#### PROJECT PREPARATORY TECHNICAL ASSISTANCE

#### A. Background and Justification

1. UTY conducted a prefeasibility study for the electrification of Marakand-Bukhara rail line (the Project) in 2013 and currently preparatory work for feasibility study are being conducted by the local design institute. Given the study's inadequate information, a PPTA is recommended to prepare the Project. The PPTA will assist to improve the feasibility study to produce mutually agreed design and implementation arrangements suitable for ADB financing, including preimplementation 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 activities and outputs are summarized in Table A3.1.

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

Major Activities	Major Outputs	Expected Completion
Due diligence on engineering, environment, resettlement, social, poverty and gender	<ul> <li>Sector assessment and sector results framework; design review report, IEE report; Resettlement Plan</li> <li>Summary Poverty Reduction and Social Strategy</li> </ul>	Month 1-6  Month 4-6
Due diligence on economic and financial analysis and governance assessment	<ul> <li>Economic and financial analysis; Procurement capacity and financial management assessment; Risk assessment and management plan</li> </ul>	Month 4-8
Sector review and identification of aspects	<ul> <li>Identification of specific areas where support is required for institutional development.</li> </ul>	Month 5-9
for institutional strengthening	Project procurement plan; assistance to UTY in the recruitment of project implementation	
Project implementation preparation	consultants (technical and financial evaluation, contract finalization, and mobilization).	Month 7-18

IEE = initial environmental examination, IP = indigenous peoples, RP = resettlement plan.

#### 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). 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.

Table A3.2: Cost Estimates and Financing Plan

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Item		Cost (\$)
ADB Financir	ng <sup>a</sup>	_
1.	Consultants	
a.	Remuneration and Per Diem	
i.	International Consultants (14 person months)	262,000
ii.	Domestic Consultants (17 person months)	55,000
b.	International and Local Travel	42,000
C.	Reports and Communications	5,000
2.	Surveys	10,000

Item		Cost (\$)
3.	Miscellaneous Administration and Support Costs	8,000
4.	Contingencies	18,000
	Total	400,000

<sup>&</sup>lt;sup>a</sup> Financed by ADB's Technical Assistance Special Fund (TASF-V).

Source: Asian Development Bank estimate

#### D. Consulting Services

4. The required positions and person-months are indicated in Table A3.3. The PPTA will require 14 person-months (PMs) international specialists and 17 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** 

Consultants	International (PMs)	National (PMs)
Railway Engineering Advisor	4.5	
Railway Engineer/Coordinator		5
Procurement and Contract Specialist	3	
Transport Economist	1.5	
Financial Specialist	2	
Environment Specialist	1	3
Resettlement Specialist	1	5
Social Development Specialist		3
Resource persons	1	1
Total	14	17

Source: Asian Development Bank estimates.

5. The outline terms of reference for the consultants are outlined in the paras below.

## 1. Railway Engineering Advisor (International, 4.5 PMs)

6. Undertake, but will not be limited to, the following tasks: (i) review and consolidate due diligence of the project including overall scope, engineering, cost estimate, safeguards and other relevant areas; (ii) update the sector roadmap for the project using problem tree analysis; (iii) review areas for institutional strengthening in the context of extending electrification and introduction of higher speeds on main routes and make proposals as to assistance needed in institutional and operational reforms; and (iv) assist in TOR preparation for and evaluation of other experts and/or firm, and as the coordinator coordinating with other experts to ensure timely and quality delivery of all outputs. Qualification: Bachelor's degree with professional work experience of 10 years, recognized as an expert in railway engineering and transportation specialization; capable of coordinating contributions of specialists in other disciplines to complete a joint report/s as per the ADB's requirements; 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.

### 2. Railway Engineer/Coordinator (National, 5 PMs)

7. 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.

### 3. Procurement and Contract Specialist (International, 3 PMs)

8. Undertake field works with the executing agency and assist in preparation of relevant project documents. More specifically, the expert will undertake but will not be limited to the following tasks: (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) 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 EPC/Turnkey 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.

### 4. Transport Economist (International, 1.5 PMs)

9. Undertake, but not be limited to, the following tasks: (i) review the railway corridor feasibility study (F/S) done by UTY and meet with the government, executing agency, and other stakeholders to 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.

#### 5. Financial Specialist (International, 2 PMs)

10. Undertake, but not be limited to, the following tasks: (i) review the railway corridor F/S and prepare the financing plan; (ii) carry out the financial analysis 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); (iv) identify key risks and carry out sensitivity analysis; and identify actions to ensure project sustainability and propose related assurances or covenants; and (v) review ongoing and planned reform actions and propose any additional measures considered necessary for institutional strengthening, particularly in the areas of financial management and financing modalities. 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.

### 6. Environmental Specialist (International, 1 PM; National, 3 PMs)

- 11. Work as a team to undertake but will not be limited to the following works:
  - Prepare Initial Environmental Examination (IEE) Report and its Summary or Environmental Impact Assessment (EIA) Report and its Summary if it is warranted. The IEE/EIA report should be prepared in accordance to the ADB's Safeguard Policy Statement 2009 for Environmental Assessment Requirement. The report should include the environmental management and monitoring plan.
  - Assess the capacity of the Government in addressing environmental problems including the institutional arrangements and any capacity building measures need to be elaborated, and propose the review procedure for addressing environmental concerns of the Project, and on this basis, prepare recommendation on how the recommendation of IEE or EIA will be implemented.
  - Reconfirm the environmental classification of the proposed project
  - If the existing facilities will be rehabilitated or reconstructed as part of the Project, undertake environmental audit to check whether the existing facilities complied with the Government environmental requirement, and its compliance with ADB's environmental safeguards requirement. Any discrepancies or incompliance should be provided proposed corrective actions. The Environmental Compliance Audit Report could be attached as appendix of the IEE, or as separate report.
- 12. <u>Qualification:</u> 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 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.

#### 7. Resettlement Specialist (International, 1 PM; National, 5 PMs)

- 13. 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 Resettlement Plan that sets out strategies to mitigate adverse effects 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% survey of socio economic condition of affected people, and meaningful consultations with affected people
  - 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 RP
  - Prepare estimated budget for implementing RP covering all aspects.
  - Prepare Involuntary Resettlement Compliance Audit Report as needed.
- 14. <u>Qualification:</u> 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. For national consultant relevant education background to undertake survey, consultations 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.

# 8. Social Development Specialist (National, 3 PMs)

- 15. Undertake but will not be limited to the following work:
  - Conduct social impact assessment other than social aspects covered by safeguards requirement, especially poverty assessment, gender assessment, participatory assessment, labor impacts and other social impacts as described in ADB guideline for social impact assessment
  - Conduct socio economic survey to prepare Poverty and Social Impact Assessment in compliance with ADB guideline for social impact assessment
  - Propose gender classification for the project and prepare measures to comply with such classification, including gender action plan if it is warranted
  - Prepare a summary poverty reduction and social strategy including gender strategy and/or measures as appropriate
- 16. <u>Qualification:</u> 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.

# 9. Resource Persons (3 international and 3 national consultants, up to 10 person-day each)

17. 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.

#### F. Schedule and Reporting Requirements

- 18. The consulting services will be implemented over a period of 24 months, with estimated TA commencement starting on 30 September 2014 and completing on 30 September 2016. TA funds will be disbursed in accordance with ADB's Technical Assistance Disbursement Handbook (2010, as amended from time to time). The PPTA will be financially closed by 31 March 2017. 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 consultant will report directly to the project officer unless delegated to UTY.
- 19. The consultants will submit to UTY and ADB (i) an inception report 4 weeks after commencement of services; (ii) an interim report after three months; 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.