## **INTERVIEW**

## PPP—The road infrastructure cure-all?

In September 2010, work was completed on the modernization of the A4 highway segment from the Hesse state border to the city of Gotha in Thuringia in what was the first of four public-private partnership (PPP) road pilot projects in Germany. Having private investors participate in infrastructure expansion and operation is already an established practice around the globe, and Germany is now employing such an approach as well. So what role can we expect PPP to play in the future development of road infrastructure? Torsten R. Böger, Managing Director of the state-run VIFG transport infrastructure finance company, provides some answers.



Thorsten R. Böger is CEO of the state-run VIFG transport infrastructure finance company

Photo: VIFG

VIFG Verkehrsinfrastrukturfinanzierungsgesellschaft mbH
was established in 2003. The
company distributes the proceeds
from truck toll collections and also
serves as a center of transport
expertise that helps the German
Ministry of Transport plan and
implement PPP and other projects
involving the private sector. The
VIFG supports the principle of
a user-financed transport infrastructure.

What challenges will Germany face in the coming years with regard to its road infrastructure?

Böger: A well functioning road infrastructure is the most important engine of growth in Germany. The problem is that investment in road infrastructure is stagnating even as traffic volume continues to increase rapidly. This problem will be further intensified by the financial crisis, government budget constraints, and the debt braking mechanism that was recently written into the country's constitution. The key challenge for transport policy over both the long and short term is therefore to ensure the permanent viability of Germany's transport infrastructure, and to support the sectors that generate growth.

How would you describe the current system for financing and operating road infrastructure in Germany?

Böger: At the moment, projects are financed by the federal government. However, the budget situation, budget policy, and the accounting methods used have led to a situation in which public financing of infrastructure projects has reached the limits of its feasibility. This, in turn, makes it extremely difficult to plan and finance long-term projects in line with infrastructure life cycles. With the system in place, funding for new construction or infrastructure expansion projects is viewed as an expenditure rather than an investment, which is why the budget fails to register or reflect the associated investment risks.

In view of current transport policy challenges and budget constraints, a modernization of the financing system is urgently required. The truck toll system marked the beginning of a userfinanced approach. Nevertheless, the opportunities that the launch of such a system offers still haven't been fully exploited. Implementing a true user-financed system would involve keeping toll revenue out of the budget used to finance and provide infrastructure and instead utilizing it solely for the mode of transportation on which tolls are levied.

What types of demands will the expected increase in

traffic volume make on the system for financing and maintaining national highways in Germany?

Böger: A viable future financing system will have to reduce the dependency of infrastructure financing on traditional budget policy implementation, without restricting the government's rights. Such a system will also have to ensure effective project implementation.

Better use of funds will also increase the effectiveness of the investments made and help ensure sustainable mobility and economic growth. In addition, a modern financing system should help mobilize private capital; the current system for financing and maintaining the national highways is insufficient in this regard.

How will it be possible to finance and maintain highways in an affordable manner in the future?

Böger: The truck toll system has provided the nationwide highways with their own revenue source. The current government's coalition agreement supports this sysISSUE 02 | NOVEMBER 2010 | ConTACT.



tem and also calls for the expansion of transport-based financing loops in order to safeguard sustainable transport infrastructure investment over the long term. The federal government should therefore implement the required road-based financing system and move ahead with the associated further development of the VIFG.

These principles are now being applied within the framework of the so-called A-Model. Here, financially sound procurement through a lifecycle-focused transport infrastructure is ensured, while risks are also taken into account. Through the direct links between utilization, payment, and the application of funds in the fi-

nancing loop, it will be possible to establish and operate transport infrastructure efficiently.

This road-based financing loop will also significantly enhance the planning security of the associated investments. Among other things, this could involve a financing agreement over years between the federal government and the VIFG at the road-network level as well. In this setup, the federal government would maintain responsibility for the financing, while the financing process itself would be managed by the VIFG.

German Transport Minister
Dr. Peter Ramsauer favors the
use of the A-Model system

in which private partners like HOCHTIEF Concessions build or expand highway segments and assume responsibility for both financing and maintenance. What does that mean in concrete terms when it comes to establishing public-private partnerships for Germany's transport infrastructure?

Böger: The experience we've had with the A-Model pilot projects has been very positive to date. The construction deadlines have been met, the quality delivered by the private companies has been impressive, and the projects have made good economic sense. PPP enables projects to be

Together with the Federal German Minister for Transport, Dr. Peter Ramsauer, and his Thuringian state counterpart, Christian Carius, HOCHTIEF Concessions Executive Board member Berward Kulle and Vinci Concessions Vice President Christophe Pélissié du Rausas opened the last section of the A4 highway to traffic.

Photo: Via Solutions Thüringen

"A well functioning road infrastructure is the most important engine of growth in Germany."



The A4 at Eisenach is the first highway project in Germany to be handled on the basis of PPP.

Photo: HOCHTIEF Concessions

## Glossary

**A-Model**: With the A-Model (expansion model) a private partner finances and constructs or expands highway segments, which are then turned over to the company for a period of 30 years. Afterward, the highway segment is given back to the government in a contractually agreed-upon condition. The private partner recoups its investment by collecting the truck tolls for the segment it operates. In addition, it is also possible to obtain initial financing support from public funds.

**F-Model**: All projects carried out in accordance with Germany's Private Financing of Highway Construction Act are designated F-Model projects. Since going into effect in 1994, this law has enabled special structures such as bridges, tunnels, and mountain passes on highways and multi-lane secondary roads to be financed, built, maintained, and operated by private companies that recoup their investment by collecting tolls set by the government. F-Model projects can also receive initial financing support from the public sector.

**K-Model**: K-Model designates a PPP road construction project at the municipal level, whereby this approach is relatively new in Germany. This model is different from the familiar A-Model in that it involves operating an existing road network with only a limited number of new segments, or none at all, and recouping the associated investment without charging tolls. Conceivable refinancing options here include revenue models linked to road segment availability as determined by road condition, quality, drivability, and safety.

implemented quickly; construction times are significantly shorter than is the case with conventional approaches. Another advantage is offered by the fact that the desired transport benefit, and thus economic and social utility, is achieved at a much earlier stage. For example, the Hörselberge bypass for the A4 in Thuringia was opened at the beginning of September. This bypass, which was one of the first A-Model proiects commissioned by the Ministry of Transport, was completed in a little less than three years, or four months ahead of schedule. The German Transport Minister therefore has good reason to continue supporting the A-Model.

Additional PPP projects are planned for the coming years. Calls for tenders have already been issued, for example, for the A8 Ulm/Elchingen interchange at Augsburg-West and for the Lederhose section of the A9 on the Thuringia-Bavaria border. Another seven projects have also been announced. As you can see, the German federal government supports PPP projects because it believes they represent an economical form of infrastructure procurement. Moreover, PPP activities help improve the German construction industry's competitive position when it comes to international projects.

The so-called F-Model for bridges and tunnels also operates in accordance with the partnership principle, but there's room for improvement on both sides here. How should projects based on this model be designed if they're to be successful from the point of view of the public sector, private companies, and users?

Böger: The two F-Model projects implemented to date are the Warnow Tunnel in Rostock and

the Herren Tunnel in Lübeck. The results have been sobering—and our experience has shown that improvements need to be made, particularly with regard to risk distribution. The federal government and participating state governments are now examining additional potential projects that would be based on F-Model legislation. These include a tunnel under the Weser river on the A281 highway, the "Albaufstieg" in Baden-Württemberg, and a new tunnel under the Elbe river. I'm very confident that we'll be able to come up with solutions acceptable to all parties here as well.

There's evidently more confusion than clarity in Germany as far as user financing is concerned. Is user financing, for example, in the form of tolls, a fair deal for a country's citizens?

Böger: Charging tolls makes economic sense and represents an efficient option only if the revenue generated flows back into the transport infrastructure in a closed loop.

That's why truck tolls are basically fair. After all, each vehicle pays only in accordance with its actual use of the infrastructure. The transport infrastructure utilization can be optimized in this manner. It also thus makes sense from an environmental protection perspective.

HOCHTIEF Concessions views itself as a road operator. In other words, it is a company that offers utility rather than merely supplying concrete. It also assesses itself in terms of the value its projects create for the German economy. What's your opinion?

Böger: It's an important point: Most people only look at things on the project level when evaluating the benefits and economic efficiency of PPP models. They basically compare the conventional and PPP implementation variants. However, especially in view of increasingly tight public sector budgets, authorities are now supplementing this project-focused view with approaches that consider how entire infrastructures can be optimized. As far as

Germany's roads are concerned, we therefore need to optimize the economic utility of the complete highway network using the financial resources currently available. For this reason, decisions regarding a particular measure need to take into account not only costs but also the potential benefit of a given transport infrastructure

project. It's all about the impact a project will have on the economy as a whole. The adoption of such an approach often makes it possible to start and complete PPP projects more quickly than conventional ones. <

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