



**ANNUAL ACTIVITY REPORT BY THE COORDINATOR**

**KAREL VAN MIERT**

**PRIORITY PROJECT 1**

**Berlin-Verona/Milan-Bologna-Naples-Messina-Palermo rail link**

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This report only represents the opinion of the European coordinator  
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On 20 July 2005 the Commission appointed six European coordinators for some of the priority projects of the Trans-European Network and asked Mr Karel Van Miert to coordinate priority project 1 (the Berlin-Verona/Milan-Bologna-Naples-Messina-Palermo rail link).

The coordinators' mission is not confined to a particular section but must contribute to coordination over the entire route. However, it should be concerned in particular with those aspects where greater coordination between several Member States is necessary, i.e. the cross-border sections and their approach tracks. In the case of priority project 1, this means the section between Munich and Verona, including the Brenner Base Tunnel. This section is the most difficult in terms of both the progress of the projects and the financing, and also because it involves the cooperation of three Member States.

This first preliminary annual report therefore highlights the section between Munich and Verona.

The information presented and the preliminary recommendations made at the end of the report are the fruit of a series of meetings and visits conducted between September 2005 and June 2006. The initial talks with the ministry authorities in the Member States concerned were followed by meetings with the regional authorities. Talks were also held with the European Investment Bank, certain managers of railway companies and the managers of *Brenner Basis Tunnel SE*. These talks will continue in the months ahead.

## **1. FIRST YEAR OF ACTIVITY FOCUSED ON THE BRENNER BASE TUNNEL PROJECT**

The progress of the preparatory work on the Brenner Base Tunnel largely determines the timetable for the whole route from Munich to Verona. Consequently, the definitive decision to launch the construction work on the tunnel, which should be taken in early 2007, will have to fit in with an overall view of commitments concerning the approach tracks.

The intergovernmental agreement between Austria and Italy of 30 April 2004 marked a decisive stage by adopting the main principles of the project and setting 2015 as the date for the tunnel's entry into service. The agreement stipulates a 56-km twin-tube rail tunnel for mixed goods and passenger traffic. It sets up an IGC and appoints BBT SE to manage the project. The timetable for carrying out studies, drilling tests and preparatory work is also laid down in the agreement. These activities will last until the end of 2006, to be followed by a decision in early 2007 to start construction work.

The project promoter, BBT SE (Brenner Basis Tunnel - Societas Europae), is based at Innsbruck and Bolzano. On the Austrian side, the shareholders are the Federal Government (25%) and the province of Tyrol (25%). On the Italian side, the shareholders are RFI (Rete Ferroviaria Italiana) (41%) and the three provinces concerned (3% each). Under the intergovernmental agreement of 30 April 2004, BBT SE is responsible for carrying out the work in phase II, i.e. preparing the definitive project, obtaining all the necessary authorisations (including those for environmental impact studies), undertaking

geological studies, submitting a finance and franchise model, carrying out all preparatory tasks at the start of the work and performing any necessary supplementary study.

As far as the Member States and the regions are concerned, the project is monitored by a bilateral committee, which has met three times since summer 2005. The Coordinator attended each of these meetings. On the basis of the information submitted to the bilateral committee and the numerous contacts with those involved in the project, it is possible to make a positive assessment.

### **1.1. Assessment**

The technical definition of the project is well advanced and there are no more major difficulties to resolve. The authorisation procedures for the definitive project, including the requisite environmental impact assessments, will be submitted in the coming weeks to the competent Austrian and Italian authorities. From the second half of 2006, the driving of a 53-km exploratory gallery (in several segments) will mark the start of the preparatory work. The gallery will furnish precise geological information, reducing the risks and costs of constructing the two main tubes, and will be used for removing water and spoil during tunnelling operations.

### **1.2. Finance and franchise model**

Concerning the estimate of costs, several simulations have been carried out by BBT SE, and comparisons can be made with similar works, e.g. the Swiss tunnels (Lötschberg and Gothard). Assuming that work on boring the two main tubes will start in 2007-2008, the project's construction cost is estimated at approximately €4.5-5 billion. Pending a more accurate estimate, this figure of €4.5-5 billion for the construction costs is close to the per kilometre average of the data available for the Swiss tunnels and for the Lyon-Turin project. Allowing for inflation and financing costs gives a figure in the region of approximately €8 billion.

Work on the financial package for the Brenner Base Tunnel should result by late 2006, the end of phase II, in a definitive project. This work is being carried out by BBT SE with the aid of external consultants and advice from the EIB.

For the moment, the schemes of work are based on an equal contribution of capital from the Community (€1 billion) and the two states together (€0.5 billion each). This scenario assumes that the remaining €2.5-3 billion will be financed by a loan, repayment of the capital and the interest being spread over a concession period of 50 years. Cross financing and operating receipts will cover only part of what is needed to repay the loan. The rest would be covered by public subsidies to fill the gap, paid by the States. Other schemes, whereby the States' capital contribution is reduced in exchange for a commitment by them to finance a larger, fixed, long-term annual sum, are also conceivable.

As regards the national financing operations, the intergovernmental agreement of 30 April 2004 provides that:

- for studies carried out in phase II, costs not covered by the Community grants will be borne in two equal parts by Italy and Austria;

- for construction work, costs not covered by the Community grants will be covered “by private resources under a PPP. The public part of the PPP shall be divided equally between the parties”.

These clauses, therefore, do not at this stage constitute any commitment as to the amounts or the percentages of the costs that will be borne by the States. The financial commitments for the construction phase will have to be formulated in late 2006/early 2007, after the definitive project has been presented.

For the period up to 2006, the TEN-T budget has basically financed the studies and preparatory activities (e.g. drilling tests) associated with the project-definition phase (phase II) and co-financed at a rate of 50%, for a total of some €70 million.

For the period 2007-13, the Community contribution requested, calculated on the basis of construction costs of €4.5 billion, would be about €900 million (50% of the study and drilling costs, including the exploratory gallery, and 20% of the construction costs). This sum should make it possible to attract the national financing and provide a sufficient basis for a public-private partnership plan.

In addition, the political agreement reached on the draft new Eurovignette Directive is an important factor, since the new text determines the context for potential cross financing for the Brenner Tunnel project. Cross revenues have the advantage that they provide a contribution throughout the franchise, e.g. over 50 years, which is important for structuring the public-private partnership plan.

### **1.3. Timetable for establishing the definitive project**

The most important work to be completed concerns the financing and concession scheme. Since the Commission will have to decide on the allocation of a large financial contribution for the period 2007-2013, it would seem necessary to have the latest available information in advance in order to draw up the definitive project.

#### Points to be addressed as a matter of priority:

##### **(1) Up-to-date traffic studies**

The traffic studies carried out so far are being updated and consolidated. The results should be presented as soon as possible (before autumn 2006), so as to provide a common reference framework.

##### **(2) Studies of income and updated costs**

The results of the income studies (fees paid by the rail companies using the tunnel) and the updating of the cost projections should be finalised as soon as possible (before autumn 2006), since these are basic data for the design of the financing plan.

##### **(3) Cross financing**

Work on the transposition of the new Eurovignette Directive has started in Austria and Italy. As regards the possibility of applying a tariff premium (“mark-up”) of 15% or 25%, a notification should be submitted to the Commission in

autumn 2006 at the latest.

**(4) Finance and franchise model**

To comply with the schedule for the whole project, it is essential to have an initial overall concept, possibly with several options, by the end of summer 2006, in order to be able to hold detailed discussions and arrive at a complete project by consensus in December 2006/January 2007.

**2. APPROACH TRACKS TO THE BASE TUNNEL BETWEEN MUNICH AND VERONA**

The Base Tunnel project is not designed as an isolated infrastructure. On the contrary, it, is part of a coherent overall concept of a high-capacity line from Munich to Verona, linking up the rail networks to the north and to the south. The goal is simply to enable as long a train as possible, and carrying the heaviest possible load, to cover the whole journey from Munich to Verona without stopping, using one locomotive.

This is fundamental to ensuring the competitiveness of rail freight transport. The Base Tunnel will benefit freight transport in particular, and it is rail freight transport of course which we should count on to slow the increase in road transport across the Alps.

Constructing the Base Tunnel is therefore part of an overall concept for the section of line from Munich to Verona. This includes the full interoperability of the future line and hence the installation of the European Rail Traffic Management System (ERTMS) by 2015.

**2.1. Work in progress in the Inn Valley in Austria**

Major work has been in progress in the lower Inn Valley since 2001. This is being carried out by Brenner Eisenbahn Gesellschaft GmbH (BEG) and consists of two phases.

The first phase concerns the 40-km section between Wörgl and Innsbruck (Kundl/Radefeld–Baumkirchen), where the east-west traffic (Vienna–Innsbruck–Graz) and the north-south traffic to the Brenner converge. This is a new high-speed, twin-track line (250 km/h), which will duplicate the existing line and 80% of which is in tunnels or semi-underground. In all, 80% of the sites are open, and work will continue on a large scale during the period 2007-2013 (completion is scheduled for 2011).

During the second phase it is proposed to continue the work northwards as far as the German border. Preparation of this phase began in 2005 but is still at a preliminary stage. The lay-out of the line has not yet been decided and the costs have not yet been estimated. Furthermore, this last section cannot be considered separately from the German section to Rosenheim.

**2.2. Approach tracks in Bavaria: Munich-Kufstein**

This 97-km section is critical for the northern opening of the Brenner Tunnel, now that on the Austrian side large-scale work is in progress on converting the line in the Inn Valley to four-track operation.

Current traffic between Munich and Vienna takes the Rosenheim-Freilassing-Salzburg route. Between Munich and Rosenheim it uses the same line as traffic going to Kufstein and the Brenner (and regional passenger traffic around Munich).

To release sufficient capacity as far as the Brenner requires:

- Vienna-bound traffic to be routed via Mühldorf, which means electrifying and modernising that line;
- upgrading the Munich-Rosenheim-Kufstein line (partial conversion to four tracks, Rosenheim loop line).

For the moment, no financing provision has been made for these works, since they are not a priority while the date of entry into service of the Brenner Tunnel is not definite. The works should include:

- conversion of Munich-Graing to four tracks;
- the Rosenheim loop line;
- upgrading the whole line to 160 km/h;
- installation of the ERTMS (which is in the process of being installed on the Austrian side and will therefore be essential for interoperability).

Examination of all these questions is still at a very preliminary stage, both on the German side and as regards discussions between Germany and Austria. It is fundamental, however, that the investment in Munich-Kufstein is made in good time for the entry into service of the Brenner Tunnel.

### **2.3. Approach tracks in Italy: Fortezza–Verona**

According to current forecasts, the conversion to four tracks of the southern access route to the Brenner Tunnel will be progressively carried out for certain sections in 2015. The key investment in this section is the Fortezza–Ponte Gardena part, since the work carried out will make it possible to reduce the gradient to 11‰, which will result in a lower gradient for the whole route from Munich to Verona and considerably reduce operating costs (a single locomotive will suffice, whereas the current gradients require two or even three locomotives per train).

The second key point is the loop line round Bolzano, which is essential if a large number of freight trains are to use the route. On this section, the proposed changes should benefit the regional passenger transport system.

Both investments - Fortezza–Ponte Gardena and the loop line round Bolzano - are essential, if the Brenner Base Tunnel is to be operated satisfactorily. With the infrastructure improvements on the outskirts of Verona, they will be sufficient as far as capacity is concerned for an initial period of operation of the Base Tunnel, even if in the longer term (2030) the conversion of the remaining parts to four tracks will have to be envisaged.

Since the modernisation of the southern access to the Brenner Tunnel is critical for the success of the project, provision should be made for a significant Community contribution to these schemes for the period 2007-13.

### **3. CONCLUSIONS AND PRELIMINARY RECOMMENDATIONS**

#### **3.1. On the financing of the Brenner Base Tunnel**

- Given the Community financial effort in question, it would not be responsible to treat the Brenner Base Tunnel as an isolated project. It is imperative, on the contrary, to see it in a coherent overall context that includes the approach tracks. It is accordingly recommended that from 2007-08 the financing of the tunnel construction work be made conditional on the existence of a firm agreement between the three Member States concerned on the timetable and financing for the necessary work on the approach tracks between Munich and Verona as regards capacity and interoperability.
- Since Community participation is a basic guarantee for the other partners in the project, Community assistance should be concentrated by using as much as possible the cofinancing possibilities afforded by the new TEN Financial Regulation. For the period 2007-2013, the Community contribution requested, calculated on the basis of construction costs of €4.5 billion, would be about €900 million (50% of the study and drilling costs, including the exploratory gallery, and 20% of the construction costs). This sum should make it possible to attract the national financing and provide a sufficient basis for a public-private partnership plan.

#### **3.2. On the approach tracks to the Brenner Base Tunnel**

- It is important for the project as a whole that high priority be given to the approach tracks in Germany and Italy; the possibility of Community financing should be examined in both cases, in particular for the Fortezza–Verona and Rosenheim–Wörgl sections.
- The installation of the ERTMS along the whole line between the Munich and Verona freight terminals should be completed at the latest by the entry into service of the Brenner Base Tunnel.
- In Bavaria, connections with Austria (links with priority project 17) should be comprehensively examined under a bilateral structure yet to be introduced.
- The improvements to the approach tracks should bring clear advantages for the border regions and their populations. In particular, they should be part of a plan to strengthen local transport in each region and between the regions concerned. It is also important that the regions, some of which are already helping to finance the project, should be fully involved. It is very positive that they systematically attend the meetings of the IGC, and it is essential that their participation should be kept at a high level in view of the decisions to be taken.

#### **3.3. On the future management of the corridor**

- Since considerable sums will be invested in the construction of a high-capacity infrastructure between Munich and Verona, an ambitious, innovative vision is required so that the future management of that infrastructure is as efficient as possible and so as to promote total interoperability.
- For example, the management and maintenance of the tunnel and the approach tracks between Munich and Verona could be entrusted to a single infrastructure manager in the form of a European company.

#### 4. PRIORITIES FOR THE SECOND YEAR OF ACTIVITY

- (1) Set the Brenner Base Tunnel project in the overall context of a high-capacity line between Munich and Verona, simultaneously covering the planning for the Base Tunnel, the planning for the approach tracks and interoperability questions (including the installation of the ERTMS).
- (2) Support, in a coordinated manner with the EIB, the work on the finance and franchise model by facilitating – if necessary – the building of a consensus between the States, the regions and the Commission (including the rapid resolution of the cross-financing issue).
- (3) See that the proposed timetable for the Brenner Base Tunnel is kept to, with the aim of arriving at a complete, definitive project, agreed by the parties, at the start of 2007. To that end, take any initiative that will strengthen cooperation between the bodies concerned.
- (4) Contribute to communication on the Brenner Base Tunnel at local, regional, national and European level, to create favourable conditions for the taking of a decision on the launching of construction work at the start of 2007.
- (5) Analyse the other critical parts of priority project 1, in particular:
  - the Halle/Leipzig–Erfurt–Nürnberg section;
  - the Kufstein–Wörgl section;
  - the sections in southern Italy.

# ANNEX

## Map of the project

