



Technical Assistance Report

Project Number: 50370-001
Knowledge and Support Technical Assistance (KSTA)
November 2017

Implementation of Sustainable Transport for All (Cofinanced by the Government of Austria)

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Asian Development Bank

ABBREVIATIONS

ADB	–	Asian Development Bank
DMC	–	developing member country
iRAP	–	International Road Assessment Program
ITDP	–	Institute for Transport and Development Policy
ITS	–	intelligent transport system
STI-OP	–	Sustainable Transport Initiative Operational Plan
TA	–	technical assistance
TSG	–	Transport Sector Group

NOTE

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

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KNOWLEDGE AND SUPPORT TECHNICAL ASSISTANCE AT A GLANCE

1. Basic Data		Project Number: 50370-001	
Project Name	Implementation of Sustainable Transport For All	Department /Division	SDCC/SDSC-TRA
Nature of Activity	Capacity Development	Executing Agency	Asian Development Bank
Modality	Regional		
Country	REG		
2. Sector		Financing (\$ million)	
✓ Transport	Air transport		0.10
	Rail transport (non-urban)		0.60
	Road transport (non-urban)		0.30
	Urban public transport		0.40
	Water transport (non-urban)		0.10
	Total		1.50
3. Strategic Agenda		Climate Change Information	
Inclusive economic growth (IEG)	Pillar 1: Economic opportunities, including jobs, created and expanded	Climate Change impact on the Project	Low
Environmentally sustainable growth (ESG)	Global and regional transboundary environmental concerns		
Regional integration (RCI)	Urban environmental improvement Pillar 1: Cross-border infrastructure Pillar 4: Other regional public goods		
4. Drivers of Change		Gender Equity and Mainstreaming	
Governance and capacity development (GCD)	Organizational development	Some gender elements (SGE)	✓
Knowledge solutions (KNS)	Application and use of new knowledge solutions in key operational areas		
Partnerships (PAR)	Knowledge sharing activities Official cofinancing Regional organizations		
Private sector development (PSD)	Promotion of private sector investment		
5. Poverty and SDG Targeting		Location Impact	
Geographic Targeting	No	Regional	High
Household Targeting	No		
SDG Targeting	Yes		
SDG Goals	SDG8, SDG9, SDG17		
6. Risk Categorization		Low	
7. Safeguard Categorization		Safeguard Policy Statement does not apply	
8. Financing			
Modality and Sources		Amount (\$ million)	
ADB		0.91	
Knowledge and Support technical assistance: Technical Assistance Special Fund		0.91	
Cofinancing		0.59	
Government of Austria (Full ADB Administration)		0.59	
Counterpart		0.00	
None		0.00	
Total		1.50	

I. INTRODUCTION

1. This knowledge and support technical assistance (TA) will enhance the sustainable transport operations of the Asian Development Bank (ADB) in developing member countries (DMCs) through support for project preparation, implementation, and capacity development to ADB's operations departments (ODs) and DMCs.¹

2. This TA is needed to successfully implement the Midterm Review of the Sustainable Transport Initiative Operational Plan (STI-OP)² and was included in the 2017 Work Plan of the Transport Sector Group (TSG).³ The TA is aligned with ADB's Midterm Review of Strategy 2020,⁴ and its initial proposal for Strategy 2030, ADB's high-level technology initiative, the global sustainable transport agenda, and the Paris Agreement on climate change.⁵

II. ISSUES

3. Besides its beneficial contributions, transport can have negative social, environmental, and economic effects that need to be avoided or mitigated.⁶ DMCs need assistance to develop sustainable transport systems. STI-OP defined sustainable transport as transport that is accessible, affordable, environment-friendly, and safe. However, many DMCs have limited experience developing sustainable transport solutions and need assistance from ADB to scale up their investments and develop more suitable institutional arrangements to support their ambitions.

4. In 2010, ADB approved the STI-OP to establish an ADB-wide approach to its transport operations to better serve the changing needs of DMCs. The plan emphasized the need to mainstream sustainability in ADB's road operations (road asset management, road safety), and build up operations in (i) urban transport, (ii) addressing climate change in transport, (iii) cross-border transport and logistics, and (iv) social sustainability. It set aspirational targets for transport lending that were incorporated into ADB's corporate results framework. In 2016, the Midterm Review of the STI-OP (footnote 2) examined progress of its implementation concluding that ADB had significantly adjusted the overall subsector composition of its transport portfolio: lending for roads declined from 79% in 2000–2009 to 67% in 2010–2016, for urban transport increased from 2% in 2000–2009 to 15% in 2010–2016, and transport lending became more diverse (such as lending for policy reform, water transport, and multimodal logistics). Taking into account the subsector lending trends and the limited scope for ODs to make significant adjustments to the pipeline during given time horizon, the targets for ADB's assistance for sustainable transport as set out in the Midterm Review of Strategy 2020 were revised. Setting targets that are ambitious and at the same time realistic, the Midterm Review of the STI-OP established the revised 2020 lending targets to 52% for roads, 20% for urban transport, and 18% for railways.

¹ The TA first appeared in the business opportunities section of ADB's website on 21 September 2017.

² ADB. 2017. *Midterm Review of Sustainable Transport Initiative Operational Plan*. Manila.

³ ADB. 2017. *Transport Sector Group Work Plan*. Manila.

⁴ ADB. 2014. *Midterm Review of Strategy 2020: Meeting the Challenges of a Transforming Asia and Pacific*. Manila.

⁵ United Nations. 2016. *Paris Climate Agreement*. Paris.

⁶ Social effects such as limited personal accessibility and mobility or injuries and deaths caused by traffic accidents; environmental effects such as noise pollution from vehicles or increased air pollution and greenhouse gas emissions; and economic costs such loss of economic competitiveness or reduced economic growth.

5. In 2011, ADB approved a \$9.3 million cluster TA (Implementation of Sustainable Transport in Asia and the Pacific) to support the implementation of the STI-OP.⁷ The cluster TA focused mainly on conducting studies on greenhouse gas assessment methodologies, low carbon transport, nonmotorized transport, data on sustainable transport, and intelligent transport systems (ITS). The cluster TA helped to develop ADB's strategy to implement the STI-OP by conducting initial sector positioning studies for urban transport and supporting knowledge work, but provided limited resources for strategic operational support to operations departments. The cluster TA was completed in December 2016 with the recommendation that new regional TA projects should (i) continue to support the implementation of the Midterm Review of STI-OP, (ii) should have a clear focus on supporting operations departments in scaling up sustainable transport, and (iii) should be prepared and implemented in consultation with operations departments and other sector and thematic groups.

6. To enhance strategic operational support and provide upstream support to operations departments, in 2015, ADB approved a \$5 million regional research and development TA for unlocking innovation for development. This Innovation TA committed \$1.5 million to help scale-up urban transport and road safety operations in DMCs.⁸ The original completion date of the TA is December 2019 but due to high demand for support from operations departments, TSG expects activities will be completed by 2018. The resources from this proposed TA will enable TSG to seamlessly continue supporting urban transport and road safety in the operations departments.

7. The Midterm Review of the STI-OP found that scaling up sustainable transport and the lending targets were not fully achieved due to (i) limited resources for upstream dialogue for the promotion of sustainable transport initiatives within ADB DMCs, (ii) limited resources available for effective project quality assurance (such as road safety audits, traffic studies, and greenhouse gas emission impact estimates), and (iii) limited financing facilities to support project preparation and design. The approved Midterm Review of the STI-OP included this proposed new regional TA as one of its key recommendations. This TA will enable ADB's TSG to help the operations departments scale up sustainable transport as envisaged in the Midterm Review of the STI-OP and ensure resources are available to provide effective quality assurance and support to operations departments, promote knowledge sharing on sustainable transport in DMCs and within ADB, and continue to implement the STI-OP.

III. THE TECHNICAL ASSISTANCE

A. Impact and Outcome

8. The TA will be aligned with the following impact: improved mobility, economic, environmental, and health conditions in participating DMCs (footnote 2). The TA will have the following outcome: ADB's sustainable transport operations in DMCs increased.⁹

⁷ ADB. 2011. *Implementation of Sustainable Transport in Asia and the Pacific*. Manila (C-R-CDTA 009). The cluster TA included activities such as the development of a tool for transportation emissions evaluation model for projects, the development and roll-out of the sustainable transport appraisal rating framework, the support the development of the intelligent transport system (ITS) components for the Ulaanbaatar bus rapid transit system, or pilot projects and concepts to support ADB's operations in at least 18 cities (including Baku, Karachi, and Manila).

⁸ ADB. 2015. *Technical Assistance for Unlocking Innovation for Development*. Manila (TA 9017-REG). Consulting services for this TA have been arranged with the Institute for Transportation and Development Policy (ITDP) and the International Road Assessment Programme (iRAP).

⁹ The design and monitoring framework is in Appendix 1.

B. Outputs, Methods, and Activities

9. The proposed TA will support the preparation and implementation of projects and capacity development of DMCs in STI-OP priority subsectors, will identify potential projects and other activities appropriate for high level technology solutions, and will deliver the following outputs:

- (i) **Output 1: Sustainable transport initiatives in developing member countries developed and implemented.** The TA will promote the development, preparation, and implementation of more high-quality sustainable transport projects through direct, timely support to the operations departments. Building upon the prior regional research and development TA, it will provide operations departments' project teams access to additional resources, expertise, and technical support for dialogue with DMCs¹⁰ to develop project pipelines of sustainable transport projects including the application of high level technology.¹¹
- (ii) **Output 2: Knowledge and capacity of developing member countries in sustainable transport improved.** The TA will promote knowledge sharing and institutional capacity building in sustainable transport both within ADB and with DMC partners. The TA will provide the resources needed to improve knowledge sharing and institutional capacity development activities, including the 2018 Transport Forum and training programs focused on sustainable transport priority areas, including railway infrastructure asset management, and road asset management and safety.¹² The TA will also support consultations to establish the proposed sustainable transport financing partnership facility, building upon the ongoing work under the TA project on Delivering Knowledge Solutions in Asia and the Pacific.¹³

10. The TSG will continue to liaise with operations departments to ensure that the support and resources available from this TA and the means to access those resources are well understood in the operations departments. This TA was developed in consultation with the sector committee and advisory teams¹⁴ of the TSG and with transport project officers in one-on-one meetings to assess the needs of the operations departments and the likely areas that will need additional support.¹⁵ The TA will seamlessly continue the highly successful support activities that were initiated with the innovation and cluster TA projects. The TA activities will be defined according to the priorities and needs for sustainable transport in DMCs and using cross-sector consultation with the sector and thematic groups (e.g., transport, urban, energy, climate change, and environment) within ADB.

¹⁰ For example, by recruiting experts that join mission or project teams and funding initial project scoping, data collection, and feasibility studies in STI-OP priority areas.

¹¹ Such as in technologies for transport management and operation (traffic, public transport) or ticketing systems.

¹² ADB's Transport Forum has grown into one of the region's premier sustainable transport events for exchange of knowledge and good practices among DMCs, development partners, and other stakeholders.

¹³ ADB. 2015. *Technical Assistance for Delivering Knowledge Solutions in Asia and the Pacific*. Manila (TA 9024-REG). The TSG obtained a funding allocation of \$200,000 to identify potential donors and develop preliminary consultations regarding the establishment of the financing partnership facility.

¹⁴ These cover roads and road safety, urban transport, railways, water and air transport, social sustainability, climate change and environment, economic analysis, cross-border transport and logistics, and ITS (being established).

¹⁵ The areas that have been preliminarily identified to receive TA support are (i) road asset management and safety in Central and West Asia, including the Pakistan Road Assessment Program; (ii) urban transport, supporting the development and implementation of sustainable urban transport projects in Manila (Philippines), Melaka (Malaysia), Suva (Fiji), and medium-sized cities in Indonesia; and (iii) ITS for implementation of traffic management in Kazakhstan. Other relevant areas will also be considered during project implementation.

C. Cost and Financing

11. The TA is estimated to cost \$1.5 million, of which \$514,500 will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF-6), \$390,900 by TASF-other sources, and \$594,600 (equivalent to €500,000) by the Government of Austria and administered by ADB.¹⁶ The key expenditure items are listed in Appendix 2. Additional funding sources, including contributions from development partners are being explored, subject to TA implementation progress. The scope and implementation period of the TA may be extended to reflect any additional financing, subject to fund availability.

D. Implementation Arrangements

12. ADB will administer the TA and will be the executing agency. The TSG Secretariat under the Sector Advisory Service Cluster of ADB's Sustainable Development and Climate Change Department will implement the TA and be accountable for the outputs. It will carry out TA administration and supervision, implementation oversight, and communication with consultants and stakeholders in close coordination with operations departments and other sector and thematic groups.

13. The proposed implementation arrangements are consistent with the Midterm Review of the STI-OP and will enable the TSG to provide high-quality services that can be quickly mobilized when needed at the request of operations departments for projects related to railways, urban transport, cross-border transport and logistics, road asset management and safety, water transport, aviation, large-scale structures (bridges and tunnels), climate change, and ITS. During the TA implementation, the Sector Advisory Service Cluster will also conduct outreach to operations departments to notify them of the resources available on request.

Implementation Arrangements

Aspects	Arrangements		
Indicative implementation period	November 2017–December 2020		
Executing agency	ADB		
Implementing agency	Transport Sector Group Secretariat under the Sector Advisory Service Cluster, Sustainable Development and Climate Change Department, ADB		
Consultants	To be selected and engaged by ADB		
	Firm: Single Source Selection	16 person-months	\$300,000
	Individual international consultants	21 person-months	\$480,000
	Individual national consultants	20 person-months	\$43,850
Procurement	To be procured by ADB and/or consultant		
	Shopping	5 contracts	\$50,000
Disbursement	The TA resources will be disbursed following ADB's <i>Technical Assistance Disbursement Handbook</i> (2010, as amended from time to time).		
Asset turnover or disposal arrangement upon TA completion	When the TA is completed, ADB and/or consultant will promptly turnover any purchased equipment to the government or dispose of these. Consultant will then submit a certificate of turnover or disposal to the user unit.		

ADB = Asian Development Bank, TA = technical assistance.

Source: Asian Development Bank.

¹⁶ US dollar equivalent of the remittance was value-dated 21 September 2017.

14. **Consulting services.** International and national consultants will be recruited using an individual consultant selection method. In the specific areas of road safety and urban transport, the International Road Assessment Program (iRAP) and the Institute for Transport and Development Policy (ITDP) respectively, are proposed to be recruited separately using single source selection. iRAP and ITDP are both non-government, nonprofit organizations with existing indefinite delivery contracts under the Innovation TA (footnote 8). They are considered centers of excellence with established track records. The single source selection method will ensure that existing support can seamlessly continue and that new assignments and outputs are delivered efficiently, quickly, and with high quality. Details and justification are provided in the Outline Terms of Reference for Consultants.¹⁷

15. The TA will require 16 person-months of services from iRAP and ITDP, and 21 person-months international and 20 person-months national individual consultant services comprising (i) 3 person-months total for one traffic engineering expert, (ii) 3 person-months total for one urban transport expert, (iii) 3 person-months total for one intelligent transport expert, (iv) 3 person-months total for one air transport expert, (v) 3 person-months total for one railway expert, (vi) 3 person-months total for one maritime transport expert (vii) 3 person-months total for one financing partnership facility coordination expert, (viii) 9 person-months total for one transport forum event coordinator, (ix) 8 person-months total for one transport forum logistics assistant, and (x) 3 person-months total for one transport forum administration assistant.¹⁸ ADB will engage consulting firms and individual consultants in accordance with ADB Procurement Policy (2017, as amended from time to time) and the associated Project Administration Instructions and Technical Assistance Staff Instructions.

16. **Procurement.** ADB and/or the consultant will purchase necessary software and equipment to support TA implementation. The procurement method will be shopping with up to five contracts. All TA financed goods shall be procured in accordance with ADB Procurement Policy (2017, as amended from time to time) and the associated Project Administration Instructions and Technical Assistance Staff Instructions. Disbursement under the TA will follow ADB's *Technical Assistance Disbursement Handbook* (2010, as amended from time to time).

IV. THE PRESIDENT'S DECISION

17. The President, acting under the authority delegated by the Board, has approved (i) ADB administering a portion of technical assistance not exceeding the equivalent of \$594,600 to be financed on a grant basis by the Government of Austria, and (ii) ADB providing the balance not exceeding the equivalent of \$905,400 on a grant basis for the Implementation of Sustainable Transport for All, and hereby reports this action to the Board.

¹⁷ Outline Terms of Reference for Consultants (accessible from the list of linked documents in Appendix 3).

¹⁸ The use of lump sum payments and/or output-based contracts will be considered as appropriate in the engagement of consultants.

DESIGN AND MONITORING FRAMEWORK

Impact the TA is Aligned with Mobility, economic, environmental, and health conditions in participating DMCs improved ^a			
Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
Outcome Sustainable transport operations in DMCs increased	By 2020: At least 80% of ADB's financed projects (in millions) are rated as moderately sustainable and sustainable (2013–2015 baseline: 66%)	STAR ^b	Changes in governments may lead to lower priority for sustainable transport.
Outputs 1. Sustainable transport initiatives in DMCs developed and implemented 2. Knowledge and capacity of DMCs in sustainable transport improved	By 2020 At least 10 projects concurrently in proven types or emerging fields of sustainable transport supported with expert inputs during the development, preparatory, or implementation phases (2016 baseline: 9) ^c 2a. At least 630 participants attend 2018 ADB Transport Forum, at least 90 of which are DMC officials, and with at least 70% reporting gaining knowledge on the issues and challenges of sustainable transport (2016 baseline: 609 participants and 85 DMC officials) 2b. At least three capacity building programs developed with training for up to 15 DMC officials each. (2017 baseline: 1)	TSG project database; consultants' report 2a. Participant registration in transport forum; post forum evaluation reports 2b. Consultants' report	Emerging fields of sustainable transport do not develop as feasible alternatives to existing transport systems.
Key Activities with Milestones			
1. Sustainable transport initiatives in DMCs developed and implemented			
1.1 Consult with operations departments to identify and define the scope of the required support for project development, preparation, and implementation (2017–2020).			
1.2 Conduct sector dialogue with DMCs regarding priority areas of sustainable transport (2017–2020).			
1.3 Deliver strategic operational support: project support (2018–2020).			
2. Knowledge and capacity of DMCs in sustainable transport improved			
2.1 Prepare and organize the 2018 ADB Transport Forum (Q2–Q3 2018).			
2.2 Consult with operations and other departments about the structure and content of the institutional capacity building programs (2017–2018).			
2.3 Implement institutional capacity building programs (2018–2020).			
2.4 Identify knowledge and financial partners and their priority areas of sustainable transport (Q4 2017).			
2.5 Consult and negotiate with potential partners on partnership and financing (2018–2020).			
Inputs ADB: \$905,400 Government of Austria: ^d \$594,600			
Assumptions for Partner Financing Not Applicable			

ADB = Asian Development Bank, DMC = developing member country, STAR = Sustainable Transport Appraisal Rating, TSG = Transport Sector Group.

^a ADB. 2017. *Midterm Review of Sustainable Transport Initiative Operational Plan*. Manila.

- ^b STAR is a tool for assessing the sustainability of ADB transport projects and for monitoring changes in transport portfolio and used by several multilateral development banks since 2012. STAR rates projects according to their economic, poverty and social, environmental, and risk to sustainability dimensions.
- ^c Proven types of sustainable transport include urban transport, inland waterway transport, cross-border transport and logistics, railways, and roads (mainstreaming road asset management and road safety), and emerging fields of sustainable transport include addressing transport-related air pollution, intelligent transport systems, mobility as a service, and clean vehicle technologies, including electric and autonomous vehicles.
- ^d This amount also includes ADB's administration fee, audit costs, bank charges, and a provision for foreign exchange fluctuations (if any), to the extent that these items are not covered by the interest and investment income earned on this grant, or any additional grant from the Government of Austria.

Source: Asian Development Bank.

COST ESTIMATES AND FINANCING PLAN
(\$'000)

Item	Amount	
	ADB ^a	Government of Austria ^b
A. Consultants		
1. Remuneration and per diem		
a. International consultants	510.0	60.0
b. National consultants	43.0	-
2. Out-of-pocket expenditures		
a. International and local travel	93.0	4.2
b. Training, seminars, and conferences ^d	12.0	-
c. Reports and communications	11.0	0.3
d. Studies, Surveys, and Reports	4.0	-
e. Miscellaneous administration and support costs	12.0	0.6
B. Goods (rental and/or purchase) ^c	40.0	10.0
C. Training, seminars, and conferences ^d		
1. Facilitators	29.0	70.0
2. Participants	70.0	228.0
3. Venue rental and related facilities	56.0	81.0
4. Representation	2.4	2.5
D. Miscellaneous TA Admin and Support Cost ^e	-	120.0
E. Contingencies	23.0	18.0
Total	905.4	594.6

- = zero, ADB = Asian Development Bank, TA = technical assistance.

Note: The technical assistance (TA) is estimated to cost \$1.5 million, of which contributions from the Asian Development Bank and the Government of Austria are presented in the table above.

^a Financed by the Asian Development Bank's Technical Assistance Special Fund (TASF-6 and TASF-other sources).

^b Administered by the Asian Development Bank.

^c Includes equipment and software, needed for pilots.

^d Includes honorarium and travel cost for resource persons and facilitators, participants' travel cost, ADB staff travel costs as resource persons and/or speakers, logistical costs and representation expenses to cover alcoholic and nonalcoholic beverages, conference materials, and conference related service providers.

^e This amount also includes ADB's administration fee, audit costs, bank charges, and a provision for foreign exchange fluctuations (if any), to the extent that these items are not covered by the interest and investment income earned on this grant, or any additional grant from the Government of Austria.

Source: Asian Development Bank estimates

LIST OF LINKED DOCUMENTS

<http://www.adb.org/Documents/LinkedDocs/?id=50370-001-TARreport>

1. Terms of Reference for Consultants