

ATTACHED TECHNICAL ASSISTANCE

A. Introduction

1. The Government of India and the State Government of Bihar (the government) requested capacity development technical assistance (TA) from the Asian Development Bank (ADB) to accompany the project. The attached TA was proposed and approved in the project concept paper on 13 March 2015. During 14–21 December 2015, an ADB fact-finding mission held discussions on preparations for the TA, and reached an understanding with the government on the results, implementation arrangements, cost estimate, financing arrangements, and terms of reference.¹

2. The objective of the TA is to enhance existing institutional capacity necessary to effectively operate and manage the new Ganga Bridge and other major bridges in the state.

B. Outputs and Key Activities

3. The major outputs of the TA are (i) operation management plan for the new Ganga Bridge prepared; (ii) model maintenance manual for other existing major bridges in the state developed; and (iii) applicable international best practices learned. The key activities involve (i) preparing an operation management plan for the new Ganga Bridge that covers comprehensively all relevant aspects, including administration and organization, user services and quality, inspection, and maintenance procedures; (ii) developing a model maintenance manual for major bridges in about four selected districts, which can be replicated for other districts in the state and which includes conducting condition surveys, prioritizing maintenance requirements, preparing cost estimates, and formulating a rolling work plan and budget; and (iii) learning international best practices, including on-the-job training of managers and technical staff during the above TA activities, in-house technical workshops, and overseas training, including case studies and observations.

C. Cost and Financing

4. The TA is estimated to cost \$1,000,000, of which \$900,000 will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF-other sources). The Government of Bihar acting through Bihar State Road Development Corporation Limited (BSRDCL) will provide counterpart support in the form of counterpart staff, office accommodation, and other in-kind contributions. The disbursements under the TA will be made in accordance with ADB's *Technical Assistance Disbursement Handbook* (2010, as amended from time to time).

D. Implementation Arrangements

5. The Government of Bihar acting through BSRDCL will be the executing agency. A project management unit is not envisaged. The in-kind contribution from BSRDCL will be the provision of office accommodation, support facilities, counterpart staff, and other logistical support. The BSRDCL will provide all available reports and other pertinent data. It will also facilitate interagency coordination and applicable permits as necessary. BSRDCL may use the advance payment facility to finance expenditures under the TA. The TA will be implemented from January 2017 to December 2018.

¹ The TA first appeared in the business opportunities section of ADB's website on 1 April 2016.

6. An overview of the required consulting services is summarized in Table 2 and described in detail in the project administration manual.²

Table 1: Cost Estimates and Financing Plan

(\$'000)

Item	Amount
Asian Development Bank^a	
1. Consultants	
a. Remuneration and per diem	
i. International consultants	332.0
ii. National consultants	262.2
b. International and local travel	38.5
c. Reports and communications	4.5
2. Equipment ^b	68.0
3. Training, seminars, and conferences	
a. Workshops and in-house training	5.0
b. Overseas training including case study and observation	96.0
4. Surveys	50.0
5. Miscellaneous administration and support costs ^c	0.3
6. Representative for contract negotiations	3.5
7. Contingencies	40.0
Total	900.0

Note: The technical assistance (TA) is estimated to cost \$1,000,000, of which contributions from the Asian Development Bank (ADB) are presented in the table above. The government will provide counterpart support in the form of counterpart staff, office accommodation, and other in-kind contributions. The value of government contribution is estimated to account for 10% of the total TA cost.

^a Financed by ADB's Technical Assistance Special Fund (TASF-other sources).

^b Equipment will be handed over to Bihar State Road Development Corporation Limited (BSRDCL) upon TA completion, which includes computers, printers, cameras, and various bridge condition survey machines.

^c See also the memorandum on [Use of Bank Resources: Regional Technical Assistance and Technical Assistance vs. Internal Administrative Expenses Budget](#), issued by Budget, Personnel and Management Systems Department and Strategy and Policy Department on 26 June 2013.

Source: Asian Development Bank estimates.

Table 2: Summary of Consulting Services

Area of Expertise	Duration (person-months)
A. International	
1. Bridge maintenance specialist (team leader)	9.00
2. Bridge operation and management specialist	2.00
3. Cable-stayed bridge maintenance specialist	2.00
Subtotal (A)	13.00
B. National	
1. Bridge engineering and maintenance specialist	9.00
2. Bridge operation and management expert	6.00
3. Bridge engineer	9.00
4. Financial analyst	1.00
Subtotal (B)	25.00
Total (A+B)	38.00

Source: Asian Development Bank.

7. The consultants will be engaged by ADB in accordance with the Guidelines on the Use of Consultants (2013, as amended from time to time). Lump-sum payments and output-based contracts will be considered for consulting services under the TA.

² Project Administration Manual (accessible from the list of linked documents in Appendix 2).

8. The expected outputs will be disseminated in the form of consultants' reports comprising (i) an operation management plan for the new Ganga Bridge, (ii) a model maintenance manual for other existing major bridges in the state, and (iii) participants' reports from the overseas case study and observation program.