



# Railway axis Berlin–Verona/Milan–Bologna–Naples–Messina–Palermo

Major improvements to this route, centred on the new transalpine Brenner base tunnel, will enable both people and goods to travel much more quickly between northern Europe and Italy, through the Alps.

## What is the axis?

The axis will streamline rail journeys along one of Europe’s major transport routes, between Germany and Italy, across the Alps. Increased rail freight capacity in particular will contribute to sustainable development.

A mixture of upgrades of existing track and new sections will increase speeds and capacity along the route Berlin–Nuremberg–Munich–Innsbruck–Verona–Florence–Rome–Naples, and onwards to the Messina Straits where a new road/rail bridge will connect Sicily to the Italian mainland.

Between Austria and Italy, a new 56 km rail tunnel – the so-called Brenner base tunnel – will be built, considerably increasing the speed of the Alpine crossing and the line’s freight capacity.

## What are its expected benefits?

Improvements will cut journey times significantly – by as much as two and a half hours between Berlin and Munich, for example. The additional capacity and improved quality of service will attract new rail traffic, helping to reduce road congestion along this key corridor by shifting freight and passengers to the railway. This is especially important in the ecologically sensitive Alpine region, where heavy road traffic has serious environmental impacts.

In Italy, faster rail travel along these busy routes is expected to contribute to the transfer of long-distance freight from the roads to rail, while 30 % growth in passenger traffic on the railway will half the number of flights between Milan and Rome. Better connections to the peripheral regions of southern Italy and Sicily will help improve the flow of goods and people.



<b>Priority section</b>		<b>Other priority axes</b>	
<b>Rail</b>			
in preparation		Motorway of the sea	
under construction		Road	
completed		Rail	
		Inland waterway	
		Airport	

Priority section	Type of work/status	Distance (km)	Timetable <sup>(1)</sup>	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)
Halle/Leipzig-Nuremberg	Rail (new/upgrade)	340	1996-2015	6 959	1 112.2	41
Nuremberg-Munich	Rail (new/upgrade)	171	2000-06	3 331	2 746.3	179.5
Munich-Kufstein	Rail (depending on completion of Brenner Tunnel)	97	2010-15	1 500	0	0
Kufstein-Innsbruck <sup>(2)</sup>	Rail (new)	73	1999-2012 (2009)	2 900	320	57.9
Brenner Tunnel cross-border section	Rail (tunnel)	56	2007-15	5 400	26	12.2
Verona-Naples	Rail (new)	628	1970-2007	14 329	7 292	8
Milan-Bologna	Rail (new)	200	2000-08 (2006)	6 508	1 735	1
Rail/road bridge over the Strait of Messina-Palermo <sup>(3)</sup>	Rail/road bridge (new), rail upgrade	3.3 + 230	2005-15	4 684.3	0	0
<b>TOTAL</b>		<b>1 798.3</b>		<b>45 611.3</b>	<b>13 231.5</b>	<b>308.7 <sup>(4)</sup></b>

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

<sup>(2)</sup> The Wörgl–Innsbruck subsection will only be completed by 2012, as recent traffic forecasts have not identified an earlier need. Upgrading of the Kufstein–Wörgl subsection (13 km) will be started after completion of the Brenner base tunnel and not finalised before 2018.

<sup>(3)</sup> Costs given concern the rail/road bridge only. Costs for upgrading of the Messina–Palermo section are not included.

<sup>(4)</sup> Note that the total TEN-T contribution includes EUR 9.1 million, which has been allocated for infrastructure improvements in general and therefore cannot be associated with a specific section of the axis..

#### Projects that were part of the original list of 14 priority projects (1996):

Berlin Lehrter Bahnhof/Berlin-Ludwigsfelde	Rail (new)	25.42	1994-2006	3 348	2 148.3	68.7
Berlin-Halle/Leipzig	Rail (upgrade)	187	1991-2005	1 594	1 564	34.6
Fortezza-Verona	Rail (upgrade)	190	1992-2015	2 500	n.a.	71.7

## What is its current status?

Speeds of up to 200 km/h are already being achieved on the upgraded line between Berlin and Halle/Leipzig, while work continues on the sections between Halle/Leipzig and Nuremberg. Further upgrading of the Munich–Kufstein section is currently scheduled between 2010 and 2015. In Austria, work to bring the Wörgl–Innsbruck section up to four tracks has started.

Technical studies for the Brenner base tunnel are due to be completed in 2006. Brenner base tunnel SE was established at the end of 2004 (the first firm with the new legal status of European company – *Societas Europaea*, SE) to manage the works on the tunnel, with a target completion date around 2015.

In Italy, between the southern end of the tunnel and Verona, the 190 km railway line has been partially upgraded with new tunnels and bypasses.

The Munich–Verona corridor has received EUR 200 million in EU support over the last 10 years.

Between Verona, Bologna and Florence approximately 200 km of high-speed line is under construction, to come into service by 2007, while the linked section from Milan to Bologna will be completed in 2008 (rather than 2006, the delay being due to environmental impact issues). The 430 km high-speed line between Florence and Naples will be operational by the end of 2007.

A mixed rail/road bridge covering the 3.3 km over the Messina Straits is due to be completed by 2015. On the mainland, the bridge will connect to a new section of the Salerno–Reggio Calabria motorway (A3), and to the existing 400 km Naples–Reggio Calabria railway line, which will be upgraded to increase speed and capacity. On the island, the 230 km railway line between Messina and Palermo will be substantially upgraded or rebuilt.

On 20 July 2005, the European Commission designated Mr Karel van Miert as European coordinator for priority axis No 1.