TECHNICAL TASK (engineer-estimator)

The contract				
Project	CAREC 1&3/CS-IC-18-2019			
Competence	engineer - estimator			
A source	Local	Category	Independent Individual Consultant	

Scope of work:

- within 10 days from the beginning of the project, it compiles, coordinates and approves the work schedule signed by the team leader, and the schedule can be adjusted in accordance with the task of the team leader;
- directly carries out the following work:

According to the feasibility study for the implementation of an electronic collection system for trucks:

- risk analysis reflecting the main uncertainties for the implementation and operations of the respective tolling system;
- review of technical options to collect free-flow tolls from trucks (tolling that does not include barriers) including ANPR, DSRC and GNSS;
- estimating costs for the implementation and operation of the respective tolling systems for a period of at least 10 years;
- traffic surveys and forecasts for at least 10 years along the main transport corridors passing through the territory of the Kyrgyz Republic (Bishkek-Osh, Bishkek-Naryn-Torugart, Osh-Sarytash-Irkeshtam, Sarytash-Karamyk, Osh-Batken-Isfana);
- participates in the joint preparation of PPP specialist and IT specialist with extensive information on technical solutions for electronic systems for collecting transportation fees in other countries;
- together with an expert in economics, prepares an analytical note describing at least five such systems in other countries, approximate prices of automated electronic systems, the cost of maintenance:
- in conjunction with an IT specialist, prepares recommendations for the two most optimal options for 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;
- prepares approximate engineering calculations for the construction and installation of an electronic collection system for the selected two optimal options;
- assists an IT specialist in the preparation of the Terms of Reference for the implementation of an electronic collection system for trucks and buses;
- other tasks of the team leader for the successful preparation of a feasibility study.

For the feasibility study of the introduction of a toll road:

- in conjunction with an engineer on artificial structures, is preparing technical solutions for putting the road on a paid basis, taking into account traffic safety requirements;
- together with the engineer for artificial structures, prepares technical solutions for the organization of the toll road;
- prepares approximate engineering calculations for the organization of paid traffic, including the construction and installation of the necessary equipment;
- together with an expert in economics, prepares calculations of the total annual amount of toll charges;
- Together with an expert in economics, he is preparing an economic analysis of the payback of a toll road using the HDM computer program.
- other tasks of the team leader for the successful preparation of a feasibility study.

Result of work:

On the feasibility study of the implementation of an electronic collection system for freight transport:

- ready-made extensive information on technical solutions for electronic systems for collecting tolls on vehicles in other countries;
- a finished analytical note describing at least five such systems in other countries, approximate prices of automated electronic systems, the cost of maintenance;
- ready recommendations of two optimal variants of technical solutions;
- ready-made approximate engineering calculations for the organization of paid traffic, including the construction and installation of the necessary equipment;

On the feasibility study of the introduction of a toll road:

- an agreed draft technical decisions on the organization of a toll road;
- ready approximate engineering calculations for the organization of a toll road.
- a ready-made economic analysis of the payback of a toll road using the HDM computer program.

Reporting requirements:

Initial report - after 10 days, a schedule of work is provided and a sequence with a clear indication of the planned deadlines for the development of regulatory legal acts; (information on performance is provided every month);

Monthly reports on the work done to the team leader.

Completion Report - full information on the work done and achievements with recommendations for further activities on the adopted documents.

Qualification requirements:

Higher education in the field of road construction.

Experience in the road industry for at least 10 years.

Experience in compiling estimates for the construction and repair of roads and road structures for at least 5 years.

Basic knowledge of compiling estimates for commissioning of automated control systems and electrical work is an advantage.

Knowledge of state and official languages at a level sufficient for the assignment.

Interpersonal skills and teamwork.

Place of assignment:	Days / months	Dates
The main place of performance		Additional services are
of services is the GRIP ADB	8 month	scheduled to begin on May 1,
office in MTR KR with periodic		2019, subject to ADB
visits to the project site, if		approval. The contract is
necessary.		valid until March 1, 2020.
Contract Period	Periodically	-
(specify if periodically)		