

## TERMS OF REFERENCE

<b>Contract</b>			
<b>Project</b>			
<b>Competence</b>	Quantity Engineer (Transport Economist)		
<b>Source</b>	National	<b>Category</b>	Independent individual consultant
<p><b>Scope of work:</b></p> <ul style="list-style-type: none"> <li>- Road Engineer shall draft a detailed schedule of works, coordinate and have it approved by the supervising Deputy Minister within 20 days from the date of project commencement; the schedule may be adjusted as instructed by the Team Leader;</li> </ul> <p><b>Directly performs the following work:</b></p> <ul style="list-style-type: none"> <li>- development of methodological instructions and guidelines for monitoring the scope of work performed and payment for work performed at the facilities, control over the compliance of paid work and services with estimates, analysis and monitoring of excess and decrease in the scope of work.</li> <li>- review of methods for calculating and determining the estimated cost of maintenance and construction of roads and the development of standard recommendations for calculations for practical use;</li> <li>- introducing, if necessary, changes in the methodology for calculating the estimated cost and calculation rules to reflect the real market value;</li> <li>- together with the road engineer, audit and review of existing GOSTs and SNIPs and preparation of recommendations for changes;</li> <li>- preparation of updated SNIPs and other documents;</li> <li>- together with the road engineer, calculation and determination of standard road safety requirements within the framework of international requirements;</li> <li>- calculation of the budget for the implementation and application of road safety recommendations;</li> <li>- review of technical options for collecting tolls in free mode from trucks (tolls do not include barriers), including ANPR, DSCR and GNSS;</li> <li>- estimation of costs for the implementation and operation of the relevant toll collection systems for a period of at least 10 years;</li> <li>- risk analysis reflecting the main uncertainties in the implementation and operation of the relevant electronic system;</li> <li>- participation with an expert team in the preparation of extensive information on technical solutions for electronic vehicle tolling systems in other countries;</li> <li>- together with an expert team, preparation of an analytical note describing at least five such systems in other countries, indicative prices for automated electronic systems, maintenance costs;</li> <li>- together with the expert team, recommend two most suitable options of technical solutions for implementation in the conditions of the Kyrgyz Republic and taking into account the planned amount of funds to be collected from trucks and buses;</li> <li>- preparation of indicative engineering calculations for the construction and installation of an electronic tolling system for the selected two most suitable options;</li> <li>- assistance together with the expert team in the preparation of the Terms of Reference for the introduction of an electronic tolling system for trucks and buses;</li> <li>- as necessary, together with the expert team, prepares recommendations for improving the effectiveness of cooperation between the Road Maintenance Department, SE "Kyrgyzavtozhoh" and Road Fund.</li> <li>- other tasks of the Team Leader for the successful preparation of the Feasibility Study.</li> </ul>			

**FS for toll road implementation:**

- jointly with the road engineer, prepares technical solutions for making the road a toll road, taking into account the road safety requirements;
- jointly with the road engineer prepares technical solutions for arranging a toll road;
- prepares indicative engineering calculations for the organization of toll traffic, including the construction and installation of the necessary equipment;
- together with the expert team, prepares estimates of the total annual amount of tolls from the toll road;
- jointly with the expert team, prepares an economic Return-on-Investment analysis for the toll road using the HDM program;
- other tasks as may be instructed by the Team Leader for successful FS preparation.

**Outputs:**

- ready-made extensive information on technical solutions for electronic vehicle tolling systems in other countries;
- prepared analytical note describing at least five such systems in other countries, estimated prices for automated electronic systems, maintenance costs;
- ready-made recommendations of the two most optimal options for technical solutions;
- ready-made indicative engineering calculations for the organization of toll traffic, including the construction and installation of the necessary equipment;

**on FS for toll road implementation:**

- an agreed draft of technical solutions for the organization of a toll road;
- ready-made indicative engineering calculations for the organization of a toll road.
- ready-made economic Return-on-Investment analysis for the toll road using the HDM program.

**Reporting requirements:**

**Initial report** - a schedule and sequence of works shall be provided after 20 days, with a clearly indicated planned timing for the development of RIA (progress report shall be provided on a monthly basis);

**Monthly progress reports** shall be submitted to the Team Leader.

**Completion report** - complete information on the tasks performed and the results achieved with recommendations for further activities in relation to the adopted documents.

<b>Place of the assignment</b>	<b>Days/months</b>	<b>Dates</b>
The main location for service delivery is the ADB PIU Office at MOTC KR with periodic visits to construction sites as needed.	9 months	Services are scheduled to start on _____, 2023, subject to ADB approval. The contract is valid until _____, 2024.
Contract period (specify if intermittent)	intermittent	-

**Qualification requirements:**

- *Higher education degree in the field of civil engineering, economics.*
- *At least 5 years of experience in the road sector and at least 2 years in projects financed by international financial institutions;*
- *Knowledge of the state and official languages at a level sufficient to complete the assignment;*
- *At least 2 years of experience in the development of regulatory legal acts;*
- *Knowledge of the regulatory framework in the field of the road sector;*
- *Interpersonal communication skills and the ability to work in a team;*