



# Technical Assistance Report

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Project Number: 49295-001  
Policy and Advisory Technical Assistance (PATA)  
November 2015

## Mongolia: Public–Private Partnership in Urban Public Transport Sector of Ulaanbaatar (Financed by the Public–Private Infrastructure Advisory Facility)

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Asian Development Bank

## CURRENCY EQUIVALENTS

(as of 14 October 2015)

Currency unit	–	togrog (MNT)
MNT1.00	=	\$0.0005016
\$1.00	=	MNT1,993.50

## ABBREVIATIONS

ADB	–	Asian Development Bank
BRT	–	bus rapid transit
MFF	–	multitranche financing facility
MGU	–	Municipal Government of Ulaanbaatar
PPP	–	public–private partnership
TA	–	technical assistance

## NOTE

In this report, "\$" refers to US dollars.

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## POLICY AND ADVISORY TECHNICAL ASSISTANCE AT A GLANCE

<b>1. Basic Data</b>		<b>Project Number: 49295-001</b>	
<b>Project Name</b>	Public-Private Partnership in Urban Public Transport Sector of Ulaanbaatar (Financed by the Public-Private Infrastructure Advisory Facility)	<b>Department /Division</b>	EARD/EATC
<b>Country</b>	Mongolia	<b>Executing Agency</b>	Municipal Government of Ulaanbaatar
<b>2. Sector</b>		<b>Financing (\$ million)</b>	
✓ Transport	Urban public transport		0.35
		<b>Total</b>	<b>0.35</b>
<b>3. Strategic Agenda</b>		<b>Climate Change Information</b>	
Inclusive economic growth (IEG)	Pillar 2: Access to economic opportunities, including jobs, made more inclusive	Climate Change impact on the Project	Low
<b>4. Drivers of Change</b>		<b>Gender Equity and Mainstreaming</b>	
Knowledge solutions (KNS)	Knowledge sharing activities	No gender elements (NGE)	✓
Partnerships (PAR)	Implementation		
Private sector development (PSD)	Private Sector Promotion of private sector investment		
<b>5. Poverty Targeting</b>		<b>Location Impact</b>	
Project directly targets poverty	No	Not Applicable	
<b>6. TA Category:</b>	B		
<b>7. Safeguard Categorization</b>	Not Applicable		
<b>8. Financing</b>			
<b>Modality and Sources</b>		<b>Amount (\$ million)</b>	
<b>ADB</b>		<b>0.00</b>	
None			0.00
<b>Cofinancing</b>		<b>0.35</b>	
Public-Private Infrastructure Advisory Facility			0.35
<b>Counterpart</b>		<b>0.00</b>	
None			0.00
<b>Total</b>		<b>0.35</b>	
<b>9. Effective Development Cooperation</b>			
Use of country procurement systems	No		
Use of country public financial management systems	No		



## I. INTRODUCTION

1. This policy and advisory technical assistance (TA) has been developed at the request of the Municipal Government of Ulaanbaatar (MGU). Through this TA, the Asian Development Bank (ADB) will support the MGU to reach agreements on (i) a bus rapid transit (BRT) service plan and a BRT business plan with bus operators; and (ii) e-ticketing system implementation with the MGU, bus operators, and e-ticketing system investors. In September 2015, ADB and the MGU reached an understanding on the objectives, scope, implementation arrangements, cost, and terms of reference of the TA. The design and monitoring framework is in Appendix 1.<sup>1</sup> The TA is included in ADB's country operations business plan for Mongolia, 2015.<sup>2</sup>

## II. ISSUES

2. Ulaanbaatar, the capital city of Mongolia, has 1.37 million residents. The city was developed according to Soviet-style urban planning concepts from the 1950s. Most of the city today is the result of construction from 1960 to 1985. Urban development and expansion have been accelerated by economic growth fueled by the mining boom and population influx from rural areas. The city center still retains an urban area suitable for public transport and pedestrians, but it has been transformed into a high-density urban area by new high-rise buildings in the city center and surrounding areas, and by the spread of low-income *ger*<sup>3</sup> areas around the city center. Effective mobility and accessibility solutions for residents have not kept pace with increasing travel demand and the rapid increase of motorization.<sup>4</sup> Recent economic growth has led to rapid motorization, resulting in traffic congestion, air pollution from vehicles, and traffic safety problems throughout the city.<sup>5</sup>

3. Public transport is provided by two government-owned and 11 private operators (50 trolley buses and 600 buses in total) that served almost 60% of urban travel demand in 2015. However, the modal share of public transport is decreasing, as motorization has accelerated during the last five years. Public transport has neither been expanded nor improved properly to accommodate new urban development and the increased mobility needs of urban residents. The service quality of public transport has been constrained by increasing traffic congestion, outdated public transport management without service monitoring, and poor coordination among the urban development agencies including Road Department and Urban Transport Department. These factors have also had a negative impact on the economic growth of the city and quality of life.

4. Despite deficiencies in the public transport service environment, the MGU has maintained control over the public transport industry by providing fare compensation to 13 operators, establishing a bus fund to supply new vehicles to the operators with installment contracts, consolidating small private operators into bigger consortia, and maintaining low fares for the benefit of low-income passengers. However, the MGU's efforts have so far failed to attract passengers or reverse the declining service standard.

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<sup>1</sup> The TA first appeared in the business opportunities section of ADB's website on 7 October 2015.

<sup>2</sup> ADB. 2015. *Country Operations Business Plan: Mongolia, 2015*. Manila.

<sup>3</sup> *Ger* is a portable, round tent covered with skins or felt and used as a dwelling by nomads in the steppes of Central Asia.

<sup>4</sup> The number of vehicles registered in Ulaanbaatar has increased from 220,000 vehicles in 2010 to 480,000 vehicles in 2014.

<sup>5</sup> Five-year (2011–2015) compounded annual gross domestic product (PPP) growth rate was 9.2%.

5. To restore and improve declining public transport services in Ulaanbaatar, ADB approved the Urban Transport Development Investment Program in 2012.<sup>6</sup> The Government of Mongolia signed the loan agreement in 2015, and the Mongolian Parliament ratified the multitranche financing facility (MFF) in May 2015.<sup>7</sup> The implementation of the MFF tranche 1 has started in May 2015. The MFF, which includes three tranches, focuses on developing a citywide BRT network with (i) exclusive median BRT lanes; (ii) fully enclosed modern BRT stations; and (iii) modern information technology systems, including a bus management system, a bus information system, and an e-ticketing system.

6. Since the approval of the MFF in 2012, there have been two changes in the public transport sector: (i) there are now fewer bus operators due to restructuring,<sup>8</sup> and (ii) the public-private partnership (PPP) modality was introduced into the e-ticketing system. These changes created the need for specialized assistance from ADB before the MGU implements the BRT system.

7. The implementation of the BRT system is a big challenge both for the MGU and the public transport industry, as installation and operation of the BRT requires institutional arrangements that can provide service and business plan support, and assist with the introduction of an e-ticketing system. The TA will provide policy and advisory services to the MGU and public and private bus operators and e-ticketing system investors to resolve institutional challenges. Successful implementation of the outputs of the TA will benefit the MGU, bus operators, the investors, and all public transport users in Ulaanbaatar by improving the sustainability and quality of the existing BRT system.

### III. THE POLICY AND ADVISORY TECHNICAL ASSISTANCE

#### A. Impact and Outcome

8. The impact will be improved public transport services for the residents of Ulaanbaatar. The outcome will be the establishment of an efficient and sustainable BRT operational framework in Ulaanbaatar by 2017.

#### B. Methodology and Key Activities

9. The TA will be conducted through a series of consultations leading to agreement with the MGU, bus operators, and investors on (i) BRT service and business plans, and (ii) the implementation of an e-ticketing system through PPP.

10. A recommended BRT service plan will be (i) prepared based on the passenger demand profile forecasted for the BRT corridor using a public transport analysis method,<sup>9</sup> and

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<sup>6</sup> ADB. 2012. *Report and Recommendation of the President to the Board of Directors: Proposed Multitranche Financing Facility and Technical Assistance Grant to Mongolia for the Urban Transport Development Investment Program*. Manila.

<sup>7</sup> Under tranche 1, two loans (Loans 2934-MON and 2935-MON) and one technical assistance grant (TA 0315-MON) were signed.

<sup>8</sup> Three government-owned companies were restructured into two companies from three companies, and 26 private companies were reduced to 11 companies. The private companies established the Ulaanbaatar Bus Operators Association, which increased their influence on public transport policy.

<sup>9</sup> Public transport analysis methods included passenger demand analysis, and station-to-station and time of day passenger demand profile analysis.



(ii) generated on the basis of service criteria.<sup>10</sup> The service plan will be interpreted according to business plan options.<sup>11</sup> In preparing business plan options, the bus operators' financial status and company structure, and the bus industry's regulations will be considered. The service and business plans for BRT will be discussed and agreed on by the bus operators and the MGU.

11. For the implementation of the e-ticketing system through PPP, a detailed review of the existing PPP agreement between the MGU, bus operators, and e-ticketing investors will be conducted to identify potential risks. The review will focus on the financial implications of the PPP general agreement on operators, its financial sustainability, and its legal soundness. On the basis of the review and consultation with the MGU, operators, and investors, a recommended PPP agreement will be prepared for consideration and agreement by the MGU, operators, and investors.

12. The process and outputs of the TA activities will be documented, and two knowledge products (the first on the BRT service and business plans, and the second on using PPP to implement the e-ticketing system) will be prepared and disseminated to ADB's developing member countries.

13. The TA will include three outputs:

- (i) Output 1: BRT service plan and business plan between the MGU and bus operators for the introduction of BRT system proposed;
- (ii) Output 2: PPP agreement for e-ticketing system operation between the MGU, bus operators, and e-ticketing investors proposed; and
- (iii) Output 3: Knowledge products on BRT service plan and business plan development, and PPP for e-ticketing system prepared.

14. Possible risks include government change and disagreement between the MGU, operators, and investors that could delay agreements on BRT service plan and business plan, and the introduction of e-ticketing through PPP. Continuous policy dialogue with the executing agency and selection of highly qualified international consultants with specific experience in developing public transport business plans and implementing e-ticketing projects through PPP will mitigate these risks.

### **C. Cost and Financing**

15. The TA is estimated to cost \$385,000, of which \$350,000 will be financed on a grant basis by the Public–Private Infrastructure Advisory Facility and administered by ADB. The MGU will provide counterpart support in the form of counterpart staff, suitably furnished office space with utilities and telecommunication access, information materials, data, and other documents as needed, and other in-kind contributions.

### **D. Implementation Arrangements**

16. The executing agency is the MGU. The Urban Transport Department, which is responsible for developing and supervising Ulaanbaatar's public transport policy and e-ticketing system, will be the implementing agency. The Public Transport Committee, which is the steering committee for the Urban Transport Development Investment Program (para. 5), will serve as an

<sup>10</sup> Service criteria mainly included BRT service frequency or headways, in-bus congestion limit, vehicle types, and quality and travel time regularity.

<sup>11</sup> The business plan options include area contract or route contract with net cost or gross cost and allocation of different operators' service routes to BRT service plan.

oversight body for the TA. The implementing agency will provide office accommodation, public transport-related documents, statistics, and the remuneration of counterpart staff required for the implementation of the TA.

17. The TA will commence on 30 November 2015 and will be completed on 30 April 2016. It will require a total of 26 person-months of consulting services, comprising 9 person-months of inputs from four international consultants and 17 person-months of inputs from five national consultants. ADB will engage individuals, as the TA requires specific expertise and experience. The consultants will be recruited in accordance with ADB's Guidelines on the Use of Consultants (2013, as amended from time to time). The international and national consultant teams will comprise (i) public transport specialist, (ii) public transport PPP specialist, (iii) transport PPP legal specialist, (iv) transport financial specialist, and (v) national project coordinator. All consultants will be contracted with lump-sum-based contracts. All disbursements under the TA will be carried out in accordance with ADB's *Technical Assistance Disbursement Handbook* (2010, as amended from time to time). Trainings and seminars will be administered by the consulting team.

#### **IV. THE PRESIDENT'S DECISION**

18. The President, acting under the authority delegated by the Board, has approved ADB administering technical assistance not exceeding the equivalent of \$350,000 to the Government of Mongolia to be financed on a grant basis by the Public–Private Infrastructure Advisory Facility for Public–Private Partnership in Urban Public Transport Sector of Ulaanbaatar, and hereby reports this action to the Board.

## DESIGN AND MONITORING FRAMEWORK

<p><b>Impact the Technical Assistance Project is Aligned with</b></p> <p>Public transport services for the residents of Ulaanbaatar improved (Urban Development Master Plan Update)<sup>a</sup></p>
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Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
<p><b>Outcome</b></p> <p>Efficient and sustainable BRT operational framework established in Ulaanbaatar by 2017</p>	<p>By 2017</p> <p>a. 100% of BRT service operators sign agreements with the MGU (2015 baseline: not applicable)</p> <p>b. The percentage of BRT buses with e-ticketing system through PPP increases to 100% in Ulaanbaatar (2015 baseline: 0%)</p>	<p>Annual report of the Municipality of Ulaanbaatar and monthly reports of Urban Transport Department</p>	<p>MGU change due to the national government change delays agreements on BRT operational framework and e-ticketing PPP</p>
<p><b>Outputs</b></p> <p>1. BRT service plan and business plan between the MGU and bus operators for the introduction of BRT system proposed</p>	<p>1a. BRT service plan and business plan are reviewed and general consensus made between the MGU and operators by 2016 (2015 baseline: not applicable)</p>	<p>1a. Biannual progress report from the executing agency</p>	<p>Consultation process prolonged due to unexpected disagreement among the MGU and operators on BRT service and business plan</p>
<p>2. PPP agreement for e-ticketing system operation between the MGU, bus operators, and e-ticketing investors proposed</p>	<p>2a. PPP agreement is confirmed between the MGU, operators, and investors by 2016 (2015 baseline: not applicable)</p>	<p>2a. Biannual progress report from the executing agency</p>	<p>Consultation process prolonged due to unexpected disagreement among the MGU, operators, and investors on e-ticketing PPP</p>
<p>3. Knowledge products on BRT service plan and business plan development, and PPP for e-ticketing system prepared</p>	<p>3a. Two knowledge products produced by April 2016 (2015 baseline: not applicable)</p>	<p>3a. Knowledge product deliverables by the consulting team</p>	

<p><b>Key Activities with Milestones</b></p> <ol style="list-style-type: none"> <li>1. BRT service plan and business plan between the MGU and bus operators for the introduction of BRT system proposed             <ol style="list-style-type: none"> <li>1.1 Recruit and field consultants after notice to proceed (November 2015)</li> <li>1.2 Assess and prepare public transport policy of the MGU (December 2015)</li> <li>1.3 Review cost structure of bus companies and assess their financial status (December 2015)</li> <li>1.4 Review legal documents on existing bus operation regulations and produce legal risks report (November 2015) [PSD]</li> <li>1.5 Compare and select bus service options and prepare a business plan for BRT (December 2015)</li> <li>1.6 Prepare a standard cost for bus operation, assess the financial sustainability of operators, and consult with operators on a recommended standard cost (January 2016)</li> <li>1.7 Conduct consultation with the MGU and operators on a BRT service plan and business plan (January–February 2016) [G/CD]</li> </ol> </li> </ol>
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<b>Key Activities with Milestones</b>	
1.8	Prepare recommended legal agreements for BRT business plan and consult with the MGU and operators (January–February 2016) [PSD]
1.9	Prepare recommended final general agreement between the MGU and operators on BRT service plan and business plan (February–March 2016)
2.	PPP agreement for e-ticketing system operation between the MGU, bus operators, and e-ticketing investors proposed
2.1	Recruit and field consultants after notice to proceed (November 2015)
2.2	Review existing PPP agreement on e-ticketing system and analyze potential risks (December 2015) [PSD]
2.3	Collect views from the MGU, operators, and PPP investors. (December 2015–January 2016) [PSD]
2.4	Conduct multiparty consultations to finalize PPP agreement (January–February 2016) [G/CD] [PSD]
2.5	Analyze the financial model of the PPP and estimate the impact of e-ticketing transaction charges on operators' financial performance (February 2016)
2.6	Prepare recommendations for transaction charge rate for PPP for the MGU (March 2016) [PSD]
2.7	Produce recommended final PPP agreement for e-ticketing system operation and conduct consultation with the MGU, operators, and investors (March 2016) [PSD]
3.	Knowledge products on BRT service plan and business plan development, and PPP for e-ticketing system prepared
3.1	Prepare draft knowledge products (March 2016) [KNS]
3.2	Prepare final knowledge products (April 2016) [KNS]
<b>Inputs</b>	
	Public–Private Infrastructure Advisory Facility <sup>b</sup> : \$350,000 (grant)
	Note: The MGU will provide counterpart support in the form of counterpart staff, suitably furnished office space with utilities and telecommunication access, information materials, data, and other documents as needed, and other in-kind contributions.
<b>Assumptions for Partner Financing</b>	
	Not applicable.

BRT = bus rapid transit, G/CD = good governance and capacity development, KNS = knowledge solutions, MGU = Municipal Government of Ulaanbaatar, PPP = public–private partnership, PSD = private sector development and operations.

<sup>a</sup> Municipal Government of Ulaanbaatar. 2013. *Urban Development Master Plan Update*. Ulaanbaatar.

<sup>b</sup> Administered by the Asian Development Bank.

Source: Asian Development Bank.

**COST ESTIMATES AND FINANCING PLAN**  
(\$'000)

Item	Amount
<b>Public–Private Infrastructure Advisory Facility<sup>a</sup></b>	
1. Consultants	
a. Remuneration and per diem	
i. International consultants	229.0
ii. National consultants	80.0
b. International and local travel	23.0
c. Reports and communications <sup>b</sup>	3.0
2. Training and seminars <sup>c</sup>	5.0
3. Contingencies	10.0
<b>Total</b>	<b>350.0</b>

Note: The technical assistance is estimated to cost \$385,000, of which contributions from the Public–Private Infrastructure Advisory Facility are presented in the table above. The MGU will provide counterpart support in the form of counterpart staff; suitably furnished office space with utilities and telecommunication access; information materials, data, and other documents as needed; and other in-kind contributions. The value of government contribution is estimated to account for 10% of the total technical assistance cost.

<sup>a</sup> Administered by the Asian Development Bank.

<sup>b</sup> Includes cost of written translation of documents and interpretation.

<sup>c</sup> Includes venue rental, interpretation, translation and other logistics, and administration costs for two trainings and two seminars. The item will be administered by the consulting team.

Source: Asian Development Bank estimates.

## OUTLINE TERMS OF REFERENCE FOR CONSULTANTS

### A. Objective and Scope

1. The consulting services will assist the Municipal Government of Ulaanbaatar (MGU) and the public transport sector to resolve institutional challenges at the start of the Asian Development Bank's multitranche financing facility for the Urban Transport Investment Program. The policy and advisory technical assistance (TA) will result in the preparation of a recommended general agreement on service and business plans for bus rapid transit (BRT) between the MGU and bus operators, and a general agreement on an e-ticketing system public-private partnership (PPP) agreement among the MGU, bus operators, and e-ticketing system PPP investors.

2. The TA will be implemented through a series of consultations with the MGU, operators and e-ticketing system PPP investors stakeholders, and the consulting team will play both a facilitators' role (by providing best practice examples) and a moderators' role (during the consultation meetings). The consulting team will record the discussions and issues raised by the stakeholders, and prepare an agenda to discuss and resolve these issues at subsequent consultations. The consultation process should result in an agreement among stakeholders on BRT service and business plan and e-ticketing PPP.

### B. Consulting Team

3. The TA requires a total of 26 person-months of consulting services, comprising 9 person-months of inputs from four international consultants and 17 person-months of inputs from five national consultants.

#### 1. International Consultants (9 person-months)

4. **Public transport specialist and team leader** (3 person-months). The team leader will have at least 20 years of experience in transport and at least 10 years of experience in public transport, including experience in developing countries. The specialist will have a master's degree or higher in public transport or public policy-related field and must be highly proficient in English. The specialist is responsible for leading and coordinating the international and national experts and will

- (i) consolidate progress reports (inception, interim, draft final, and final reports);
- (ii) coordinate the team's work schedule for integrating survey, consultation, and outputs;
- (iii) plan and coordinate trainings and workshops; and
- (iv) coordinate knowledge product preparation and outputs.

5. The specialist will also be responsible for producing the BRT service plan and business plan needed for BRT operation. The main tasks related to this include the following:

- (i) assess and prepare public transport policy of the MGU;
- (ii) compare different BRT service plan options and business plan options, and prepare appropriate BRT service and business plans for Ulaanbaatar;
- (iii) conduct consultation with the MGU and operators on service plan and business plan for Ulaanbaatar BRT;
- (iv) prepare recommended general agreement between the MGU and operators on bus service plan and business plan for Ulaanbaatar BRT;

- (v) provide training on public transport policy and public transport service and business plan to the MGU and operators; and
- (vi) produce knowledge products.

6. **Public transport public–private partnership (transport economist) specialist** (2 person-months). The specialist will have at least 20 years of experience in transport and at least 10 years of experience in public transport, including experience in public transport PPP projects. The specialist will have a master's degree or higher in transport economics or related field, and must be highly proficient in English. The specialist is responsible for advising the government on the e-ticketing PPP agreement. The tasks of the specialist include the following:

- (i) review existing PPP general agreement on e-ticketing system, and analyze potential risks;
- (ii) collect views from the MGU, operators, PPP investors, and prepare consultation agenda;
- (iii) conduct multiparty consultations in generating PPP agreement with the MGU, operators, PPP investors;
- (iv) produce recommended final PPP agreement for e-ticketing system operation;
- (v) provide training on public transport policy to the MGU, operators, PPP investors;
- (vi) produce the inception, interim, draft final, and final reports; and
- (vii) produce knowledge product on BRT e-ticketing system PPP of Ulaanbaatar.

7. **Transport public–private partnership legal specialist** (2 person-months). The specialist will have at least 10 years of experience in legal practice and at least five years of experience in transport-related legal transactions on PPP projects. The specialist will have a master's degree or higher in law or a related field, and must be highly proficient in English. The specialist is responsible for advising the MGU on the legal framework for e-ticketing PPP transactions and producing e-ticketing PPP legal documents. The tasks of the specialist include the following:

- (i) provide legal review of e-ticketing PPP agreement, and verify the compliance of e-ticketing PPP agreement to the national PPP framework;
- (ii) review existing e-ticketing PPP general agreement and identify potential legal risks;
- (iii) provide legal review of existing bus operation regulations and prepare a regulatory framework for BRT;
- (iv) prepare recommended legal agreements for BRT business plan and e-ticketing PPP and consult with stakeholders;
- (v) prepare final recommended legal agreement documents for BRT business plan and e-ticketing PPP;
- (vi) produce the inception, interim, draft final, and final reports on the legal aspect of the business plan and e-ticketing PPP; and
- (vii) produce knowledge product chapter on the legal aspect of BRT business plan transport e-ticketing system PPP of Ulaanbaatar.

8. **Transport financial specialist** (2 person-months). The specialist will have at least 15 years of experience in financial analysis and at least five years of experience in public transport- and PPP-related financial analysis. The specialist will have a master's degree or higher in finance or a related field, and an accountancy qualification such as certified accountant, certified public accountant, certified financial analyst, and must be highly proficient in English. The specialist is responsible for advising the TA team members about the financial implications of the BRT service and business plan and e-ticketing PPP, producing financially sustainable and

equitable transaction recommendations, and helping the MGU reach a decision on a public transport incentive and disincentive scheme. The tasks of the specialist include the following:

- (i) review cost structure of bus companies and assess the financial status of bus companies' operations;
- (ii) prepare a recommended standard cost of bus operation and consult with operators on a recommended standard cost for agreement;
- (iii) estimate the financial impact of different e-ticketing transaction charges on operators;
- (iv) prepare recommendations for transaction charge rate for e-ticketing PPP;
- (v) estimate the financial implication of the BRT service and business plans, and report the findings to the MGU and TA team members;
- (vi) provide financial-related inputs to the inception, interim, draft final, and final reports; and
- (vii) produce knowledge product chapter on financial aspect of BRT service plan and business plan, and BRT e-ticketing system PPP of Ulaanbaatar.

## **2. National Consultants (17 person-months)**

9. **Public transport specialist and deputy team leader** (4 person-months). The deputy team leader will have at least 15 years of experience in transport and at least 5 years of experience in public transport. The specialist will have a bachelor's degree or higher in economics or a public policy-related field and good command of English. The specialist is responsible for leading and coordinating the national experts and will

- (i) assist the team leader in consolidating progress reports (inception, interim, draft final, and final reports);
- (ii) assist the team members in coordinating the team's work schedule for integrating surveys, consultations, and outputs;
- (iii) organize and coordinate trainings and workshops;
- (iv) coordinate meetings with the MGU, operators, and PPP investors for international consultants; and
- (v) communicate with the MGU during TA implementation.

10. The specialist is also responsible for preparing background information in producing bus industry needed for BRT operation. The related tasks include the following:

- (i) collect public transport policy of the government;
- (ii) assist the international public transport specialist in preparing bus service plan options and preparing service plan for BRT;
- (iii) coordinate consultation meetings with the MGU and operators on BRT business plan options;
- (iv) assist the international public transport specialist in preparing recommended general agreement between the MGU and operators on BRT service and business plans;
- (v) coordinate training on public transport policy and development of BRT service and business plans;
- (vi) prepare a Mongolian version of the inception, interim, draft final, and final reports; and
- (vii) prepare a Mongolian version of the knowledge product on BRT service and business plan development.

11. **Public transport public-private partnership specialist** (3 person-months). The specialist will have at least 15 years of experience working on public sector projects, including



PPP projects. The specialist will have a bachelor's degree or higher in economics or a related field and good command of English. The specialist is responsible for assisting the international PPP specialist and advising the MGU on the e-ticketing PPP agreement. The tasks of the specialist include the following:

- (i) collect and review existing PPP general agreement on e-ticketing system and assist the international PPP specialist in analyzing potential risks;
- (ii) assist the international PPP specialist in (a) collecting views from the MGU, operators, PPP investors, and all other stakeholders, and (b) preparing consultation agenda;
- (iii) coordinate multiparty consultations in generating a PPP agreement with the MGU, operators, PPP investors;
- (iv) assist the international PPP specialist in producing a recommended final PPP agreement for e-ticketing system operation;
- (v) coordinate training on public transport policy for the MGU, operators, PPP investors;
- (vi) produce a Mongolian version of the inception, interim, draft final, and final reports; and
- (vii) produce a Mongolian version of the knowledge product on public transport e-ticketing system PPP policy.

**12. Transport public-private partnership legal specialist** (3 person-months). The specialist will have at least 10 years of experience in legal practice and at least five years of experience in transport-related legal transactions on PPP projects. The specialist will have a bachelor's degree or higher in law or a related field and good command of English. The specialist is responsible for assisting the international PPP legal specialist in producing e-ticketing PPP legal documents and advising the MGU on the legal framework for e-ticketing PPP transactions. The tasks of the specialist include the following:

- (i) assist the international PPP legal specialist in reviewing the Mongolian national PPP framework and e-ticketing PPP agreement, and verifying the compliance of the e-ticketing PPP agreement to the national PPP framework;
- (ii) assist the international PPP legal specialist in reviewing the existing e-ticketing PPP general agreement and identifying potential legal risks;
- (iii) assist the international PPP legal specialist in reviewing existing bus operation regulations, and preparing a regulatory framework;
- (iv) assist the international PPP legal specialist in preparing recommended legal agreements for the BRT business plan and e-ticketing PPP, and consulting with the MGU, operators and PPP investors;
- (v) assist the international PPP legal specialist in preparing final recommended legal agreement documents for the BRT business plan and e-ticketing PPP;
- (vi) produce a Mongolian version of the inception, interim, draft final, and final reports on the legal portion of the reports; and
- (vii) produce a Mongolian version of knowledge products on legal aspects of the BRT service and business plan development and BRT e-ticketing system PPP produced by the international consultants.

**13. Financial specialist** (3 person-months). The specialist will have at least 15 years of experience in financial analysis and at least five years of experience in transport- and PPP-related financial analysis. The specialist will have a bachelor's degree or higher in finance or a related field, and good command of English. The specialist is responsible for advising the TA team members about the financial implications of the service and business plan and e-ticketing PPP, producing financially sustainable and equitable transaction recommendations, and helping

the MGU reach a decision on a public transport incentive and disincentive scheme. The tasks of the specialist include the following:

- (i) assist the international financial specialist in reviewing cost structure of bus companies and assessing the financial status of bus companies;
- (ii) collect operators' bus operation cost data and assist the international specialist in consulting with operators on a recommended standard cost for agreement;
- (iii) assist the international specialist in estimating the financial impact of different e-ticketing transaction charges on operators;
- (iv) assist the international consultant in preparing recommendations for transaction charge rate for e-ticketing PPP;
- (v) assist the international specialist in estimating the financial implication of the recommended BRT service and business plans, and reporting the findings to the MGU and TA team members;
- (vi) produce a Mongolian version of the inception, interim, draft final, and final reports on the financial portion of the report; and
- (vii) produce a Mongolian version of knowledge products on financial aspect of BRT service and business plan development, and public transport e-ticketing system PPP produced by the international consultants.

14. **Project coordinator** (4 person-months). The coordinator will have at least 10 years of experience in project coordination, including in transport sector projects. The specialist will have a bachelor's degree or higher, and be fluent in English. The detailed tasks include, but are not limited to, the following:

- (i) liaise with the executing and implementing agencies, and consultants in the administration and monitoring of the project, and prepare relevant correspondence;
- (ii) support missions, and organize and participate in meetings with the executing agency, consultants, and stakeholders;
- (iii) facilitate and contribute to the work of international consultants as requested by the project officers;
- (iv) assist in translation and interpretation between English and Mongolian for meetings and reports;
- (v) provide overall management of the TA team office on a daily basis; and
- (vi) manage local transportation for the TA team.

### C. Reporting Requirements

15. The consulting team will be engaged in the TA implementation intermittently from November 2015 to April 2016 and produce the following deliverables:

- (i) Reports: (a) inception report, one month after TA commencement; (b) interim report, three months after TA commencement; (c) draft final report, five months after TA commencement; and (d) final report, six months after TA commencement; and
- (ii) Knowledge products: (a) draft knowledge product, five months after TA commencement; and (b) final knowledge product, six months after TA commencement.