



**TRANSPORTATION, WATER AND URBAN DEVELOPMENT DEPARTMENT  
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**INTRODUCTION OF COMPETITIVE BIDDING FOR ROAD  
WORKS IN THE FORMER SOVIET UNION**

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*While adoption of competitive bidding for road and other civil works has been the norm in most countries of the world, the countries of the Former Soviet Union (FSU) did not have independent contractors, and road works contracts were generally awarded to state construction agencies on a negotiated basis. It was common for suppliers of construction materials to have monopoly power in a region. This note discusses progress made under the first Bank-financed highway project in the FSU in successfully introducing competitive bidding in the Russian Federation.*

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**ROAD TRANSPORT IN THE FORMER SOVIET UNION**

In the Former Soviet Union (FSU), freight transport, particularly over long distances, was organized to rely primarily on the railway and, to a lesser extent, on inland waterways; road transport, in contrast, served largely as a feeder to the railways and as a means to distribute goods in urban areas. As the market economy develops and shippers become free to choose modes of transport, short haul rail traffic will be highly vulnerable to trucking competition. A major modal shift of rail traffic to road transport is inevitable, especially for time-sensitive shipments and for short-haul traffic. Trucks will provide door to door service, more service and greater reliability. These trends will reduce the rail share of freight traffic, as well as altering its composition, and accelerate the growth of road traffic.

The expected modal shift toward road transport, together with the rapid deterioration of roads, make

preservation of the road network a high priority. A recent federal road study in Russia shows that about 38% of the network is in poor condition and requires thick overlays. The expected increase in both traffic volumes and axle loads on the country's roads will aggravate the problem of reducing the backlog of road maintenance and could lead to a collapse of the road infrastructure were major action not taken to expand road rehabilitation and maintenance. To forestall such a result, the Russia Highway Rehabilitation and Maintenance Project (HRMP) is being implemented. This is a program of urgently needed road rehabilitation and maintenance, for which the Bank has provided a loan of US\$300 million (Ln 3706-RU). It is the first Bank-financed project in the subsector in the FSU.

## **HISTORIC LACK OF COMPETITION IN THE HIGHWAY SUBSECTOR**

Execution of road works under competitive bidding was not used in the FSU in the past. A review of the situation in the Russian Federation in mid-1992 indicated that the major obstacles to the introduction of a competitive bidding system for road contracts included:

Lack of experience with preparation of bids since contracts for all road works were based on standard designs and bills of quantities, with unit prices adjusted for inflation and the inclusion of a generous profit margin (up to 30% in some cases);

- Poor monitoring of actual bills of quantities since there was no compensation for any changes in contract quantities of work unless there were additional activities clearly outside the scope of the original contract;
- An accounting methodology which only partially takes account of inflation and does not depreciate based on replacement value;
- No supervision of contracts and little monitoring of quality of works;
- Inefficient organization of road works, difficulty keeping to work schedules, and no penalties for late completion of contracts; and
- The monopoly power position of suppliers of construction materials.

## **INTRODUCTION OF COMPETITION**

### ***Political Environment***

A highway policy seminar organized by the Bank in Moscow in July 1992 addressed the above obstacles and was fundamental in conveying to high level highway and transportation officials the advantages of competitive bidding in carrying out road works, as well as the economic benefits of an adequate supervision of works. Following the seminar, Government officials and Bank staff worked together to identify the HRMP. At that time, a decision was made to introduce competitive bidding and supervision of works under the HRMP.

### ***Prequalification***

Private contracting firms in Russia are generally recent creations formed by privatizing construction agencies of the government. Most of these new firms are well aware of their need to acquire knowledge and experience in western technology and business management, including participation in competitive bidding. In many instances, they seek to fill this information and skills gap by associating themselves with western companies through joint ventures. As an example, in the prequalification of contractors carried out by the Federal Highway Department (FHD) for the 1995-96 program of works under the ongoing HRMP, 13 (or 20%) of the 64 prequalified contractors are joint-ventures between Russian and foreign contractors (of the remaining contractors, 27 are Russian and 24 are foreign). The Bank standard prequalification document was used in this exercise.

### ***Supervision of Works***

In the framework of a twinning arrangement with FHD, the U.S. Federal Highway Administration (FHWA) has provided a grant of US\$5 million to help prepare and implement the HRMP. FHWA's contribution was fundamental in the preparation of engineering design and bidding documents for the 1994 pilot road works program and subsequent supervision of works. The highly experienced FHWA staff provided on the job training to Russian staff, who are now familiar with all the activities involved in an appropriate management of road works contracts.

### ***Decrease of Unit Cost as a Result of Competition***

In Russia, competitive bidding for road works was introduced through a Pilot Road Rehabilitation Program carried out in 1994 under HRMP. This pilot program resulted in a reasonable selection of contractors for the road works despite the fact that the FHD and local contractors lacked experience with this procedure, and international contractors lacked experience in Russia. The experience gained with the 1994 exercise led to increased competition in the selection of contractors to carry out the 1995-96 road rehabilitation works under HRMP. Bids were invited and contractors selected under international competitive bidding using the Bank standard document for smaller works. [Table 1](#) summarizes the information available on 12 ongoing road rehabilitation contracts, indicating the level of competition and the unit cost per lane-km for each contract. Among the 12 successful bidders for the ongoing road works contracts (amounting to a total of about US\$92 million), three were Russian, eight joint-ventures, and one foreign owned. In general, an inverse relationship between the number of bidders and the unit cost per lane-km has been observed ([see Figure 1](#)).

The major cost item in these contracts is related to asphalt works, which account for about 50% of the total contract price. As for the contractual unit prices per lane-km discussed above, it was also noted that the contractual unit price for asphalt concrete tends to decrease with increased competition, as illustrated in [Figure 2](#).

A summary of unit prices (in terms of US\$/lane-km and US\$/ton) is given in [Table 2](#). The table indicates a general trend of decreasing unit prices with increasing competition. The average asphalt concrete cost for the 12 contracts underway is US\$56/ton, which is about 34% higher than the US

average of US\$42/ton. However, it is generally lower than asphalt concrete prices in Western Europe.

## Project Implementation Unit

Although the restructuring of the highway subsector is in a transition phase, FHD is realizing, through HRMP, the important objective of increased competition among contractors. International competitive bidding under HRMP has been successful. The unit established by FHD to implement the project, Dorinvest, has contracted with consultants for engineering design, bid document preparation and supervision of works. Dorinvest staff, with assistance of Finnish and American advisors provided on a grant basis, have effectively undertaken prequalification of contractors and several international bidding exercises. There have been some useful learning experiences, and Dorinvest quickly adapted to them and is now a competent contracting authority.

## ***LESSONS LEARNED***

The lessons from the HRMP show that use of Bank standard procurement documents, particularly for prequalification of contractors and competitive bidding, is a determining factor for the introduction and increase of competition in the highway subsector. Another factor is a strong commitment by the management and staff of the highway agency responsible for implementing the project, which in this case was largely a result of the July 1992 policy seminar. Additional factors that significantly helped to increase competition for road works in Russia were: (i) distributing the works into lots of appropriate size and number; (ii) accepting contractors on their merits not on their origin; and (iii) encouraging associations of firms such as temporary (ad-hoc) joint-ventures.

## ***TO LEARN MORE***

World Bank. December 1993. Russia Highway Rehabilitation and Maintenance Project Staff Appraisal Report. Report Number 12194-RU.

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