



Nordic triangle railway/road axis

Better rail, road and maritime infrastructure across the Nordic countries will help to overcome their remoteness from other regions of the EU.

What is the axis?

The multimodal Nordic triangle scheme is upgrading road, rail and maritime infrastructures in Sweden and Finland to improve freight and passenger transport between the Øresund fixed link, which is part of the Nordic triangle (see axis No 11), Stockholm, Oslo, Turku, Helsinki and the Finnish–Russian border.

Upgrading rail lines should make it possible to reach speeds of 160 km/h and even, on some sections, more than 200 km/h. The distances covered by this project connecting Malmö, Stockholm, Oslo, Turku, Helsinki and the Finnish–Russian border are immense: totalling nearly 1 900 km of road and 2 000 km of rail track.

What are its expected benefits?

In conjunction with a parallel Russian improvement project, the upgrading of the Finnish rail corridor to 200 km/h will cut journey times between Helsinki and St Petersburg by nearly 50 %, to just three hours. Similar upgrading work has already improved journey times on the Turku–Helsinki section, attracting increased numbers of passengers. Progressive upgrading to motorway standards of the two-lane E18 road from Turku via Helsinki to the Russian border near Hamina (Vaalimaa) in the south-east will similarly reduce journey times – in particular, by relieving congestion around Turku and Helsinki and elsewhere along the route. In Sweden, rail journeys from Stockholm to Malmö will be cut to less than four hours and between Gothenburg and Oslo, where tilting trains will be used, from four hours to two hours and 20 minutes.

Improvements to roads in Sweden and Finland, as well as to the ferry link across the gulf of Bothnia, will significantly boost safety standards along these routes.

What is its current status?

Upgrading of the main Turku–Helsinki rail line, as well as urban lines from Helsinki to Leppävaara and Tikkurila, was completed in 2001. East of Helsinki, towards the Finnish–Russian border, work will mostly be completed by 2010. Additional track between the main line in Luumäki and the border at Vainikkala will be laid by 2015 – one year later than indicated in the guidelines. Work on the E18 motorway has focused on the stretch west of Helsinki. The last section here is due for completion by 2009, when activity will switch to the east of Helsinki. The whole motorway between Turku and the Russian border will be completed by 2015.

The main rail line from Malmö to Stockholm has been upgraded to 200 km/h as far as Norrköping, with new lines (up to 300 km/h) in the busiest sections. The Stockholm–Oslo line has been upgraded to the Norwegian border. Most of the Swedish west coast mainline from Malmö to Gothenburg has been expanded to double track, mainly along a new route. A new 17 km double-track tunnel is under construction at Hallandsås Ridge, to be completed in 2011. Double-tracking to permit speeds of up to 200 km/h is also under way on the rail line between Gothenburg and the Norwegian border.

The E4, E6 and E18 roads in Sweden have now largely been upgraded to motorway standard. The remaining sections include a new 21 km bypass around Markaryd, which is under construction, as well as a new construction north of Uddevalla to the Norwegian border at Svinesund. A new underground passenger rail link – Citytunneln – is planned in Malmö. Work started in 2004 and the link will come into use by the end of 2009. Also a new underground passenger rail link – Citybanan – is under construction in Stockholm, to be completed by 2011.

Priority section	Type of work/status	Distance (km)	Timetable ⁽¹⁾	Total cost as of end 2004 (million EUR)	Investment up to 31.12.2004 (million EUR)	TEN-T contribution, including studies, up to 31.12.2004 (million EUR)
Road and rail projects in Sweden	Road/rail (upgrade)	1 550 (road) 1 450 (rail)	1996–2015	8 102	2 336	60.4
Helsinki–Turku motorway	Road (upgrade)	167	1995–2009 (2010)	618	249	3.7
Kerava–Lahti (railway)	Rail (new)	78	2002–06	331	222	0
Helsinki–Vaalimaa motorway	Road (upgrade)	181	1995–2015	700	168	6.8
Helsinki–Vainikkala railway	Rail (upgrade)	470	1996–2015 (2014)	1 154	247	16.5
TOTAL		1 898 (road) 1 998 (rail)		10 905	3 222	214 ⁽²⁾

⁽¹⁾ In brackets, completion date listed in the 2004 guidelines, if different from the date notified in 2005 by the Member State.

⁽²⁾ Note that the total TEN-T contribution includes EUR 126.6 million, which has been allocated to the Swedish and Finnish sections in general and cannot be associated with a specific section of the axis.

