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FINANCING SCHEMES OF TRANSPORT INFRASTRUCTURE

Addendum 4

Transmitted by the Government of Germany

Railway infrastructure funding in Germany (the situation as of June 2003)

As part of the reform of the railways, Deutsche Bahn AG became the owner of the railway infrastructure of the former Deutsche Bundesbahn (DB) and the former Deutsche Reichsbahn (DR). In the meantime, DB AG has been split up into five new joint stock companies under DB AG as a management holding. At present, DB Netz AG, DB Station&Service AG and DB Energie GmbH, as federal railway infrastructure companies, are the owners of the railway infrastructure under Article 87e of the Basic Law.

However, this does not mean that the Federal Government has divested itself of its responsibility for infrastructure. Rather, the new Article 87e of the Basic Law states that the Federal Government is responsible for upgrading and maintaining the rail network of the federal railways. This responsibility of the Federal Government has been put into more concrete terms by the Upgrading of Federal Railway Infrastructure Act. Under this act, the Federal Government finances investment in federal railway infrastructure. This covers both the replacement of capital assets and the construction of new or the upgrading of existing infrastructure.

The transport policy intentions of the Federal Government also have a bearing on this, especially in the case of new construction or upgrading. These intentions have been concretized by the Requirement Plan (Railways), which forms an annex to Section 1 of the Upgrading of Federal Railway Infrastructure Act.

DB AG has all the rights and obligations ensuing from its function as owner, especially maintenance of the railway infrastructure and the function of client in investment projects.

In the period from 1997 to 2002, the Federal Government provided funding for railway infrastructure investment as follows (figures in billion €/information provided by DB AG):

| | Year | | | | | |
|------------------|------|------|------|------|------|------|
| | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
| Total investment | 3.5 | 2.9 | 3.6 | 3.5 | 3.9 | 4.2 |
| <i>of which</i> | | | | | | |
| Modernization | 1.3 | 0.7 | 1.3 | 1.1 | 1.7 | 2.3 |
| New investments | 2.2 | 2.2 | 2.3 | 2.4 | 2.2 | 2.1 |

The objective is that, starting in 2003, around € 2.5 billion annually of the federal funds available for investment in railway infrastructure should be used for modernization.

In addition, the railway infrastructure companies provide funds for modernization and new investments. This is the case, for instance, when railway lines are to be provided with equipment that goes beyond a certain standard (deemed eligible for funding by the Federal Government) or maximum assistance levels agreed for railway lines are exceeded.

In addition, new investments are funded on a pro rata basis using Funding from the European Union (ERDF and TEN funds).

As described above, responsibility for funding repair and maintenance is vested solely in the railway infrastructure companies. As part of the activities to draw up the 2003 Federal Transport Infrastructure Plan, these companies stated that they have a funding requirement of € 1.5 billion per year for repair and maintenance.

Other funding instruments:

Private sector pre-financing of railway infrastructure investment by the railway infrastructure companies

Private sector pre-financing of the pilot project to construct a new high-speed line/upgrade the existing line between Nuremberg and Munich via Ingolstadt was envisaged on the basis of the 1996 Budget Act (Section 29 (2)).

The basic aim of private sector pre-financing is to realize investment projects more quickly (“buying time”), without additional net borrowing by the Federal Government, than would be possible using available federal funds.

The funding agreement signed by the Federal Government and DB AG for the Nuremberg – Ingolstadt – Munich project contains the following major private-sector pre-financing arrangements:

- DB AG will borrow funds on the capital market for the interim financing of the pilot project.
- After the project has entered into service, the Federal Government will assume all the liabilities resulting from this borrowing (including the cost of interest) and will reduce them by making annual repayments using federal funds.
- The Federal Government will have the option of paying off the private-sector pre-financing, either wholly or in part, at an earlier time using federal funds.

Positive effects of private sector pre-financing:

- Private-sector pre-financing means that transport projects that are economically desirable but cannot be funded from the existing budget can be realized sooner rather than later.
- Private-sector pre-financing reduces construction costs. If, by using private-sector pre-financing, a project can be started at an earlier date, this is at the current level of prices; if construction starts at a later date, the construction costs will, in all probability, rise.
- Private-sector pre-financing increases the budget available at present and thus has a positive impact on economic activity and employment at present.

Negative effects of private sector pre-financing:

- The Federal Government bears all the burdens and risks. In particular, no private-sector venture capital is used.
- Private sector pre-financing makes projects more expensive because of the pre-financing interest accruing during the construction period and because the rate of interest at which the private sector procures capital is less favourable than the rate that can be obtained by the Federal Government.
- When the Federal Government starts paying off the liabilities, there is a sharp drop in the level of federal funds available for investment each year. The private-sector pre-financing of the Nuremberg – Ingolstadt – Munich line will impose an annual burden of up to 622 million DM on federal budgets from 2004 onwards.

Actual financing of the project

Because federal funds are available for investment, the Federal Government has availed itself of its contractual option and has already paid off, using Federal funds, the costs of pre-financing that have already accumulated. Since 2001, the project has been funded directly using federal funds.

Since private sector pre-financing imposes considerable burdens on future (transport) budgets, this type of funding should be limited to a small number of cases.

Private sector financing of railway infrastructure investment

The railway infrastructure companies are at liberty to incorporate private-sector capital in the financing of railway infrastructure investment.

However, it is not very easy to mobilize private-sector venture capital, because investment in railway infrastructure can hardly yield the rates of return that investors expect. Within the framework of a “feasibility study on upgrading the Berlin – Dresden – Schöna line”, sponsored by the European Union, well-known private-sector companies, with the support of the Federal Ministry of Transport, Building and Housing, have examined the extent to which the aforementioned investment project could be financed using private-sector venture capital. A detailed cost, traffic and revenue forecast showed at an early stage that financing the project with private-sector venture capital is unlikely to yield a positive rate of return on the capital committed.

The incorporation of private-sector capital in the financing of railway infrastructure investment by the railway infrastructure companies would be a welcome development, because it would, on the whole, facilitate speedier realization of railway infrastructure investment. So far, however, the Federal Government has not been informed of any investors that would provide private-sector venture capital for the realization of railway projects.

Private sector pre-financing of railway infrastructure investment by federal states

From a constitutional point of view, the pre-financing of railway infrastructure investment by federal states is, at the very least, dubious. The main risk is that financially strong states will pre-determine the Federal Government’s decisions on its investment activities. The central tasks of the Federal Government, reflected in the requirement plans and in federal transport infrastructure planning, could be influenced by pre-financing commitments given by financially strong federal states.

The positive and negative effects are essentially the same as those of private financing by the railway infrastructure companies.

In addition, pre-financing commitments would tend to restrict the railway infrastructure companies’ scope for making entrepreneurial decisions. In individual cases, it would mean that the projects realized were not those that made sense from a business management point of view, but those that were initiated by financially strong federal states.

This form of pre-financing should thus be considered – if at all – only in a few individual cases. One case where it could be possible would be that a project already under construction could be continued as planned, despite a shortage of federal funding, by means of the temporary (continuing) pre-financing by a federal state for the benefit of the railway infrastructure companies.

Road infrastructure funding in Germany (Situation as of June 2003)

Please take note of the following explanations concerning the questionnaire:

- 1) The information refers exclusively to federal trunk roads.
- 2) Specific information relating to the federal trunk roads budget cannot easily be provided in accordance with the strict differentiation required in the questionnaire (broken down into new construction, modernization, etc.). For this reason, the information provided is based on the following differentiation:
- 3) new construction and widening
(including some preservation, e.g. in the case of the widening of motorways to six lanes, as well as refinancing of federal trunk roads pre-financed by the private sector);
 - pure preservation;
 - other investment;
(e.g. upgrading of federal trunk roads without capacity enhancement, traffic control, measures under the Railway Crossing Act and others; includes some preservation).
 The following tables are structured according to the differentiation given under 2) and contain only those lines from the original questionnaire for which figures can be provided.

Sources - and instruments - of funding
(Percents, total of table = 100)

| | New construction and widening | Pure preservation | Other investment | Maintenance |
|--|--------------------------------------|--------------------------|-------------------------|--------------------|
| National funding | | | | |
| (i) central Government budget | 47.0 | 18.2 | 15.3 | 12.0 |
| (ii) national ¹ financial markets | 6.5 | ..... | ..... | ..... |
| (iii) regional ² authorities | 0.5 | ..... | ..... | ..... |
| International funding | | | | |
| (iv) soft loans ³ grants and guarantees | 0.5 | ..... | ..... | ..... |

¹ Private-sector pre-financing of federal trunk roads.

² Co-financing of federal trunk roads by federal states.

³ TEN and EFRE funds.

Advantages and disadvantages:

Private-sector pre-financing of federal trunk roads makes it possible to provide the infrastructure at an early stage. The need for refinancing (repayment and interest payment) over a longer period of time (15 years) will however restrict the flexibility of the federal trunk roads budget in the relevant years (maximum amount to be spent for refinancing in the coming years: around 300 million euros p.a.).

Funding procedures
(Percents, total of table = 100)

| | New construction and widening | Pure preservation | Other investment | Maintenance |
|-------------------------------------|-------------------------------|-------------------|------------------|-------------|
| Public funding ⁴ | 48.0 | 18.2 | 15.3 | 12.0 |
| Wholly private funding ⁵ | 6.5 | .... | .... | .... |

Advantages and disadvantages:

Private sector pre-financing of federal trunk roads makes it possible to provide the infrastructure at an early stage. The need for refinancing (repayment and interest payment) over a longer period of time (15 years) will, however, restrict the flexibility of the federal trunk roads budget in the relevant years (maximum amount to be spent for refinancing in the coming years: around 300 million euros p.a.).

Road infrastructure financing in Germany (Situation as of June 2003)Transport-specific taxes

Like any other tax, transport-specific taxes - motor-vehicle tax and mineral oil tax - serve the general purpose of obtaining State revenues and are originally not earmarked to cover the State's expenditure in the field of transport. As opposed to other European Union (EU) States, Germany does not levy a vehicle licensing tax.

Road user charges

On 1 January 1995, Germany started levying distance-related charges for the use of motorways by heavy goods vehicles (HGV) with a maximum permissible weight of at least 12 tons within the framework of a common regional system established by means of an

⁴ Includes also refinancing of projects pre-financed by the private sector.

⁵ Is refinanced by the Federal Government.

agreement with the Benelux countries and Denmark. The relevant agreement is based on Directive 93/89/EEC and was signed by the Benelux countries, Denmark and Germany on 9 February 1994.

Since 1 April 2001, the emission-related maximum rate to be paid in this system of distance-related motorway user charges has been € 1,550 per year.

Apart from Germany, the obligation to pay such charges was also introduced in 1995 in Belgium, Denmark and Luxembourg. The Netherlands followed suit on 1 January 1996. In 1997, Sweden joined the common regional system and introduced the obligation to pay charges for Swedish HGV and other HGV on 1 January 1998 and 1 February 1998, respectively.

In Germany, the Federal Government is entitled to receive the charge revenue. It goes to the general budget and is not earmarked. This means that, up to now, there has not been any earmarking of types of revenue for federal trunk roads in Germany (non-affectations principle).

The introduction of the time-related motorway user charge for domestic and foreign HGV was a decisive step on the way towards making domestic and foreign road haulers contribute equally and thus more fairly to the covering of infrastructure costs.

It has, however, only been a provisional step. The objective is to finally achieve a breakthrough in terms of the "user pays principle" by introducing a distance-related road user charge for heavy goods vehicles from the year 2003. The reason is that the previous charge level does not reflect the actual use of the motorways. Nor does it lead to an adequate participation of domestic and foreign haulers in the funding of transport infrastructure.

In line with EU transport policy, the contributions made by the users to the infrastructure costs are to be increased. This applies, in particular, to heavy goods vehicles because they are responsible for a disproportionately high share of the costs incurred for the construction, maintenance and operation of motorways.

By means of the HGV toll it is possible to allocate infrastructure costs to the users in an optimum manner since the toll rate depends directly on the actual number of kilometres travelled.

In order to cover the infrastructure costs caused every year by HGV liable to pay tolls, i.e. around € 3.4 billion, and taking into account the amount of € 600 million per year envisaged for harmonization purposes, the Federal Government, the Bundestag and Bundesrat agreed on an average toll rate of 12.4 cents per kilometre. On this basis, the toll rates, differentiated according to axle numbers and emission categories, have been stipulated in a statutory instrument.

The entire toll revenue - minus the costs of the toll system - will be used for improving transport infrastructure and, in particular, the federal trunk roads. For this purpose, an "anti-congestion scheme" with a total volume of around € 3.78 billion (2003 - 2007, i.e. € 756 million per year) has already been established with the objective of eliminating capacity bottlenecks in the road, rail and waterway networks.

Operator models are another tool that the Federal Government will use in order to accelerate the widening of motorways to six lanes by means of the involvement of private-sector investors. The costs thus incurred are to be refinanced, on the one hand, by start-up funds provided by the Government and, on the other, by future HGV toll revenue to be used specifically for that stretch of motorway on which it was collected.

The tolls will be collected without any intervention in the free flow of traffic. This means that there will be no tollbooths; vehicles liable to pay tolls will neither have to use designated lanes nor observe specific speed limits. The tolls will largely be collected fully automatically. Non-discriminatory access to the motorway network will be ensured for occasional motorway users - in particular those from abroad - by means of an additional manual toll collection system (booking system with terminals accepting conventional means of payment).

A satellite-based system will be used for the automatic toll collection. Such a system will have a determining influence on the technological progress made in this field.

The collection of the HGV toll in Germany will start on 31 August 2003.
