south of the existing rail bridge) was erected at

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

Assessment is as at November 2025



[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.

the expense of €26.5 million (north of the bridge lies another lonely support, the left-over of a bridge destroyed in 1918). A few heavy-duty infrastructures have also been erected to connect Riga Airport with Rail Baltica. The issue with all of that? As things stand today, there's a firm decision that RB won't connect to Riga… And a tram line to/from the airport would probably cost less and get rolling without (and ahead of) Rail Baltica. There is also a recent, from February 2026, procurement for

Photo: Jevgenijs Safarevics/CONSULT SIA

directors and officers liability insurance, its coverage spanning back to 2014 (which, my contact noted, might involve affairs worthy of criminal charges; no wonder the procurement is mocked as seeking to buy indulgence – as perhaps only a higher being might qualify for fulfilling the tender's requirements). And there was also a botched procurement, concerning cars for managers, written in such a way that they would get nothing but Audi Q5s – with all-wheel drive and heated steering wheels. Fortunately, public outrage scorched that 'tender' to ash. More worryingly, my informant told me, there is no proper investigation into the inner workings of setting up Rail Baltica in Latvia – which involves spending the country's as well as the EU's money.

And I can still recall the media coverage of the Baltics kicking a fuss over who would do what, when, where, and for how much – all in the rather grim atmosphere that the project could be abandoned altogether. Speaking of which, ECA hosted a press brief about the update in mid-January this year – and I asked whether there is a risk of an investment getting scrapped in order not to mutate from a mega- into a zombie-project. With a courtesy smile, the ECA representative responded that it's a legitimate question – but for the European Commission (COM) to address.

Over and over again

The bill keeps getting bigger also because of the delays. The 2020 report identified an average delay of 11 years for the eight TFIs. Fast forward five years, and the average grew to 17 years vs the original plans. This number, however, excludes the E59 and A1. That said, it's a questionable consolation given the delays in the 11-22-year range for the remaining mega-projects. Because Rail Baltica's second track has no timeline yet, the hold-up limit can be further stretched… On a positive note, ECA reports, "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."

The EU auditors also surfaced an interesting cost-adding factor. "[…] 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." As this TFI did actually run into a delay, 11 years vs the starting implementation timeline, "[…] the clause was applied to avoid the need to dissolve the contracts and launch a tendering procedure to conclude new contracts." It cost the European Climate, Infrastructure and Environment Executive Agency some €14.8m, which is probably less than going through the tendering-contract commotion over and over again.

Stacked against global mega-projects, ECA found that "[…] the majority of the projects had smaller deviations between actual costs and their estimated budgets than the global average." Others doing worse than the EU – phew, what a relief! "However, most of the six projects experienced, on average, longer delays than comparable projects worldwide." Well, the universe had to, it seems, find balance somewhere for the COM (or rather COMs throughout all these years) not to rest on its (their) laurels.

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

Recommendations to the Commission Level of acceptance: accepted; partially accepted; not accepted. Level of implementation: fully; in most respects; in some respects; not implemented.	Acceptance	Implementation by April 2024	Change until November 2025
(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	accepted	fully	-
(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	accepted	fully	-
(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	accepted	fully	-
(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	partially accepted	in most respects	-
(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	not accepted	not implemented	-
(2b) For shared management expenditure, advocate to managing authorities the adoption of the same requirements before providing EU support to megaprojects	not accepted	not implemented	-

Recommendations to the Commission	Acceptance	Implementation by April 2024	Change until November 2025
(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	not accepted	not implemented	-
(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	not accepted	not implemented	-
(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	not accepted	not implemented	-
(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	partially accepted	in some respects	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"	not accepted	not implemented	-
(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	accepted	in some respects	-

Source: ECA.

Distant oversight

So, one could ponder: if we're dealing with the EU's flagship projects, surely its executive would step in and sort things out? Because taxpayer money shouldn't be spent without sufficient prudence, right? That is why ECA produces its audits and hands them over to COM – to right the wrongs? "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 […]"

One instrument is the Article 56 of the 2013 TEN-T Regulation, through which COM can inquire EU Member States about the reasons behind significant delays in completing Core TEN-T, "[…] and then start a consultation with a view to resolving them." The 2020 report noted a perfectly round zero use of Article 56. Not to be outdone, the update had only to dust off that figure. "Overall, the Commission has used this procedure since our 2020 special report only once for another mega-project in France."

The new TEN-T Regulation from 2024 sparked light in the tunnel by introducing new requirements and legal provisions for COM to oversee TEN-T completion by the EU Member States. Specifically, it added muscle to COM's Implementing Acts. "These are binding legal documents addressed to [EU] Member States and include provisions on the timelines and governance of specific projects." Whereas in the past Regulation, these could be targeted at cross-border projects only, the 2024 revision made them cover entire transport corridors, so they "[…] can focus on sections or projects along the Core Network depending on need."

Another 2024-TEN-T-Regulation addition was the introduction of a legal obligation for EU Member States to align their national transport plans with the bloc's priorities. It is indeed mysteriously interesting why this wasn't part of the original legislation. After all, the EU aimed to create a *trans-European* transport network. As such, "National transport plans must take into account the European coordinators' work plans and any adopted Implementing Act. [EU] Member States are required to submit these plans to the Commission, which will then issue a formal – although non-binding – opinion." It reminds me of the upcoming EU Port Strategy, which will also be an 'opinion,' a – brace for it – COM policy initiative, a so-called strategic communication, an expression of policy direction (read: not a Regulation, Directive, Decision, or Delegated/Implementing Act).

Not part of the 2024 TEN-T Regulation but tied to it is the 2021 EU Directive on streamlining permit-granting measures. "The Directive requires [EU] 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)." Since it's a Directive, it needs to be transposed into national legislation. "At the time of this update, the Commission had infringement procedures opened with five [EU] Member States in connection with the transposition of the Directive." As with probably any law, its effectiveness will be a function of its execution. Even the best regulation or directive can be deader than disco if it stays on paper only.

The 2020 report also saw ECA putting forth a set of four recommendations, subdivided into 12. Of these, COM accepted six, of which four were implemented either completely or substantially. The two others were only partially completed. The six sub-recommendations COM did not accept were consequently sucked into the void.

"The Commission's oversight of the completion of the Core Network Corridors by the [EU] Member States remained distant, focusing largely on outputs rather than on results or long-term sustainability," the EU's auditors summed up the state of affairs in the update.

Outperformed

It is pretty self-explanatory that blowing a project's budget and timetable is hardly welcome news. Naturally, life happens – including a global pandemic, Russia's ongoing war of aggression against Ukraine, or the inflation crisis of 2021-23 – so that plans require diligent recalibration.

Then again, over the years, I've grown somewhat sceptical towards COM's transport arm. Who, if not the Transport Commissioner, should wield the sharpest double-edged blade of actionable knowledge and will? Reality, like mega-projects' costs and time horizons, blows up in your face. Many a year ago, I was stubbornly inquiring then Transport Commissioner Violeta Bulc about the fate of the British part of TEN-T come Brexit. I never received a simple 'it stays/leaves,' as if admitting either option in a loud and straightforward way would tear open a cosmic portal for a demonic invasion…

There was also the bewildering experience of attending one edition of TEN-T Days. A trade fair, in theory, in practice, it couldn't be further from it for anybody who partook in, say, transport logistics. The personal highlight was when Commissioner Bulc visited the stand of the Baltic Ports Organization at which, it so happened, I was present. "I hope you get the rail," was what we heard. Pole-axed, the booth's staff and I couldn't muster a response. But the Commissioner was already off to another stand, for good or ill. Baltic = Baltics, of course, hence Rail Baltica, never mind ports (the rail-over-seaport mindset is well embedded in Brussels, given how much Connecting Europe Facility money goes to the former – and how little in comparison to the latter). The next invitation to TEN-T Days was abruptly cancelled because of a lack of funds – on the inviter's side, COM, that is…

I take comfort in the notion that maybe those few euros went instead towards completing a TFI. Then again, there are internal divisions within the world of transport & logistics. Just ask a ferry company plying between Denmark and Germany what it thinks about the Fehmarn Belt fixed link; about the taxpayer money that goes into drilling a mega-tunnel instead of supporting zero-emission shipping (according to the Femern project developer, some 2.25 million tonnes of CO_2-equivalent emissions will result over the full build-out; that's roughly what city proper of Copenhagen was emitting annually in the early 2020s). Imagine those €7.63b (in 2019 values) spent on ports & shipping! No wonder that the Helsinki-Tallinn underwater tunnel remains a project with no construction start, no approved financing, and no intergovernmental agreement (but it had its own stand at that miserable edition of TEN-T Days!). Its feasibility studies show the tunnel is technically and economically possible (€15-20b) – the latter a dark joke in the light of ECA's TFI reports.

The same Latvian friend who shared the air-hanging bike ramp *et al.* anecdotes also brought my attention to history. The Baltic Railway Company set up the 317-km-long Tallinn-St. Petersburg Railway in two years (1868-70). The St. Petersburg-Moscow Railway was constructed in eight years (1843-51). Combined, they more or less covered the same distance as the 870-km Rail Baltica, the transport symbol of the Baltics' westwards pivot. My liaison did not fail to mention that it's quite troubling that the 21st-century EU is being outperformed by the 19th-century Russian Empire… ■