

## PROJECT PREPARATORY TECHNICAL ASSISTANCE

### A. Justification

1. Currently the feasibility study is being conducted by the local design institute. The PPTA will assist to improve the feasibility study and produce mutually agreed design and implementation arrangements suitable for ADB financing, including pre-implementation works for the project. The government and UTY were advised that approval of the PPTA does not commit ADB to financing any ensuing project.

### B. Major Outputs and Activities

2. The major outputs and activities are summarized in Table A3.1.

**Table A3.1: Summary of Major Outputs and Activities**

| Major Activities  | Major Outputs   | Expected Completion Date |
|---|---|--------------------------|
| Due diligence on engineering, environment, resettlement, social, poverty and gender | <ul style="list-style-type: none"> <li>• Sector assessment</li> <li>• Design review report</li> <li>• IEE report</li> <li>• Resettlement Plan</li> <li>• Summary Poverty Reduction and Social Strategy</li> <li>• Social and gender action plan</li> </ul>                      | October 2016             |
| Due diligence on economic and financial analysis and governance assessment          | <ul style="list-style-type: none"> <li>• Economic analysis</li> <li>• Project financial analysis, and entity financial analysis</li> <li>• Procurement capacity assessment</li> <li>• Financial management assessment</li> <li>• Risk assessment and management plan</li> </ul> | October 2016             |
| Sector review and identification of aspects for institutional strengthening         | <ul style="list-style-type: none"> <li>• Identification of specific areas where support is required for institutional development.</li> </ul>   | October 2016             |
| Project implementation preparation  | <ul style="list-style-type: none"> <li>• Project procurement plan</li> </ul>  | October 2016             |

IEE = initial environmental examination.

Source: Asian Development Bank staff estimates.

### C. Cost Estimate and Proposed Financing Arrangement

3. The total cost of the TA amounts to \$445,000, of which \$400,000 will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF-V).<sup>6</sup> The Government through UTY will provide counterpart support in the form of PIU staff, office space and supplies, secretarial assistance, and other in-kind contributions. The value of the government contribution is estimated to account for 10% of the total TA cost. The detailed cost estimate is in Table A3.2.

<sup>6</sup> Project preparatory technical assistance will be financed from proceeds of the earlier approved TA 8706 for Uzbekistan: CAREC Corridors 2 and 3 (Marakand-Bukhara) Railway Electrification Project, subject to approval of a major change in scope.

**Table A3.2: Cost Estimates and Financing Plan**  
(\$'000)

| Item   | Total Cost   |
|--|--------------|
| <b>Asian Development Bank<sup>a</sup></b>                      |              |
| 1. Consultants   |              |
| a. Remuneration and per diem                                   |              |
| i. International consultants (13 person-months)                | 261.5        |
| ii. National consultants (13 person-months)                    | 44.5         |
| b. International and local travel                              | 61.5         |
| c. Reports and communications                                  | 5.5          |
| 4. Surveys   | 10.0         |
| 5. Miscellaneous administration and support costs <sup>b</sup> | 5.0          |
| 6. Contingencies   | 12.0         |
| <b>Total</b>   | <b>400.0</b> |

<sup>a</sup> Financed by the Asian Development Bank's Technical Assistance Special Fund (TASF-V)

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

Source: Asian Development Bank estimates.

#### D. Consulting Services

4. The required positions and person-months are indicated in Table A3.3. The PPTA will require 13 person-months (PMs) international specialists and 14 PMs of national experts to be recruited individually. For project due diligence where feasibility study is under preparation by EA following government internal requirements, hiring individual consultants with short duration is more appropriate for quick mobilization of consulting service and cost-effective than firms to perform the assignment. The individual experts will be engaged by ADB in accordance with the Guidelines on the Use of Consultants (2013, as amended from time to time).

**Table A3.3: Summary of Consulting Services Requirement**

| Positions                                       | Person-Months Required |
|---|------------------------|
| <b>International</b>                            |                        |
| Railway Electric Engineering Specialist         | 2                      |
| Railway Signaling and Communications Specialist | 2                      |
| Procurement and Contract Specialist             | 2                      |
| Transport Economist                             | 1.5                    |
| Financial Specialist                            | 2                      |
| Environment Specialist                          | 1                      |
| Resettlement Specialist                         | 2                      |
| Resource persons                                | 0.5                    |
| <b>National</b>                                 |                        |
| Railway Engineer                                | 3                      |
| Environment Specialist                          | 3                      |
| Resettlement Specialist                         | 3                      |
| Social Development Specialist                   | 3                      |
| Resource persons                                | 2                      |

Source: Asian Development Bank estimates.

5. The outline terms of reference for the project preparatory TA consultants are described in the paras. below.

6. **Railway Electric Engineering Specialist (International, 2 PMs).** Undertake, but will not be limited to, the following tasks: Working closely with other consultants, UTY and ADB (i) review and consolidate technical due diligence of the project including overall scope, engineering, cost estimate, and other relevant areas; and (ii) assist in the preparation of procurement design and bidding documents for the ensuing project, especially in relation to overhead catenary system, traction substations and dispatcher points, external power supply, maintenance machinery and depot equipment, and SCADA. Qualification: Bachelor's degree with professional work experience of preferably 10 years or more in railway electric engineering; Working experience or knowledge of ADB's operations will be desirable; Must have proven analytical skills and working experience in ADB developing member countries; Uzbekistan project experience would be preferred.

7. **Railway Signaling and Communications Specialist (International, 2 PMs).** Undertake, but will not be limited to, the following tasks: Work closely together with the Railway Electric Engineering Specialist and Procurement and Contract Specialist, and assist in the preparation of procurement design and bidding documents for the ensuing project, especially in relation to signaling and communication systems. Qualification: Bachelor's degree with professional work experience of preferably 10 years or more in railway signaling and communications; Working experience or knowledge of ADB's operations will be desirable; Must have proven analytical skills and working experience in ADB developing member countries; Uzbekistan project experience would be preferred.

8. **Railway Engineer (National, 3 PMs)** Assist international consultants in gathering in-depth information and preparing project documents. More specifically, the expert will undertake but will not be limited to the following tasks: (i) provide overall coordination and all necessary assistance to all international experts and consolidate their outputs in accordance with the Uzbekistan government requirements; (ii) review preliminary designs including safety aspects during construction and operation, and rail line maintenance; (iii) update the cost estimates; (iv) assist international transport economist with the demand forecasts for the proposed railway; and (v) prepare an implementation schedule. Qualification: Bachelor's degree in railway engineering specialization; familiar with Uzbekistan railway practices and five or more years' railway project experience; preferably good skill in written and spoken English; ADB project experience is an added advantage.

9. **Procurement and Contract Specialist (International, 2 PMs)** Support UTY and ADB to (i) undertake procurement activities including EA's procurement capacity assessment in line with ADB's Procurement Guidelines (2013, as updated) and Guidelines on the use of Consultants (2013, as updated); (ii) receiving inputs from the Railway Electric Engineering Specialist and Railway Signaling and Communications Specialist, prepare bidding documents and request for proposals documents; (iii) receive, open, and assist EA in the procedures for obtaining ADB no-objection on evaluation of proposals, finalization of contracts, and the processes for contractor mobilization; and (iv) train EA staff on ADB procurement requirements and on Plant contract management. Qualification: relevant Bachelor's degree with preferably 10 or more years' work experience in international bidding and procurement; excellent analytical skills and working experience in ADB developing member countries; prior experience of ADB projects in Uzbekistan is a preference.

10. **Transport Economist (International, 1.5 PMs)** Undertake, but not be limited to, the following tasks: (i) gather in-depth information to update the traffic forecast; (ii) review macroeconomic and sector contexts, conduct demand analysis, identify project rationale and alternatives; (iii) identify and compare project costs and benefits (including additional

environmental benefits from electrification), assess project sustainability, conduct sensitivity and risk analysis, and identify indicators for project performance monitoring system; and (iv) coordinate with other experts in order to produce a cohesive joint report for processing the project for ADB financing. Qualification: Bachelor's degree in economics or equivalent with broad-based work experience (a minimum of 10 years of relevant professional experience) recognized as an expert in transport economics; proven analytical skills and working experience in ADB developing member countries; Uzbekistan experience would be preferred.

11. **Financial Specialist (International, 2 PMs)** Undertake, but not be limited to, the following tasks: (i) support the preparation of detailed budget and financing plan for the project; (ii) carry out the financial evaluation of the project and determine financial internal rate of return and weighted average cost of capital computations and evaluate the financial viability of the investment; (iii) prepare an updated financial management assessment pertaining to UTY, including through a study of their financial statements; (iv) identify key risks and carry out sensitivity analysis; and (v) conduct financial analysis and identify actions to ensure project sustainability and propose related assurances or covenants. Qualification: Bachelor's degree and a broad-based work experience (10 years of relevant professional experience) recognized as an expert in transport financial analysis; proven analytical skills and working experience in ADB developing member countries, with a recognized accountancy qualification such as a Chartered Accountant, Certified Public Accountant or Chartered Certified Accountant; Uzbekistan experience would be preferred.

12. **Environmental Specialist (International, 1 PM; National, 3 PMs).** Work as a team to undertake but will not be limited to the following works:

- Prepare a Rapid Environmental Assessment (REA) checklist to confirm the environmental classification of the proposed project.
- Prepare Initial Environmental Examination (IEE) Report including a fully costed Environmental Management Plan (EMP), for the railway alignment and associated facilities. The IEE report should be prepared in accordance to the ADB's Safeguard Policy Statement 2009
- The EMP should include environmental mitigation measures, a monitoring program, capacity building measures and institutional arrangements for EMP implementation, based on assessment of the capacity of the Government and UTY in addressing environmental problems. If the existing facilities will be rehabilitated or reconstructed as part of the Project, undertake environmental audit to check whether the existing facilities, including the alignment and associated facilities, are in compliance with the Government environmental requirement, and with ADB's environmental safeguards requirement. If discrepancies or non-compliance will be identified, corrective actions should be proposed for each area of concern, including costs and schedule before and during the project implementation. The Environmental Compliance Audit Report could be attached as an appendix of the IEE.
- Assist UTY in conducting public consultation as required by SPS 2009, in obtaining necessary Government approval and permits to the IEE and for commencing the project activities.

13. Qualification: For International consultant relevant education background to undertake environmental impact assessment works and significant experience for preparing environmental impact assessment for similar projects, and be familiar with implementation of Uzbekistan's environmental protection law; preferably a master degree and at least 5 years' experience in work related with environmental impact assessment. Familiarity with the ADB Safeguards Policy

Statement (SPS) 2009 is an advantage. For national consultant relevant education background for data collection to prepare environmental impact assessment and some experience on preparing environmental impact assessment of project in Uzbekistan, and well knowledge of Uzbekistan's environmental law and regulation; preferably undergraduate degree with at least 3 years' experience.

14. **Resettlement Specialist (International, 2 PM; National, 3 PMs).** Work as a team to undertake but will not be limited to the following work:

- Reconfirm the project classification for Involuntary Resettlement (IR) and Indigenous Peoples Safeguards.
- Prepare options to minimize land acquisition and associated impacts.
- Prepare a Resettlement Framework which would crucially include an entitlement matrix, to guide the development of a Resettlement Plan (RP): and
- Once detailed design is available, assist UTY to prepare a Resettlement Plan (RP) based on a census and assets inventory of the project affected persons that sets out strategies to mitigate adverse impacts and maintain living standards of affected people. It shall address the policy objectives of ADB and the government for land acquisition and resettlement, in line with the ADB SPS 2009 and relevant Government Law and Regulations.
- Conduct 100% census and assets inventory of the project affected persons based on a detailed measurement survey, a survey of their socio economic conditions, and carry out meaningful consultations with the affected persons.
- Describe the institutional arrangements for addressing social impacts/risks associated with the project, to develop grievance redress mechanism, and to develop effective arrangement to implement the RP.
- Prepare an estimated budget as part of the RP for implementing RP covering all aspects.

15. **Qualification:** For International Consultant relevant education background and significant experience in preparing RP and implementing land acquisition and resettlement in Central Asia especially for projects in Uzbekistan; full understanding of the ADB SPS 2009; preferably a master degree and over 7 years' experience and at least 3 years' work as resettlement specialist. Russian language skills are desirable. For national consultant relevant education background to undertake survey and consultations, and market price data generation for compensation of lost assets as part of RP preparation, and some experience in preparing RP with full understanding on Uzbekistan law and regulation on land acquisition; preferably undergraduate degree from land management institute with at least 3 years' related work experience.

16. **Social Development Specialist (National, 3 PMs)** Undertake but will not be limited to:

- Conduct socio economic surveys to prepare the Poverty and Social Analysis (PSA).
- Conduct the PSA, including, gender assessment, participatory assessment, labor impacts and other social impacts as described in ADB's Handbook on Poverty and Social Analysis: A Working Document (December 2012), and Operations Manual C1-Poverty Reduction (14 July 2004), C2-Gender and Development (6 December 2010), and C3-Incorporation of Social Dimensions into ADB Operations (6 December 2010).
- Propose gender classification for the project and prepare measures to comply with such classification.
- Prepare a social and gender action plan.

- Prepare a summary poverty reduction and social strategy including gender strategy and/or measures as appropriate.

17. Qualification: relevant education background to conduct social impact assessment and significant experience in preparing poverty and social impact assessment. Familiar with ADB's policy on social impacts especially gender and poverty. Preferably master degree with at least 5 years' related work experience.

18. **Resource Persons (international and national consultants, up to 10 person-day each).** Resource persons on railway signal and telecommunication, power supply, supervisory control and data acquisition system, electric locomotive workshop, institution development, etc. may be engaged during project preparation. They will provide specialized expertise to UTY as regards (i) recent technology development in railway electrification, operation and maintenance; (ii) improving the technical and cost side of UTY's feasibility study as needed; and (iii) other railway technical and institutional aspects as appropriate.

## E. Implementation Arrangements

19. The EA for the TA is UTY. TA funds will be disbursed in accordance with ADB's Technical Assistance Disbursement Handbook (2010, as amended from time to time). On a regular basis, the consultant will work closely with UTY and the local design institute and provide all necessary assistance in the preparation of project documents. The consultants will report directly to the project officer unless delegated to UTY. The consultants will submit to UTY and ADB (i) an inception report 1 week after commencement of services; (ii) an interim report after one month; and (iii) a final report (including a five-page executive summary with key findings and recommendations) 3 weeks after receipt of review comments from UTY and ADB. All reports will be written in English and translated into Russian. Two hard copies and one soft copy of the inception, interim, and draft final reports (in English) will be submitted to ADB. Three hard copies and one soft copy of each report (in both Russian and English) will be submitted to UTY. The proposed TA processing and implementation schedule is listed in Table A3.4.

**Table A3.4: Technical Assistance Processing and Implementation Schedule**

| <b>Major Milestones</b> | <b>Expected Date</b> |
|-------------------------|----------------------|
| Commencement Date       | July 2016            |
| Completion Date         | 30 June 2017         |
| Financial Closure Date  | 31 December 2017     |

Source: Asian Development Bank estimates.