



Completion Report

Project Number: 49295-001
Technical Assistance Number: 8985
May 2017

Mongolia: Public–Private Partnership in Urban Public Transport Sector of Ulaanbaatar

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TA Number, Country, and Name: TA 8985-MON: Public-Private Partnership in Urban Public Transport Sector of Ulaanbaatar			Amount Approved: \$350,000 Revised Amount: Not Applicable	
Executing Agency: Municipal Government of Ulaanbaatar (MUB)		Source of Funding: Public-Private Infrastructure Advisory Facility	Amount Undisbursed: \$13,119.41	Amount Utilized: \$336,880.59
TA Approval Date: 5 Nov 2015	TA Signing Date: 1 Dec 2015	Fielding of First Consultant: 24 Jan 2016	TA Completion Date Original: 30 Apr 2016 Actual: 30 Apr 2016	Account Closing Date Actual: 21 Jul 2016 Original: 30 Jul 2016

Description

Ulaanbaatar is the capital city of Mongolia with 1.3 million population. The city is experiencing high motorization during the last 5 years (2011–2016), the number of vehicles registered had risen from 210,000 in 2011 to 450,000 in 2015. The rapid motorization and outdated public transport service resulted in the decline of public transport patronage and increased traffic congestion. To improve public transport services in Ulaanbaatar, Asian Development Bank (ADB) approved the Urban Transport Development Investment Program in 2012.¹ The program, which includes three tranches, will develop a citywide bus rapid transit (BRT) network. Since the approval of the program in 2012, there have been two changes in the public transport sector: (i) private operation of 2,200 buses had changed to vehicle-hour based service contract between the government and operators; and (ii) the public-private partnership (PPP) modality was introduced into the e-ticketing system. These changes created a dispute between the government and the operators over the vehicle-hour rate and decline of the number of passengers and fare revenues due to the improper implementation of the e-ticketing system.

This technical assistance (TA) provided policy and advisory services to the MUB and public and bus operators and e-ticketing system investors to resolve institutional challenges, and establish a healthy public transport operation environment before the implementation of city-wide BRT by the program.

Expected Impact, Outcome, and Outputs

The expected impact was improved public transport services for the residents of Ulaanbaatar. The expected outcome was the establishment of an efficient and sustainable BRT operational framework in Ulaanbaatar by 2017. The outputs included: (i) proposals for a BRT service plan and business plan between the MUB and bus operators for the introduction of the BRT system; (ii) proposals for a PPP agreement for e-ticketing system operation between the MUB, bus operators, and e-ticketing investors; and (iii) preparation of knowledge products on both outputs.

Delivery of Inputs and Conduct of Activities

The planned inputs were 26 person-months of consulting services (9 person-months international and 17 person-months national) from December 2015 to April 2016. Consultants were engaged in January 2016 through individual consultant selection (ICS). ADB engaged four international consultants (three were engaged through a firm), and five national consultants. The consultants were experts in public-private partnerships and financing in public transport. The TA was completed on time and within the budget allocation. The TA has utilized \$336,880.59 for TA activities and savings generated by the TA was due to savings in consulting services costs, training costs, and exchange rate fluctuation. A projector for training use and travel demand software were procured through the TA. These were handed over to the MUB on 28 April 2016.

An inception meeting was held on 22–27 February 2016 to review the problems of the service contract and the new e-ticketing system in Ulaanbaatar and to consolidate the work plan for the team. The inception report was submitted on 9 March 2016. A series of consultations with various stakeholders were held during the inception meeting and through three workshops organized that included private and public transport operators, Ulaanbaatar Urban Transport Department (UTD) employees, smartcard operators and investors, and the academe.² A review mission together with the BRT Travel Demand Forecasting training was held on 13–15 April 2016. The final TA workshop with the Travel Demand Forecasting training was held from 25–29 April 2016. The final report was submitted on 28 April 2016.

The consultants produced the intended outputs and performed satisfactorily. The consultants reviewed legal, financial, and institutional documents pertaining to the smart card contracts and public transport operating contracts. They also

¹ ADB. 2012. *Report and Recommendation to the President of the Proposed Multitranches Financing Facility in Mongolia: Urban Transport Development Investment Program*. Manila.

² Investors from bus companies such as Autobus Negdel, Atibus LLC, and academicians from the School of Construction and School of Transport, Mongolian University of Science and Technology.

conducted consultations with officials from the UTD and the MUB, private bus companies, and smart card operators. On this basis, they prepared the Ulaanbaatar BRT service and business plan, a living document intended to provide the most up to date information on the planned Ulaanbaatar BRT System. They also developed a standard PPP contract for the e-ticketing system which is now being used by the MUB. The consultants' final report included: (i) an overview of the challenges and solutions for the smart card system; (ii) an assessment of the financial sustainability of the smartcard system; (iii) an overview of BRT structure and service plan; and (iv) financial assessment of the new BRT system.

Resulting from ADB's assessment of the MUB's capacity in developing a BRT business and operational plan, the TA has supported travel demand forecasting model development for MUB to build the passenger demand model required for the BRT's business plan. It also organized training on the use of the software for the transport related staff. This capacity building exercise is also useful for future use of the program. MUB's performance as the executing agency was satisfactory. It facilitated the participation of transport stakeholders, government agencies, and operators to reach consensus on the business and service plan of the BRT.

ADB performance was satisfactory. It closely monitored the work progress of the consultants through inception and review missions. The TA was completed on time by combining several missions and trainings for the staff of MUB.

Evaluation of Outputs and Achievement of Outcome

The TA delivered the intended outputs and outcome. The TA developed the Ulaanbaatar BRT service and business plan for MUB. This was reviewed by various stakeholders and consensus was reached between MUB and the bus operators. The revised PPP agreement for e-ticketing system operation was also produced and delivered to the legal department and urban transport department of MUB and e-ticketing system operator.

Through the consultations and workshops conducted, problems with revenue collection due to restructuring, fare evasion, and changes in public transport routes were resolved. Some of the recommendations proposed by the TA were optimization of the bus routes; enforcement in fare collection, and switching the entire basis of the standard cost and minimum revenue guarantee, as prescribed by the City Council decree/regulation, from per-bus hour to per bus-kilometer to capture the differences in bus route operating speed and fuel efficiency.

Two trainings on travel demand modeling and use of transport modeling software were conducted to support the executing agency and provide accurate data for the Ulaanbaatar BRT service and business plan. MUB formally recognized the travel demand model working group established by the TA. Since TA completion, there have been several actions taken by the MUB based on the TA output and one direct improvement seen was on the increased fare revenue.

Overall Assessment and Rating

The TA is rated successful. Successful implementation of the TA produced the intended outputs that benefitted the MUB, bus operators, the investors, and all public transport users in the city by improving the sustainability and quality of the existing bus system and recommending operation options for the proposed BRT system. The TA outputs and outcomes will contribute to the successful implementation of the program.

Major Lessons

The public transport reform in Ulaanbaatar, the service contract and implementation of e-ticketing system through PPP, without a proper financial, legal framework and enforcement resulted in negative impact to the public transport sector. Providing technical assistance to the MUB, operators and all other stakeholders as a form of TA or a part of loan is very crucial for the successful implementation of urban transport projects which involves public transport.

Recommendations and Follow-Up Actions

Evaluation of the participants of the training to get feedback on what they learned and if they are actively using the software for transport demand modeling in Ulaanbaatar and for BRT planning in the city would be valuable. It is also recommended to monitor the adaptation of the TA outputs before and during the implementation of the program to minimize the negative impact during the adjustment period of the BRT system operation. The continued support on the financial and legal agreement improvement of the bus service contract, and transport demand model update, and the working group support from the program is recommended.