TERMS OF REFERENCE FOR CONSULTANTS

The Asian Development Bank (ADB) will engage the consultants following the ADB Procurement Policy (2017, as amended from time to time) and its associated project administration instructions and/or staff instructions. ADB will select a consulting firm based on the quality- and cost-based selection method using a 90:10 quality–cost ratio with simplified technical proposal. In addition to a firm, a national coordinator will be recruited separately using the individual selection method.

I. INTERNATIONAL FIRM: POLICY ADVICE AND CAPACITY BUILDING ON ROAD MAINTENANCE AND ASSET MANAGEMENT

A. Primary Expertise

1. Transport, engineering, and institutional development.

B. Terms of Reference Keywords

2. Road asset management, road maintenance, and axle load control.

C. Objective and Purpose of the Assignment

3. The consulting firm will assist the Mongolian Ministry of Road and Transport Development in addressing the incomplete regulatory framework, lack of sustainability of the road asset, and lack of private sector participation by (i) recommending suitable and implementable frameworks for road asset management systems; (ii) reviewing and enhancing the Law on Road implementation procedures including establishment of Road Board; and (iii) providing start-up support in adopting the improved road asset management (RAM) system. The technical assistance (TA) will supplement the planned assistance under the Regional Road Development Project (loan project), which will provide soft and hard measures on road maintenance, rehabilitation, and safety.

D. Experts Needed

4. The following experts will be required.

No.	Expertise or Position	Inputs in Person- Month	Primary Place of Assignment	Legal Expert	I.T. Expert	Required in Proposal
1	Road Transport Specialist /Team Leader	3.5	Ulan Bator, Mongolia	No	No	Yes
2	Road Asset Management Specialist	2.5	Ulan Bator, Mongolia	No	No	Yes
3	Road Institutional Development Specialist	2.5	Ulan Bator, Mongolia	No	No	Yes
4	Axle Load Control Specialist	2.5	Ulan Bator, Mongolia	No	No	Yes

Table 1: International Experts

No.	Expertise or Position	Inputs in Person- Month	Primary Place of Assignment	Legal Expert	I.T. Expert	Required in Proposal
1	Road Transport Specialist /Deputy Team Leader	9.0	Ulan Bator, Mongolia	No	No	Yes
2	Road Asset Management Specialist	6.0	Ulan Bator, Mongolia	No	No	Yes
3	Road Institutional Development Specialist	6.0	Ulan Bator, Mongolia	No	No	Yes
4	Axle Load Control Specialist	6.0	Ulan Bator, Mongolia	No	No	Yes

Table 2: National Experts

E. Detailed Terms of Reference

5. **Road Transport Specialists** (international/team leader 3.5 person-months and national /deputy team leader 9 person-months) will be transport specialists with minimum qualification requirements of: (i) 20 years of general and 15 years of specific (similar to the assignment) experiences with a degree in a relevant field (a post-graduate degree preferred) for the international specialist and (ii) 15 years of general and 10 years of specific (similar to the assignment) experiences with a degree in a relevant field for the national specialist.

6. They will act as a team leader and a deputy team leader. They will be responsible for managing the overall methodology, progress, suitability with client government's and Asian Development Bank's needs, and other TA implementation matters. They will ensure participation and involvement in the TA activities of various relevant stakeholders including, but not limited to, the Ministry of Road and Transport Development (MRTD) and other central and local governments, Road and Transportation Development Center (RTDC), Mongolian Road Association (MRA), maintenance companies along the project road, and logistics/trucking association. Together with a national coordinator to be selected separately through individual consultant selection, the team leader and deputy team leader will act as the focal persons of the TA implementation in communication with the executing agency and ADB.

7. **Road Asset Management Specialists** (international 2.5 person-month and national 6 person-months) should have minimum qualification requirements of: (i) 15 years of general and 10 years of specific (similar to the assignment) experiences with a degree in a relevant field (a post-graduate degree preferred) for the international specialist and (ii) 10 years of general and 5 years of specific (similar to the assignment) experiences with a degree in a relevant field for the national specialist.

8. They will be mainly responsible for *Output 1: Enhanced road asset management introduced* as described below:

- (i) assess applicability of the existing tools and provide the best suitable RAM system option for planning and prioritizing maintenance works in Mongolia as well as requirements for road condition data collection;
- (ii) review the drafts and provide recommendations for required procedures, regulations, and guidelines for implementing the Law on Road focusing on road maintenance fund and its management;
- (iii) recommend result-oriented business process and institutional setup for the organizational structure and standard operating procedure of MRTD and RTDC in

relation to RAM to enable effective implementation of the amended Law on Roads and associated low implementation procedures;

- (iv) evaluate long- and medium-term (5–10 years) road maintenance financing needs using the enhanced RAM system and recommend efficient mechanism to ensure sufficient revenues and budget allocation; and
- (v) provide a start-up support in preparing a 3-year road maintenance rolling program.

9. **Road Institutional Development Specialists** (international 2.5 person-month and national 6 person-months) should have minimum qualification requirements of: (i) 15 years of general and 10 years of specific (similar to the assignment) experiences with a degree in a relevant field (a post-graduate degree preferred) for the international specialist and (ii) 10 years of general and 5 years of specific (similar to the assignment) experiences with a degree in a relevant field for the national specialist.

10. They will be mainly responsible for *Output 2: Strategy prepared to enhance efficiency of maintenance implementation arrangements* as described below:

- develop a strategy for engaging the private sector more effectively in road maintenance, including further outsourcing of road maintenance works in a systematic way;
- (ii) prepare a roadmap for implementing the strategy with clear indicators and targets to monitor the change and performance of road maintenance operators;
- (iii) recommend ways to strengthen the road maintenance companies' human and technical capacity and business processes for preparing future divesting the road maintenance companies; and
- (iv) strengthen technical documents such as the standard bidding documents for various road maintenance works and the manual for maintenance supervision.

11. **Axle Load Control Specialists** (international 2.5 person-month and national 6 personmonths) should have minimum qualification requirements of: (i) 15 years of general and 10 years of specific (similar to the assignment) experiences with a degree in a relevant field (a postgraduate degree preferred) for the international specialist and (ii) 10 years of general and 5 years of specific (similar to the assignment) experiences with a degree in a relevant field for the national specialist.

12. They will be mainly responsible for *Output 3: Axle load control operation improved* as described below:

- (i) develop a strategy to combat vehicle overloading that will direct the MRTD in introducing implementable and stepwise approaches and cost-effective technologies to achieve reduced vehicle overloading;
- (ii) prepare a roadmap for implementing the strategy with clear indicators and targets to monitor the change and performance;
- (iii) recommend ways to strengthen the MRTD and RTDC business processes for effectively implementing the strategy and roadmap;
- (iv) recommend the strategic locations to control axle loads, and
- (v) prepare technical guidance documents to control overloaded vehicle and to calibrate and commission the weigh scales and other equipment necessary for measuring axle loads.

F. Deliverables

13. The following deliverables are expected.

Deliverables	Туре	Estimated Submission Date			
Inception Report	Report	31 July 2019			
Interim Report	Report	30 November 2019			
Report on Output 1	Report	29 February 2020			
Report on Output 2	Report	29 February 2020			
Report on Output 3	Report	29 February 2020			
Draft Final Report	Report	30 April 2020			
Final Report and Knowledge Product	Final Report	30 June 2020			

Table 3: Expected Deliverables from the International Firm

II. INDIVIDUAL: NATIONAL COORDINATOR

A. Basic Data

14. Professional group: C; job level: 3; expertise: engineering and project coordination; expertise group: engineering; and source: national.

B. Objective and Purpose of the Assignment

15. The national individual consultant will assist the MRTD in addressing the incomplete regulatory framework, lack of sustainability of the road asset, and lack of private sector participation by (i) recommending suitable and implementable frameworks for road asset management systems; (ii) reviewing and enhancing the Law on Road implementation procedures including establishment of Road Board; and (iii) providing start-up support in adopting the improved RAM system. The TA will supplement the planned assistance under the Regional Road Development Project (loan project), which will provide soft and hard measures on road maintenance, rehabilitation, and safety.

C. Scope of Work

16. The national coordinator will act as a liaison among the government, ADB TA team, and the TA consulting firm and report to ADB and the government on any issues that requires close attention of relevant parties. He/she will promote participation and active involvement of all relevant stakeholders including non-government organizations like Mongolian Road Association and maintenance companies.

D. Detailed Tasks and/or Expected Output

17. The national coordinator will (i) liaise with consulting firm, the road sector stakeholders including the MRTD, Ministry of Finance, the Road and Transportation Development Center, the Mongolian Road Association, and other government and non-government agencies; (ii) oversee overall day-to-day TA implementation and immediately report any emerging TA implementation issues to ADB and the MRTD; and (iii) encourage the full participation of stakeholders in a series of consultation meetings.

18. He/she will regularly report to ADB on TA implementation progress and any issues that require close attention from ADB in addition to providing inception, interim, draft-final, and final reports.

E. Minimum Qualification Requirements

19. The national coordinator must have a strong background in road maintenance, road asset management, and related development projects. He/she must possess a degree in relevant fields and at least 10 years of general work experience and at least 5 years of work experience relevant to the assignment. Work experience with ADB and other multilateral development organization will be an advantage.

Minimum General Experience	10 Years
Minimum Specific Experience (relevant to assignment)	5 Years
Regional/Country Experience	Required

F. Deliverables

20. The following deliverables are expected.

Deliverables	Туре	Estimated Submission Date
Inception Report	Report	30 March 2019
Interim Report	Report	30 November 2019
Draft Final Report	Report	30 April 2020
Final Report	Final Report	30 June 2020

Table 4: Expected Deliverables from the National Coordinator

G. Schedule and Places of Assignment

21. The national coordinator will be based in Ulaanbaatar, Mongolia. He/she will travel intermittently to field especially to the project aimags of Tuv, Darkhan, and Selenge when necessary.