

Project Administration Manual

Project Number: 48025-003
Loan Number: {LXXXX}
Draft: 10 March 2017

Republic of Uzbekistan: Central Asia Regional
Economic Cooperation Corridor 2 (Pap–Namangan–
Andijan) Railway Electrification Project

ABBREVIATIONS

ADB	–	Asian Development Bank
CAREC	–	Central Asia Regional Economic Cooperation
EMP	–	environmental management plan
EMR	–	environmental monitoring report
IEE	–	initial environmental examination
km	–	kilometer
LARP	–	land acquisition and resettlement plan
PAM	–	project administration manual
PIU	–	project implementation unit
PPTA	–	project preparatory technical assistance
UTY	–	Joint Stock Company O'zbekiston Temir Yo'llari

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Project Administration Manual Purpose and Process

The project administration manual (PAM) describes the essential administrative and management requirements to implement the project on time, within budget, and in accordance with the policies and procedures of the government and Asian Development Bank (ADB). The PAM should include references to all available templates and instructions either through linkages to relevant URLs or directly incorporated in the PAM.

The O'zbekiston Temir Yo'llari (UTY) is wholly responsible for the implementation of ADB-financed projects, as agreed jointly between the borrower and ADB, and in accordance with the policies and procedures of the government and ADB. ADB staff is responsible for supporting implementation including compliance by UTY of their obligations and responsibilities for project implementation in accordance with ADB's policies and procedures.

At loan negotiations, the borrower and ADB shall agree to the PAM and ensure consistency with the loan agreement. Such agreement shall be reflected in the minutes of the loan negotiations. In the event of any discrepancy or contradiction between the PAM and the loan agreement, the provisions of the loan agreement shall prevail.

After ADB Board approval of the project's report and recommendations of the President (RRP), changes in implementation arrangements are subject to agreement and approval pursuant to relevant government and ADB administrative procedures (including the Project Administration Instructions) and upon such approval, they will be subsequently incorporated in the PAM.

I. PROJECT DESCRIPTION

1. The project aims to electrify the missing 145.1 kilometers (km) of single-track non-electrified track linking major cities in the populous Fergana Valley with Tashkent. This will facilitate direct and efficient operation of both freight and passenger train services and thereby promotes economic and social development of the Fergana Valley.¹

2. The Project will be aligned with the following impacts: (i) stimulated economic growth in the Fergana Valley, and (ii) increased regional trade along CAREC Corridor 2. The outcome will be the level of passenger and freight service on the Pap-Namangan-Andijan railway line improved.

3. The project will produce two outputs. First, railway infrastructure along the Pap-Namangan-Andijan railway line will be upgraded. This includes electrification of 145.1 km of the main railway line to 27.5 kilovolts alternating current, construction of 2 traction substations and dispatcher points, purchase of maintenance equipment and machinery, modernization of signaling and communications facilities, and construction of external power supply facilities which will transmit electricity from the main grid to the traction substations.

4. The project will build upon another initiative being taken by UTY and the government to realign six kilometers of the railway line to bypass a section of the line that currently traverses the territory of the Kyrgyz Republic. The construction of this 6.7 kilometer bypass will not be considered part of the ADB-financed project, but rather an associated facility.

5. Second, UTY's institutional capacity will be strengthened, especially with regards to operational safety for general public along the railway. With the project, it is expected that train frequencies and speeds will increase. Also, the presence of the power lines may pose additional risks of electrocution. To offset any potential negative impacts which may arise, the project will support UTY in (i) conducting an assessment of the existing and anticipated safety situation to the general public including women and children, (ii) supporting the development of practical countermeasures, and (iii) training of staff (including female staff) to plan future railway developments in the safest manner.

II. IMPLEMENTATION PLANS

A. Project Readiness Activities

Table 1: Project Readiness Activities

Indicative Activities	2016	2017								Responsibility	
	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug		
Advance contracting actions	X	X	X	X	X	X	X	X	X	X	UTY/UTY PIU
Establish project implementation arrangements	X										UTY/UTY PIU

¹ The Asian Development Bank (ADB) provided project preparatory technical assistance for Preparation of Central Asia Regional Economic Cooperation Corridor 2 (Pap-Namangan-Andijan) Railway Electrification Project (TA 8706-UZB).

Indicative Activities	2016	2017								Responsibility	
	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug		
Loan negotiations			X								ADB, government and UTY
ADB Board consideration					X						ADB
Loan signing						X					ADB and government
Government legal opinion provided								X			Government
Government budget inclusion		X									Government
Loan effectiveness									X		ADB and government

ADB = Asian Development Bank, PIU = project implementation unit. UTY = Joint Stock Company O'zbekiston Temir Yo'llari.

Source: Asian Development Bank.

B. Overall Project Implementation Plan

6. The overall project implementation plan records outputs with key implementation activities. This is updated annually and submitted to ADB with contract and disbursement projections for the following year.

Table 2: Project Implementation Plan

Indicative Activities	2016				2017				2018				2019				2020				2021			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
A. DMF																								
Output 1 Railway infrastructure along the Pap-Namangan-Andijan line upgraded																								
Output 2 Operational safety of railways in the Fergana valley improved																								
B. Management Activities																								
Procurement plan key activities to procure contract packages																								
Consultant selection procedures																								
Environment management plan key activities																								
Communication strategy key activities																								
Annual and/or midterm review																								
Project completion report																								

DMF = design and monitoring framework.

Source: Asian Development Bank.

III. PROJECT MANAGEMENT ARRANGEMENTS

A. Project Implementation Organizations: Roles and Responsibilities

Table 3: Project implementation organizations

Project Implementation Organizations	Management Roles and Responsibilities
UTY (executing agency) and its Project Implementation Unit	<ul style="list-style-type: none"> • Coordinate project implementation, including with Uzbekenergo • Hire additional staff for PMU with the required expertise • Enhance procurement capacity, especially in relation to international competitive bidding • Recruit consultants • Procure works and goods • Update procurement plan annually and as needed to reflect changes agreed with ADB (implement only after ADB approval) • Monitor procurement activities and key milestones and submit the status to ADB with the quarterly progress report • Manage contracts • Ensure timely provision of agreed counterpart funds for project activities • Submit withdrawal applications to ADB • Maintain project financial statements • Ensure project financial audits are conducted and recommendations are implemented within the agreed timeframe • Disclose project documents • Involve beneficiaries and civil society representatives in all stages of project design and implementation • Monitoring and evaluate project activities and outputs, and prepare review reports reflecting issues and time-bound actions taken or to be taken • Prepare quarterly progress reports and a project completion report, and ensure timely submission of reports to ADB • Ensure compliance with all loan covenants • Ensure project's sustainability during post implementation stage and report to ADB on the assessed development impacts
ADB	<ul style="list-style-type: none"> • Assist UTY in providing timely guidance at each stage of the project for smooth implementation in accordance the agreed implementation arrangements • Review all documents that require ADB approval • Conduct periodic loan review, mid-term review, and completion review missions • Supervise compliance with all loan covenants • Timely process withdrawal applications and release eligible funds • Supervise the compliance with financial audit recommendations • Regularly update the project performance review reports with the assistance of UTY • Regularly post on ADB web the updated project data sheet and updated project documents including the PAM, procurement plan, APFS, and safeguards documents
Ministry of Finance	<ul style="list-style-type: none"> • Sign the loan agreement • Monitor project implementation and provide respective coordination and facilitation

Project Implementation Organizations	Management Roles and Responsibilities
	<ul style="list-style-type: none"> • Allocate and release counterpart funds • Endorse to ADB the authorized staff with approved signatures for processing of withdrawal applications • Process and submit to ADB any request, when required, for reallocating loan proceeds
MFERIT	<ul style="list-style-type: none"> • Register contracts for imported goods and international services

ADB = Asian Development Bank, APFS = audited project financial statement, MFERIT = Ministry of Foreign Economic Relations, Investments and Trade, MOF = Ministry of Finance, PAM = project administration manual, PIU = project implementation unit, UTY = O'zbekiston Temir Yo'llari.
Source: Asian Development Bank.

B. Key Persons Involved in Implementation

Executing Agency

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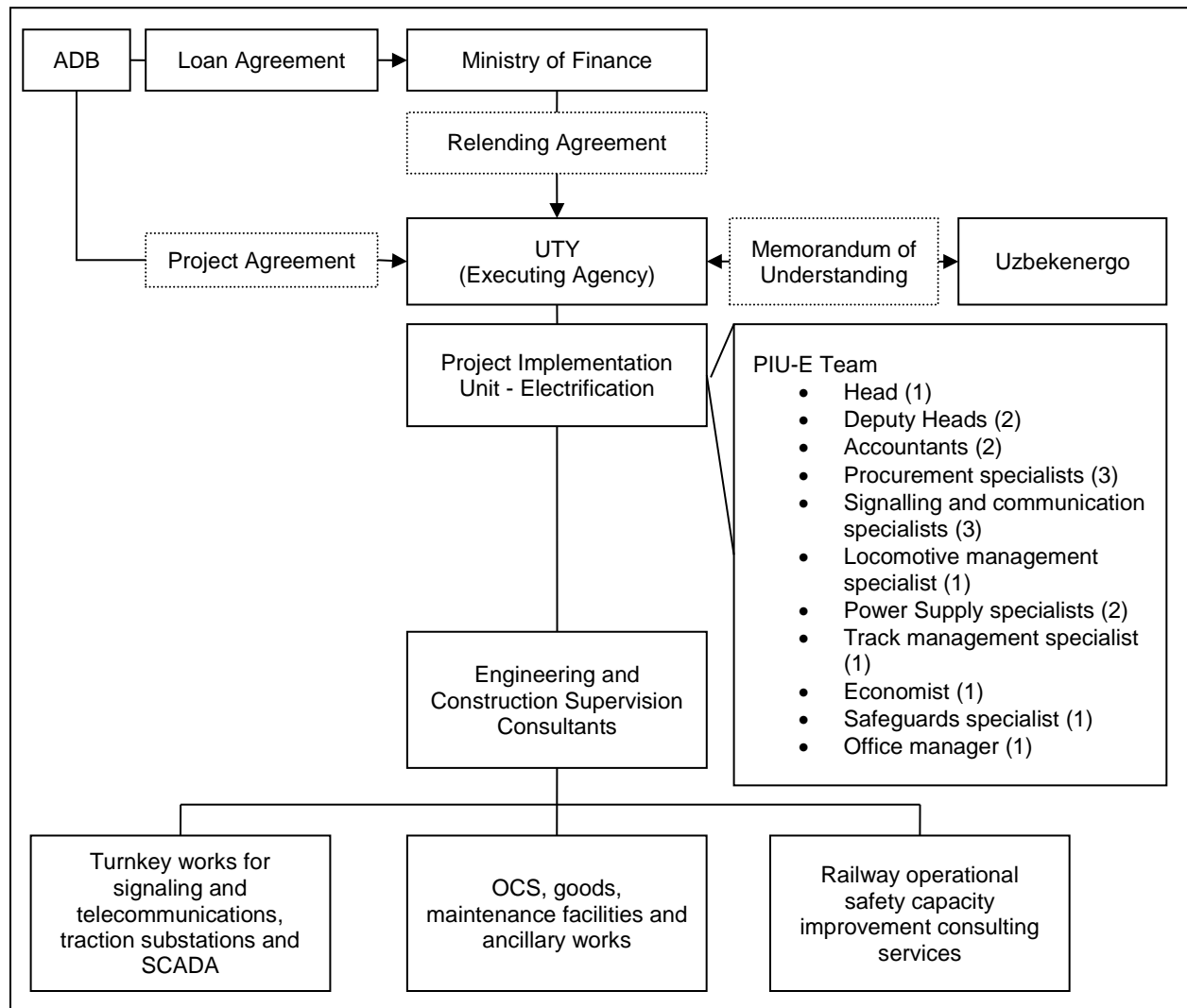
C. Project Organization Structure

7. UTY, the executing agency (EA), is adequately staffed and uses acceptable financial management, has good management practices and a sound track record with project

implementation. Implementation arrangements build on ADB's successful railway project experiences in the country. UTY established a project implementation unit (PIU) on 1 May 2011, which became fully operational following UTY's internal order 163 issued on 16 March 2012. The PIU comprises 18 staff including head, deputy heads, accountants, procurement specialists, signaling and telecommunication specialists, locomotive management specialist, power supply specialists, track management specialist, economist, safeguards specialist and office manager. PIU staff have the necessary experience. Technical departments of UTY also assist PIU during project implementation.

8. International and national experts are engaged as construction supervision consultants. Contract modalities include design and build work, hence the engineering and construction supervision consultants' role is to manage contracts with PIU and give hands-on training in procurement, project management and oversight, operation and maintenance, and reporting.

Figure 1: Project organization structure



ADB = Asian Development Bank, OCS = overhead catenary systems, PIU-E = project implementation unit-electrification, SCADA = UTY = O'zbekiston Temir Yo'llari.

Source: Asian Development Bank and O'zbekiston Temir Yo'llari.

IV. COSTS AND FINANCING

9. The project is estimated to cost \$177.45 million. It is proposed that ADB provide a loan of \$80 million from its ordinary capital resources to finance supervision consultants; procurement of plant (design, delivery, installation and commissioning) of traction substations and dispatcher points, overhead catenary system, signaling, telecommunication and supervisory control and data acquisition (SCADA) system; purchase of maintenance equipment; and purchase of materials for external power supply. The government and UTY are expected to finance the balance, which will cover land acquisition and resettlement, civil works, taxes and duties and financing charges during implementation.

A. Cost Estimates Preparation and Revisions

10. Costs have been estimated by UTY and ADB staff, based on information acquired from UTY's feasibility study, and benchmarking against recently procured packages. Revisions and updates to the cost estimates during implementation are the responsibility of UTY, supported by supervision consultants.

B. Key Assumptions

11. The following key assumptions underpin the cost estimates and financing plan:

- (i) Exchange rate: UZS3,251.06 = \$1.00 (as of 18 January 2017).
- (ii) Price contingencies based on expected cumulative inflation over the implementation period are as follows:

Table 4: Escalation Rates for Price Contingency Calculation

Item	2017	2018	2019	2020	2021	Average
Foreign rate of price inflation	1.4%	1.5%	1.5%	1.5%	1.5	1.5%
Domestic rate of price inflation	11.0%	9.7%	10.0%	10.0%	10.0	10.1%

Sources: World Bank estimates (foreign rat); Asian Development Bank estimates (domestic rates).

C. Detailed Cost Estimates by Expenditure Category

Table 5: Detailed Cost Estimates by Expenditure Category

Item	Foreign Exchange (\$ million)	Local Currency ^b (\$ million)	Total Cost (\$ million)	% of Total Base Cost
A. Investment Costs				
1. Electrification System Installation				
a. Base Structure				
i. Preparatory works				
ii. Track facilities				
iii. Buildings and structures				
b. Traction substations, section post and material for overhead catenary				
c. Signalling and telecommunications				
d. SCADA system				
e. Procurement of machinery and equipment				
f. External power supply				
i. Preparatory works and installation				
ii. Equipment and materials				
2. Supervision Consultants				
3. Administrative expenses ^a				
Total Base Cost (A)	76.00	54.36	130.36	100.0%
B. Taxes and Duties	0.00	38.50	38.50	29.5%
C. Contingencies				
1. Physical	2.00	1.20	3.20	2.5%
2. Price	2.00	0.80	2.80	2.1%
Subtotal (C)	4.00	2.00	6.00	4.6%
D. Financial Charges During Implementation	2.59	0.00	2.59	2.0%
Total Project Cost (A+B+C+D)	82.59	94.86	177.45	136.1%

[This information was deemed confidential according to paragraph 97(v) of ADB's Public Communications Policy.]

^a Includes costs for land acquisition and resettlement (approximately \$2.3 million), studies, monitoring and reporting.

^b Local costs are inclusive of a mandatory 10% allowance to account for foreseen cost inflation.

Notes: Numbers may not sum precisely because of rounding.

Source: Asian Development Bank and O'zbekiston Temir Yo'llari staff estimates.

D. Allocation and Withdrawal of Loan Proceeds

Number	Item	Total Amount Allocated for ADB Financing (\$) Category	Basis for Withdrawal from the Loan Account
1	Plant, goods, and consultancy services for electrification system installation	80,000,000	100% of total expenditure claimed*
	Total	80,000,000	

* Exclusive of taxes and duties imposed within the territory of the Borrower. Inclusive of contingencies.

E. Detailed Cost Estimates by Financier

Table 6: Detailed Cost Estimates by Financier

Item	ADB (\$ million)	% of Cost Category	UTY/Gov't ^a (\$ million)	% of Cost Category	Total Cost (\$ million)
A. Investment Costs					
1. Electrification System Installation*					
a. Base Structure					
i. Preparatory Works					
ii. Track facilities					
iii. Buildings and structures					
b. Traction substations, section post and material for overhead catenary*					
c. Signalling and telecommunications*					
d. SCADA system					
e. Procurement of machinery and equipment					
f. External power supply*					
i. Preparatory works and installation					
ii. Equipment and materials					
2. Supervision Consultants					
3. Administrative expenses					
Total Base Cost (A)	76.00	58%	54.36	42%	130.36
B. Taxes and Duties	0.00	0%	38.50	100%	38.50
C. Contingencies					
1. Physical	2.00	63%	1.20	38%	3.20
2. Price	2.00	71%	0.80	29%	2.80
Subtotal (C)	4.00	67%	2.00	33%	6.00
D. Financial Charges During Implementation	0.00	0%	2.59	100%	2.59
Total Project Cost (A+B+C+D)	80.00	45.1%	97.45	54.9%	177.45

[This information was deemed confidential according to paragraph 97(v) of ADB's Public Communications Policy.]

^a Local costs are inclusive of a mandatory 10% allowance to account for foreseen cost inflation.

Notes: Numbers may not sum precisely because of rounding.

Source: Asian Development Bank and O'zbekiston Temir Yo'llari staff estimates.

* ADB's financing percentage on specific sub-items (to be covered by ADB) under each category will be 100% net of tax.

F. Detailed Cost Estimates by Outputs

Table 7: Detailed Cost Estimates by Outputs
(\$ million)

Item	Total Cost (\$ million)	Output 1 (\$ million)		Output 2 (\$ million)	
		Amount	% of Cost Category	Amount	% of Cost Category
A. Investment Costs					
1. Electrification System Installation					
a. Base Structure					
i. Preparatory Works					
ii. Track facilities					
iii. Buildings and structures					
b. Traction substations, section post and material for overhead catenary					
c. Signalling and telecommunications					
d. SCADA system					
e. Procurement of machinery and equipment					
f. External power supply					
i. Preparatory works and installation					
ii. Equipment and materials					
2. Supervision Consultants					
3. Administrative expenses ^a					
Total Base Cost (A)	130.36	126.26	96.9%	4.10	3.2%
B. Taxes and Duties	38.50	38.50	100.0%	0.00	0.0%
C. Contingencies					
1. Physical	3.20	3.10	96.8%	0.10	3.4%
2. Price	2.80	2.71	96.8%	0.09	3.4%
Subtotal (C)	6.00	5.81	96.9%	0.19	3.4%
D. Financial Charges During Implementation	2.59	2.51	96.8%	0.08	3.4%
Total Project Cost (A+B+C+D)	177.45	173.08	97.5%	4.38	2.5%

[This information was deemed confidential according to paragraph 97(v) of ADB's Public Communications Policy.]

^a Includes costs for land acquisition and resettlement (approximately \$2.3 million), studies, monitoring, and reporting.

Notes: Numbers may not sum precisely because of rounding. Local costs are inclusive of a mandatory 10% allowance to account for foreseen cost inflation.

Source: Asian Development Bank and O'zbekiston Temir Yo'llari staff estimates.

G. Detailed Cost Estimates by Year

Table 8: Detailed Cost Estimates by Year
(\$ million)

Item	Total Cost (\$ million)	2017	2018	2019	2020
A. Investment Costs					
1. Electrification System Installation					
a. Base Structure					
i. Preparatory Works					
ii. Track facilities					
iii. Buildings and structures					
b. Traction substations, section post and material for overhead catenary					
c. Signalling and telecommunications					
d. SCADA system					
e. Procurement of machinery and equipment					
f. External power supply					
i. Preparatory works and installation					
ii. Equipment and materials					
2. Supervision Consultants					
3. Administrative expenses ^a					
Total Base Cost (A)	130.36	20.19	62.10	30.70	17.37
B. Taxes and Duties	38.50	17.80	9.56	6.30	4.84
C. Contingencies					
1. Physical	3.20	0.53	1.07	1.07	0.53
2. Price	2.80	0.47	0.93	0.93	0.47
Subtotal (C)	6.00	1.00	2.00	2.00	1.00
D. Financial Charges During Implementation	2.59	0.11	0.55	1.12	0.81
Total Project Cost (A+B+C+D)	177.45	39.09	74.22	40.12	24.02

[This information was deemed confidential according to paragraph 97(v) of ADB's Public Communications Policy.]

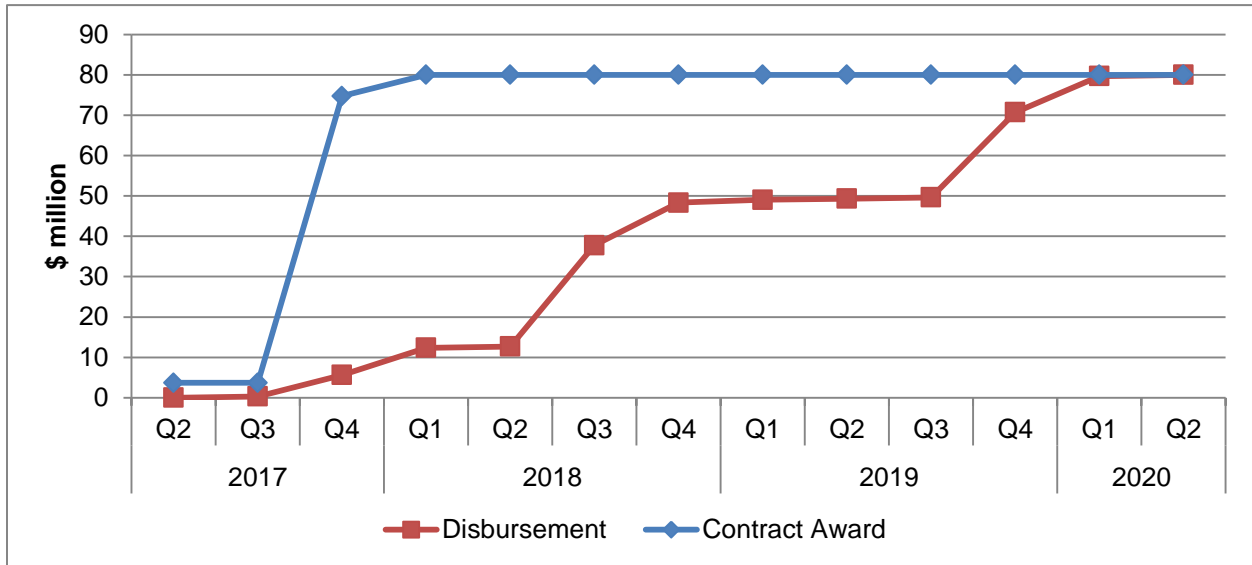
^a Includes costs for land acquisition and resettlement (approximately \$2.3 million), studies, monitoring, and reporting.

Notes: Numbers may not sum precisely because of rounding. Local costs are inclusive of a mandatory 10% allowance to account for foreseen cost inflation.

Source: Asian Development Bank and O'zbekiston Temir Yo'llari staff estimates.

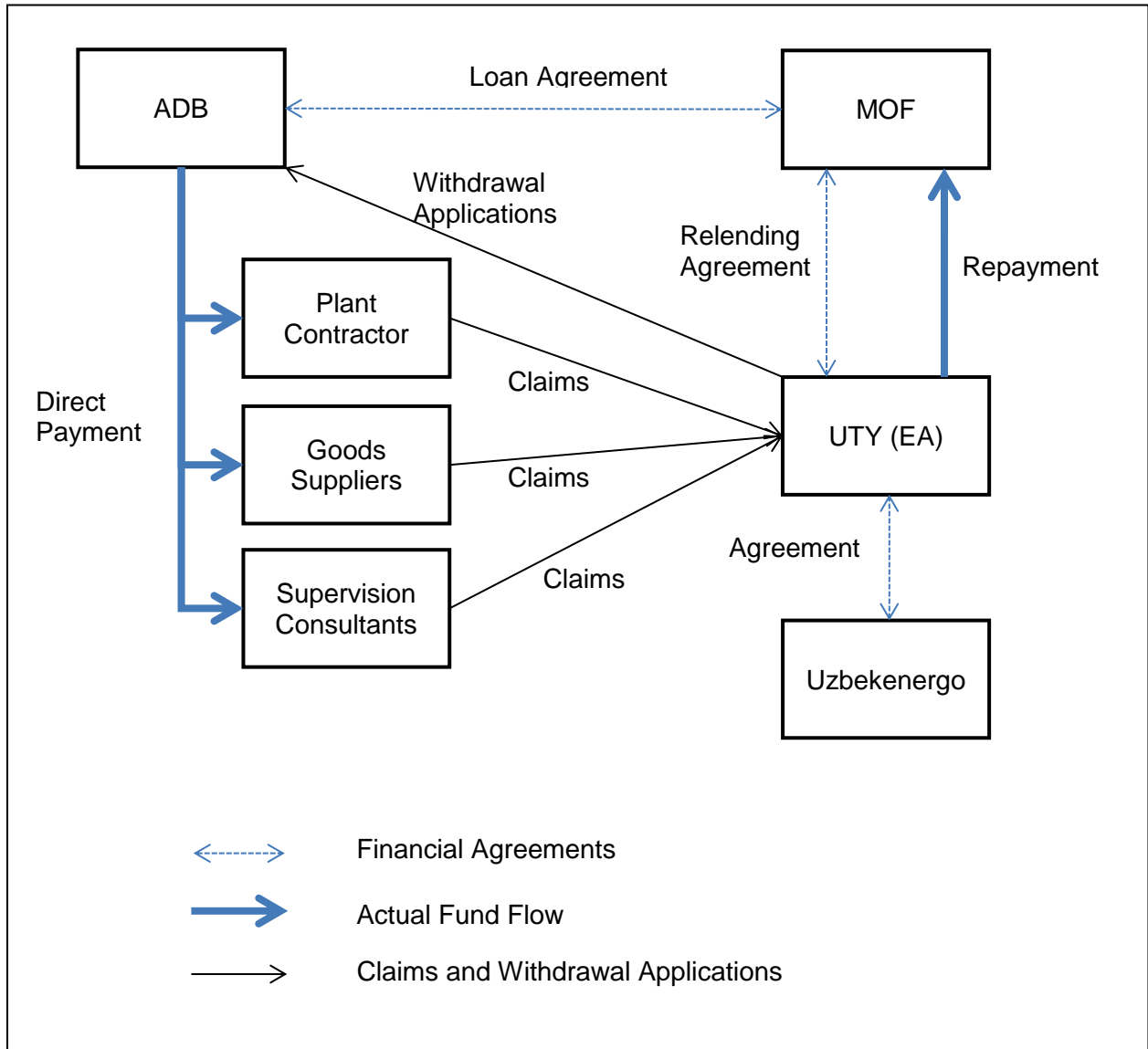
H. Contract and Disbursement S-Curve

12. The S-curve is only for ADB financing, which will be recorded in ADB's systems and reported through e-Ops. The projection for contract awards includes contingencies and unallocated amounts, but excludes front-end fees, service charges, and interest during construction. The cumulative disbursements at project completion is equal to the full loan amount, with project completion defined as up to 4 months after loan closing.



Year	Contract Awards					Disbursement				
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total
2017	0.00	3.68	0.00	71.05	74.74	0.00	0.00	0.31	5.33	5.64
2018	5.26	0.00	0.00	0.00	5.26	6.73	0.31	25.12	10.55	42.71
2019	0.00	0.00	0.00	0.00	0.00	0.69	0.31	0.31	21.09	22.39
2020	0.00	0.00	0.00	0.00	0.00	8.96	0.31	0.00	0.00	9.27

I. Fund Flow Diagram



V. FINANCIAL MANAGEMENT

A. Financial Management Assessment

13. The financial management assessment (FMA) was conducted in October 2016 in accordance with ADB's Guidelines for the Financial Management and Analysis of Projects and the Financial Due Diligence: A Methodology Note. The FMA updated the assessment for the CAREC Corridor 6 (Marakand–Karshi) Railway Electrification Project, initially conducted in 2011 and updated from time to time.

14. The FMA considered the capacity of the UTY, including funds-flow arrangements, staffing, accounting and financial reporting systems, financial information systems, and internal and external auditing arrangements. The assessment concluded that UTY's current project financial management practices, policies and procedures are capable of implementing the project in compliance with ADB requirements. This is backed by UTY and the PIU's ongoing track record of successfully managing projects financed by ADB and other international financial institutions.

15. **Executing agency.** UTY is a joint stock company, with a long and successful history of implementing capital projects and managing the railway network of Uzbekistan. The PIU has been in existence since 2012, is situated within the UTY structure and has a successful record of implementing projects financed by ADB and other international financial institutions. Some new staff of PIU have less familiarity with ADB financial management procedures and requirements.

16. **Fund flow arrangements.** UTY and the PIU have enough capacity and capability to work under the proposed fund flow arrangements acceptable to ADB. The fund flow arrangements are the same as which was successfully applied in an ongoing ADB-financed project of similar nature.

17. **Staffing.** The PIU comprises 18 staff including 2 accountants. In addition, there are more than 20 staff in the central accounting group in Tashkent including two Deputy Heads. UTY accounting personnel are assigned to PIUs to oversee project accounting activities and ensure that UTY accounting staff complete the project accounting requirements accurately and timely. Accounting staff receive training regularly at the UTY Institute and externally from the Association of Accountants and Auditors and the Academy for State and Public Construction. The World Bank is conducting training of PIU staff on financial management.

18. **Accounting policies and procedures.** UTY accounts for its operations in accordance with International Accounting Standards (IAS) and International Financial Reporting Standards (IFRS). Policies and procedures are documented in an accounting manual. UTY's Finance and Accounting Department is capable of providing all necessary data for the project (in both local and foreign currencies). Segregation of duties is specified including budgeting system, payments, policies and procedures, cash and bank, safeguard over assets, other offices, and implementing agencies

19. **Internal and external audit.** UTY's financial statements are audited annually by an internal audit function and an external auditor. The 2014 external audit was conducted by Audit-AS Audit Company based in Tashkent and delivered September 30, 2015. Audit-AS is affiliated with Crowe Horwath International, a global network of audit firms. Audit findings are a subject of consideration by the Supervisory board of UTY.

20. **Reporting and Monitoring.** The PIU reports to UTY's Investments Department, Directorate on Capital Construction, MOF, MFERIT and UTY's accounting department monthly and weekly as required.

21. **Information systems.** The PIU uses its own system which is capable of monitoring and reporting all key elements necessary for effective project management. The UTY Finance and Accounting Department's accounting system is structured for the National Accounting Standards of Uzbekistan. The PIU system and the finance and accounting department system are not integrated and UTY accounting staff is required to manually enter data produced by the PIU system into UTY's central accounting system.

Financial Risk Assessment and Mitigation Measures

	Risk Assessment*	Mitigation Measures
Inherent Risk		
1. Country-specific risks	S	Continue to work with the government to minimize delays to contract registration and counterpart fund availability UTY has sufficient and proven capacity to manage ADB-financed projects. Retain and further improve capacity of PIU staff on financial management.
2. Entity-specific risks	M	
3. Project-specific risks	M	
Overall Inherent Risk	M	Ensure strong coordination between UTY and Uzbekenergo on external power supply component, backed by written agreement mutually signed at management level.
Control Risk		
1. Executing Agency	N	PIU has sufficient and proven capacity to manage ADB-financed projects.
2. Fund Flow Arrangements	N	PIU is experienced in direct payment procedure as applied to the previous ADB-financed project.
3. Staffing	M	Current staffing is sufficient. However, new staff of PIU would benefit from receiving ADB financial management training.
4. Accounting Policies and Procedures	M	Accounting policies adhere to International Accounting Standards (IAS) and International Financial Reporting Standards (IFRS).
5. Internal and External Audit	N	Periodic internal audits conducted by UTY. External audits being conducted annually with recent satisfactory results.
6. Reporting and Monitoring	M	PIU has adhered to reporting and monitoring requirements of ADB, albeit with delay to submission of APFSs.
7. Information Systems	M	EA to consider using fully integrated financial management software
Overall control risk	M	

*H = High, S = Substantial, M = Moderate, N = Negligible or Low.

ADB = Asian Development Bank, EA = executing agency, MFERIT = Ministry of Foreign Economic Relations, Investment and Trade, MOE = Ministry of Economy, MOF = Ministry of Finance, NAS = national accounting standards, PIU = project implementation unit, UTY = O'zbekiston Temir Yo'llari.

Source: ADB staff and consultants.

22. It is considered that the overall premitigation financial management risk of the project is moderate. The borrower and UTY have agreed to implement an action plan as key measures to address the deficiencies. The financial management action plan is provided in the table below.

Financial Management Action Plan

Key Risk	Action Plan	Responsibility	Timing
New staff of PIU less familiar with ADB procedures for financial management	ADB to conduct and PIU finance and accounting staff to attend training on ADB financial management procedures	PIU	Before and during project implementation, as necessary
Limited integration of information systems/software packages used by UTY/PIU	UTY/PIU to consider using fully integrated financial management software that can generate customized reports	UTY, PIU	Before and during project implementation, as necessary

B. Disbursement

1. Disbursement Arrangements for ADB Funds

23. The loan proceeds will be disbursed in accordance with ADB's *Loan Disbursement Handbook* (2015, as amended from time to time), and detailed arrangements agreed upon between the government and ADB. No withdrawals shall be made from the Loan Account until the Subsidiary Loan Agreement shall have been signed between the government and UTY, and become effective in accordance with its terms. Online training for project staff on disbursement policies and procedures is available.² Project staff are encouraged to avail of this training to help ensure efficient disbursement and fiduciary control.

24. Direct payment procedures will be used for the plant-design, supply and install contracts, goods contracts, and consulting services. No imprest account will be established for this project.

25. UTY will be responsible for (i) preparing disbursement projections, (ii) requesting budgetary allocations for counterpart funds, (iii) collecting supporting documents, and (iv) preparing and sending withdrawal applications to ADB. Before the submission of the first withdrawal application, Government/UTY should submit to ADB sufficient evidence of the authority of the person(s) who will sign the withdrawal applications on behalf of the borrower, together with the authenticated specimen signatures of each authorized person. The minimum value per withdrawal application set in accordance with ADB's *Loan Disbursement Handbook* (2015, as amended from time to time). UTY is to consolidate claims to meet this limit. Withdrawal applications and supporting documents will demonstrate, among other things that the goods, and/or services were produced in or from ADB members, and are eligible for ADB financing.

2. Disbursement Arrangements for Counterpart Fund

26. All disbursements under government financing will be carried out in accordance with regulations of Uzbekistan relevant to co-financing of the projects financed by Multilateral Financing Organizations. UTY is using own funds as counterpart funds for this project. In case of any shortfall in UTY's funding, the Borrower will seek and identify alternative sources of funding to ensure the successful completion of the project. A written guarantee is required at MOF and UTY level to ensure the timely disbursement of counterpart funding.

² Disbursement eLearning. http://wpqr4.adb.org/disbursement_elearning.

C. Accounting

27. UTY will maintain, or cause to be maintained, separate books and records by funding source for all expenditures incurred on the project following accrual-based accounting following the Uzbekistan National Accounting Standards. UTY will prepare consolidated project financial statements in accordance with the government's accounting laws and regulations which are consistent with international accounting principles and practices.

D. Auditing and Public Disclosure

28. UTY will cause the detailed consolidated project financial statements to be audited in accordance with International Standards on Auditing by an independent auditor acceptable to ADB. The audited project financial statements together with the auditor's opinion will be presented in the English language to ADB within 6 months from the end of the fiscal year by the UTY.

29. The audit report for the project financial statements will include a management letter and auditor's opinions, which cover (i) whether the project financial statements present an accurate and fair view or are presented fairly, in all material respects, in accordance with the applicable financial reporting standards; (ii) whether the proceeds of the loan were used only for the purpose(s) of the project; and (iii) whether the borrower or executing agency was in compliance with the financial covenants contained in the legal agreements (where applicable).

30. In addition to annual audited project financial statements, UTY shall (i) provide its annual financial statements prepared in accordance with financing reporting standards acceptable to ADB; (ii) have its financial statements audited annually by independent auditors whose qualifications, experience and terms of reference are acceptable to ADB, in accordance with auditing standards acceptable to ADB; (iii) as part of each such audit, have the auditors prepare the auditors' opinion(s) on the financial statements and compliance with the financial covenants of the Loan Agreement; and (iv) furnish to ADB, no later than 1 month after approval by the relevant authority, copies of such audited financial statements and auditors' opinion(s), all in the English language, and such other information concerning these documents and the audit thereof as ADB shall from time to time reasonably request.

31. Compliance with financial reporting and auditing requirements will be monitored by review missions and during normal program supervision, and followed up regularly with all concerned, including the external auditor.

32. The government and UTY have been made aware of ADB's approach to delayed submission, and the requirements for satisfactory and acceptable quality of the audited project financial statements.³ ADB reserves the right to require a change in the auditor (in a manner

³ ADB's approach and procedures regarding delayed submission of audited project financial statements:

- (i) When audited project financial statements are not received by the due date, ADB will write to the executing agency advising that (a) the audit documents are overdue; and (b) if they are not received within the next 6 months, requests for new contract awards and disbursement such as new replenishment of imprest accounts, processing of new reimbursement, and issuance of new commitment letters will not be processed.
- (ii) When audited project financial statements are not received within 6 months after the due date, ADB will withhold processing of requests for new contract awards and disbursement such as new replenishment of imprest accounts, processing of new reimbursement, and issuance of new commitment letters. ADB will (a) inform the executing agency of ADB's actions; and (b) advise that the loan may be suspended if the audit documents are not received within the next 6 months.

consistent with the constitution of the borrower), or for additional support to be provided to the auditor, if the audits required are not conducted in a manner satisfactory to ADB, or if the audits are substantially delayed. ADB reserves the right to verify the project's financial accounts to confirm that the share of ADB's financing is used in accordance with ADB's policies and procedures.

33. Public disclosure of the audited project financial statements, including the auditor's opinion on the project financial statements, will be guided by ADB's Public Communications Policy 2011.⁴ After the review, ADB will disclose the audited project financial statements and the opinion of the auditors on the project financial statements no later than 14 days of ADB's confirmation of their acceptability by posting them on ADB's website. The management letter, additional auditor's opinions, and audited entity financial statements will not be disclosed.⁵

VI. PROCUREMENT AND CONSULTING SERVICES

A. Project Procurement Risk Assessment

34. The design of the procurement packaging is informed by a project procurement risk assessment (PPRA) which was conducted by ADB project preparatory technical assistance consultants. The PPRA confirmed the overall procurement risk as Moderate, with mitigation. Three major risk areas were identified, as well as mitigation measures. These are summarized in the table below.

Project Procurement Risk Assessment and Mitigation Measures

Risk Description	Risk Assessment*	Mitigation Measures or Risk Management Plan
1. Delays in preparation and approval of the bidding documents and conducting of the bidding process, caused by unfamiliarity with ADB procurement guidelines and complex procedures prescribed by the national legislation	M	UTY/PIU has gained substantial experience with procurement under ADB guidelines, however, current procurement staff of the PIU is lacking this experience. To address this, they will be assisted by PPTA and supervision consultants in managing international procurements including the process of procurement planning and monitoring; preparation of bidding documents, bid evaluation and contract awards; contract management and administration. In addition, PIU procurement staff will receive on-the-job training by procurement consultants and formal training by Uzbekistan Resident Mission. All procurement-related decisions will be subject to prior review by ADB.
2. Multiple layers of procurement review and approving authorities, lengthy procedure to register contract and verification of contract price to cause procurement and implementation delay.	S	ADB will continue dialogue with the government to streamline/simplify the procurement approval procedure and remove the price verification and modification of the contract award price when registering the contract under ADB funded project. ADB and the government are conducting regular meetings to discuss all pending issues and follow up actions.

(iii) When audited project financial statements are not received within 12 months after the due date, ADB may suspend the loan.

⁴ Public Communications Policy: <http://www.adb.org/documents/pcp-2011?ref=site/disclosure/publications>.

⁵ This type of information would generally fall under public communications policy exceptions to disclosure. ADB. 2011. *Public Communications Policy*. Paragraph 97(iv) and/or 97(v).

Risk Description	Risk Assessment*	Mitigation Measures or Risk Management Plan
3. Complex coordination between UTY, Uzbekenergo, respective design institutes and local authorities may cause delays to procurement packaging and project implementation.	S	UTY as the executing agency will perform systematic coordination with Uzbekenergo, design institutes and local authorities. PPTA and supervision consultants will support UTY in this regard. Furthermore, Uzbekenergo representatives will participate in all stages of the bidding for External Power Supply to ensure its full involvement in the bidding process and concurrence with the results.
Overall procurement risk	S	(M with mitigation measures)

* H = High, S = Substantial, M = Moderate, N = Negligible or Low.

ADB = Asian Development Bank, EA = executing agency, PIU = project implementation unit, PPTA = project preparatory technical assistance, UTY = O'zbekiston Temir Yo'llari.

Source: ADB staff and consultants.

B. Advance Contracting and Retroactive Financing

35. All advance contracting and retroactive financing will be undertaken in conformity with ADB Procurement Guidelines (2015, as amended from time to time) and ADB's Guidelines on the Use of Consultants (2013, as amended from time to time). The issuance of invitations to bid under advance contracting and retroactive financing will be subject to ADB approval. The borrower and UTY have been advised that approval of advance contracting and retroactive financing does not commit ADB to finance the project.

36. **Advance contracting.** To expedite project implementation, advance contracting will be conducted for project management consulting services, as well as all goods and plant procurement packages. Advance contracting allows the government to commence procurement activities, at its own risk, prior to signing of the loan agreement but does not allow for the award of contract until after the loan has become effective.

37. **Retroactive financing.** The maximum amount of eligible expenditures up to \$16 million, the equivalent of 20% of the total ADB loan, incurred before loan effectiveness, but not more than 12 months before the signing of the loan agreement. This is envisaged for equipment and materials for external power (goods), machinery, tools and equipment for maintenance (goods) and project implementation and supervision consultants. external power supply (goods), machinery, tools and equipment for maintenance (goods), as well as consulting services.

C. Procurement of Goods, Works, and Consulting Services

38. All procurement of goods and works will be undertaken in accordance with ADB's Procurement Guidelines (2015, as amended from time to time).

39. Procurement will consist of three packages, namely:

- A plant (design-procure-construct) package with three lots, covering (i) transformer sub-stations, section posts, catenary systems and, (ii) signaling, telecommunication, and (iii) SCADA; and
- A goods package to cover maintenance machinery/equipment.
- A goods package on external power supply.

40. International competitive bidding will apply to all three packages. ADB's Standard bidding documents (latest edition) will be used. As a result of international competitive bidding, it

would be possible for multiple contracts to be awarded to one company or joint venture of companies.

41. An 18-month procurement plan indicating threshold and review procedures, goods, works, and consulting service contract packages and national competitive bidding guidelines is in Section C.

42. All consultants will be recruited according to ADB's Guidelines on the Use of Consultants (2013, as amended from time to time).⁶ The terms of reference for all consulting services are detailed in Section D.

43. An estimated 219 person-months (111 international, 108 national) of consulting services are required to (i) facilitate project management and implementation, and (ii) strengthen the institutional and operational capacity of the executing agency. Consulting firms will be engaged using the quality- and cost-based selection (QCBS) method with a quality–cost ratio of 80:20.

D. Procurement Plan

Basic Data

Project Name: Central Asia Regional Economic Cooperation Corridor 2 (Pap-Namangan-Andijan) Railway Electrification Project	
Project Number: 48025-003	Approval Number: {XXXXXX}
Country: Uzbekistan	Executing Agency: O'zbekiston Temir Yo'llari (UTY)
Project Procurement Classification: B	Implementing Agency: UTY PIU
Procurement Risk: Moderate	
Project Financing Amount: \$177.45 million ADB Financing: \$80.00 million Cofinancing (ADB Administered): 0 Non-ADB Financing: \$97.45 million	Project Closing Date: 30 June 2021
Date of First Procurement Plan: 22 October 2016	Date of this Procurement Plan: 10 March 2017

A. Methods, Thresholds, Review and 18-Month Procurement Plan

1. Procurement and Consulting Methods and Thresholds

Except as the Asian Development Bank (ADB) may otherwise agree, the following process thresholds shall apply to procurement of goods and works.

Procurement of Goods and Works		
Method	Threshold	Comments
International Competitive Bidding (ICB) for Works	\$5,000,000	
International Competitive Bidding for Goods	\$2,000,000	

Consulting Services	
Method	Comments
Quality and Cost Based Selection (QCBS)	

⁶ Checklists for actions required to contract consultants by method available in e-Handbook on Project Implementation at: <http://www.adb.org/documents/handbooks/project-implementation/>.

2. Goods and Works Contracts Estimated to Cost \$1 Million or More

The following table lists goods and works contracts for which the procurement activity is either ongoing or expected to commence within the next 18 months.

Package Number	General Description	Estimated Value	Procurement Method	Review [Prior / Post/Post (Sampling)]	Bidding Procedure	Advertisement Date (quarter/year)	Comments
1	Lot 1: Traction substations, Section posts, Catenary systems	[This information was deemed confidential according to paragraph 97(v) of ADB's Public Communications Policy.]	ICB	Prior	1S1E	2Q/2017	SBD Plant
	Lot 2: Signaling and Telecom systems						PQ N/A
	Lot3 : SCADA						Domestic preference N/A
2	External power supply		ICB	Prior	1S1E	3Q/2017	SBD Goods PQ N/A Domestic preference N/A
3	Machinery/ equipment		ICB	Prior	1S1E	1Q/2017	SBD Goods PQ N/A Domestic preference N/A

3. Consulting Services Contracts Estimated to Cost \$100,000 or More

The following table lists consulting services contracts for which the recruitment activity is either ongoing or expected to commence within the next 18 months.

Package Number	General Description	Estimated Value	Recruitment Method	Review (Prior / Post)	Advertisement Date (quarter/year)	Type of Proposal	Comments
1	Project Implementation Support and Supervision Consultant	[This information was deemed confidential according to paragraph 97(v) of ADB's Public Communications Policy.]	QCBS	Prior	26 January 2017	Full	International Quality-Cost ratio 80:20

4. Goods and Works Contracts Estimated to Cost Less than \$1 Million and Consulting Services Contracts Less than \$100,000 (Smaller Value Contracts)

The following table groups smaller-value goods, works and consulting services contracts for which the activity is either ongoing or expected to commence within the next 18 months.

Goods and Works								
Package Number	General Description	Estimated Value	Number of Contracts	Procurement Method	Review [Prior / Post/Post (Sampling)]	Bidding Procedure	Advertisement Date (quarter/year)	Comments

Consulting Services								
Package Number	General Description	Estimated Value	Number of Contracts	Recruitment Method	Review (Prior / Post)	Advertisement Date (quarter/year)	Type of Proposal	Comments

B. Indicative List of Packages Required Under the Project

The following table provides an indicative list of goods, works and consulting services contracts over the life of the project, other than those mentioned in previous sections (i.e., those expected beyond the current period).

Goods and Works							
Package Number	General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Procurement Method	Review [Prior / Post/Post (Sampling)]	Bidding Procedure	Comments

Consulting Services							
Package Number	General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Recruitment Method	Review (Prior / Post)	Type of Proposal	Comments

C. List of Awarded and On-going, and Completed Contracts

The following tables list the awarded and on-going contracts, and completed contracts.

1. Awarded and On-going Contracts

Goods and Works							
Package Number	General Description	Estimated Value	Awarded Contract Value	Procurement Method	Advertisement Date (quarter/year)	Date of ADB Approval of Contract Award	Comments

Consulting Services							
Package Number	General Description	Estimated Value	Awarded Contract Value	Recruitment Method	Advertisement Date (quarter/year)	Date of ADB Approval of Contract Award	Comments

2. Completed Contracts

Goods and Works								
Package Number	General Description	Estimated Value	Contract Value	Procurement Method	Advertisement Date (quarter/year)	Date of ADB Approval of Contract Award	Date of Completion	Comments

Consulting Services								
Package Number	General Description	Estimated Value	Contract Value	Recruitment Method	Advertisement Date (quarter/year)	Date of ADB Approval of Contract Award	Date of Completion	Comments

D. Non-ADB Financing

The following table lists goods, works and consulting services contracts over the life of the project, financed by Non-ADB sources.

Goods and Works				
General Description	Estimated Value	Estimated Number of	Procurement Method	Comments

	(cumulative)	Contracts		
Associated civil works, installation	\$97.45 million	Several	Government procedures	Financed 100% by UTY and government

Consulting Services				
General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Recruitment Method	Comments

E. Consultant's Terms of Reference for Engineering and Construction Supervision

General

1. [this part of the TOR will specify the project background, rationale, impact, outcome, outputs, and implementation arrangements. This section has been omitted from this PAM to reduce overlap with other sections of the PAM]

Objectives

2. The main objectives of the consulting services are to: (i) ensure that the procurement and implementation of electrification, signaling and telecommunications, track works and associated civil works under the project are carried out efficiently and in an economical manner, consistent with the widely accepted engineering standards and practices for such works, and to the satisfaction of UTY and ADB; and (ii) assist in the institutional strengthening of UTY by conducting an assessment of the existing and anticipated safety situation to the general public including children, supporting the development of practical countermeasures, and training of staff to plan future railway developments in the safest manner.

Scope of Services

3. The tasks and responsibilities of the Engineering Consultant outlined in the paragraphs below shall be performed under the supervision of the PIU, which will oversee the day-to-day performance of the services, review submissions and deliverables, provide approval, as necessary, and report to the Government/UTY and ADB.

3.1 *Overall responsibility, design reviews and interfacing:* The Engineering Consultant shall:

- (i) Assist the Employer/PIU in all technical and commercial matters relating to the project. Based on general technical state of the art and its related experience, the Engineering Consultant shall submit its observations and proposals exercising all reasonable skill, care and diligence in the discharge of duties and responsibilities under this terms of reference (TOR). The Engineering Consultant shall be responsible for the accuracy and completeness of the assigned tasks.
- (ii) Monitor all contracts for works, goods, and services for the project, which may be financed by ADB. The Employer may authorize the Engineering Consultant to act on its behalf. Such authorization shall be made in written form and be consistent with this TOR and the contract between the Employer and the Engineering Consultant.

- (iii) Coordinate closely with the PIU in the performance of the services. In all matters relating to the project, the Engineering Consultant will report to the PIU and ADB. Decisions on the Engineering Consultant's proposals will be the responsibility of the PIU.
- (iv) Coordinate with all those involved in the recently-completed works of electrification on the Pap – Angren/ Pap– Kokand–Andijan sections and ensure compatibility of designs and facilities as well as interfacing requirements for safe, efficient and economic operations on the Pap–Namangan–Andijan railway route.
- (v) Follow the laws, regulations and normative documents of the Republic of Uzbekistan.
- (vi) Review the preliminary design and/or detailed design carried out by UTY and/or contractors to determine its technical and operational soundness and implement ability and make recommendations and/or alternative proposals to meet the requirements of the project.
- (vii) Considering that the project has various components and different types of works which will be implemented by various agencies/contractors and there are inter-dependencies, the Engineering Consultant shall review all aspects of interfacing of the project and its components including but not limited to (a) technical interface in the designs of various components and parts thereof; (b) interface between the systems on the project section and the systems outside the project section together with countermeasures required in the event that the equipment or facility on either of the sections should fail;(c) interfacing the scheduling of works and equipment installation jobs under the components and parts thereof; and (d) interfacing the implementation of works by one or more agencies/contractors, so as to ensure that the requirements for sound implementation of the project and its safe and efficient operation have been adequately considered and provided for.

3.1.1 Engineering Consultant shall perform the following key tasks according to the Contract:

- Technical, commercial and in-time project realisation
- Interface-Management
- Construction supervision
- Claim management

3.1.2 In detail, the Engineering Consultant shall assist in the following fields:

- Provide all necessary facilities to the work place (office).
- Assist the PIU throughout the bidding process to select the contractor(s) and/or supplier(s) and award the contract(s).
- Examination and co-ordination of time schedules (construction, assembling, installation)
- Preparation of cash flow plans
- Realisation of interfaces between contracts for specific lots
- Realisation of interfaces between the Employer and contractors/suppliers (the Employer's actions/decisions should be co-ordinated with works performed by the contractors in terms of organisation, technique and time)
- Construction supervision (conformity with approved design, quality, functionality, safety, costs, bills of quantity)
- Participation and approval of acceptance tests
- Participation and acceptance in testing
- Participation and acceptance in commissioning

- Checking of project documentation (as-built plans, operational manuals, maintenance manuals)
- Verification of claims (technical, financial, and impact on time of completion)
- Assessing compliance with laws, rules, and standards
- Issue of special approvals
- Checking of completeness of deliveries, spare part management
- Examination of warranty claims
- Dispute arbitration

3.2 Procurement

3.2.1 Procurement of goods, plant and services financed under the ADB loan will follow international competitive bidding (ICB) procedures, in accordance with ADB's *Procurement Guidelines* (2015, as amended from time to time) and ADB's *Guidelines on the Use of Consultants* (2013, as amended from time to time). Works including remodeling of existing structures and/or construction of new buildings, track works, overhead catenary system which are scattered and/or require special arrangements for implementation under conditions of train operations on the project route will be procured in accordance with the government's procedures and be financed by UTY from its own resources. The contract packaging for procurement shall be based on the Procurement Plan approved by ADB. Currently it is envisaged that ICB procurement under the project would involve procurement of goods (materials and equipment) and plant - design, supply and install.

3.2.2 The scope of the Engineering Consultant's work includes the provision of assistance to PIU during the pre-qualification, bidding, including invitation to bid, conducting pre-bid meetings and responding to bidders' requests for clarification and conducting site visits, bid evaluation and preparation of bid evaluation report, contract negotiations, preparing of draft contract and obtaining approval of Government/ ADB for award of contract.

3.2.3 The Engineering Consultant will assist the Employer/PIU in all aspects of contract management up to the stage of completion and hand over of works to the Employer.

3.3 Supervision of Construction works

3.3.1 During the construction stage, the Engineering Consultant will provide supervision and oversight inspection of the construction contract(s). The scope of the construction supervision services includes carrying out contract administration; construction supervision; supervision of the quality assurance plan; monitoring of the environmental management plan; monitoring of the gender and the health and safety plans, monitoring of the HIV/AIDS and human trafficking awareness plans, review of project performance indicators; a project performance baseline study and social assessments; and a completion of a performance monitoring report at the end of construction.

3.3.2 Upon authorization by the Employer in written form, the Engineering Consultant will perform and be responsible for the duties of the Project Manager as defined in the General Conditions of Contract (see ADB's Standard Bidding Document for plant) The Engineering Consultants will, in their proposal, nominate a senior officer of the company who will represent the company throughout the assignment. This senior officer will not be separately remunerated under the consultancy agreement, his/her remuneration shall be deemed to be included in the Engineering Consultant's overhead.

3.3.3 During tendering the Engineering Consultant shall review the safety plans submitted by the bidders for assuring safety during construction. If necessary, the Consultant may require the bidders to submit further details from the point of view of securing safety during construction. During the supervision of the construction work, the Engineering Consultant shall confirm that an accident prevention officer proposed by the contractor is duly assigned at the project site and that the construction work is carried out according to the safety plan as well as the safety measures detailed in the program

3.3.4 The Engineering Consultant shall assist the Employer with the following tasks:

- (i) Assist the Employer with regard to the execution of the works within the Project schedule, budget, quality and safety requirements, and in compliance with: (a) technical specifications; (b) quality requirements; (c) appropriate local and international standards and regulations; (d) working drawings; installation drawings; and (e) construction safety rules.
- (ii) Ensure that the construction methods proposed by the contractor for carrying out the works are satisfactory. Inspect contractor's construction equipment, results of material tests, safety of the works, property and personnel;
- (iii) Review the contractor's(s') final designs, design calculations and working drawings for compliance with the project's requirements, and provide comments and recommendations as appropriate.
- (iv) Establish efficient procedures for verifying contractor performance and reporting progress and problems in a timely manner, including quality control reports, quantity survey records, requests for variation or change orders, and contractor's claims and invoices.
- (v) Resolve problems that may arise during the construction stage, including technical issues, contractors' claims and variations and contractual issue(s) that may arise.
- (vi) Provide day-to-day reports and advice to the Employer on the progress of the works; and assist the Employer, when necessary, on direction and management of the work(s); maintain a daily record of progress of works, and prepare progress reports.
- (vii) Inspections of materials and equipment procured, including overseas inspections at the suppliers' facilities as may be required under the Employer's contracts with contractor(s)/ suppliers.

3.3.5 The Engineering Consultant shall provide the following services during supervision of the contracts:

- (i) Development of the interim and final measurement and payment systems; establish a monitoring system for costs to date and costs to completion; provide a system for the preparation of interim and final payment certificates; provide advice on the evaluation of all claims and extensions of time; provide advice on the preparation of variation orders, and its monitoring and assist PIU in all matters pertaining to the contract(s), claims and disputes;
- (ii) Review and approval of the Contractor's quality assurance plan, working drawings, supervise and monitor compliance with the plan including establishment of the contractors on-site laboratory, and calibration of all testing equipment;

- (iii) Identify utility services (electricity, telecoms, water), if any, within the right-of-way which need to be relocated.
- (iv) Ensure compliance with the requirements of (a) Environmental Management Plan and report in the quarterly progress reports any social problems with implementation of the plan together with recommendations for implementation of amelioration measures; (b) social impact mitigation, including health and safety; HIV/AIDS and human trafficking awareness; and the gender plan; and report any non-compliance in the quarterly progress reports.
- (v) Conduct monthly contract site meetings, which shall be attended by the Engineering Consultant, the contractor's representative and the Employer, and provide advice to the Employer on procedures necessary to complete the works within the time and cost stated in the works contracts.
- (vi) Prepare reports and provide assistance, as necessary and as required, to the Disputes Board and during any subsequent arbitration procedures.
- (vii) For each contract (a) provide the Employer with complete records, reports, and certify completion of part or all of the work and to see that the "as built" drawings are in order; and (b) prepare a final payment certificate, taking over certificate, and performance certificate as required by the General Conditions of Contract.
- (viii) Ensure that the contractor does not involve child labor in the execution of the civil works contracts in accordance with the provisions of the contract agreement.
- (ix) Review the socio/economic project performance indicators provided by the employer and collect necessary baseline data and information for project performance monitoring and evaluation during and after the project implementation as required under the Project.
- (x) Carry out the following duties related to environmental mitigation, with particular reference to the technical requirements of sound environmental standards on the basis of IFC Environmental Health and Safety General Guidelines, Railway Sector Guidelines and TL and DL Guidelines during construction: (a) ensure that all the environmental mitigation measures required to be implemented are incorporated in the contract documents; (b) supervise and monitor the implementation of environmental mitigation measures required; and (c) in the event of occurrence of any unexpected environmental impacts, coordinate with the Executing Agency and ADB;
- (xi) Upon completion of construction to prepare the following reports: (a) Project Monitoring and Evaluation Reporting accordance with the project framework and ADB's *Project Performance Management System Handbook*, including the baseline data survey and the following annual survey and reporting up to project completion; (b) Project Completion Report in conformity with ADB guidelines.
- (xii) On completion of the construction of facilities, to ensure in coordination with the Employer that the plans for switch-over of operation on the railway line to the new equipment and the removal of old equipment is phased in a manner that will ensure continuity of safe and efficient operations on the railway line.
- (xiii) The completed project facilities shall be tested by the Engineering Consultant before commissioning as follows: (a) prepare commissioning requirements for each of the project systems before bringing these in to operation; (b) review the current operations arrangements and prepare a simulation of operations for the newly electrified line to verify and validate the traction power design and the operations planning; and (c) before commencement of the simulation work, the

Employer should be provided with all details with regard to the simulation tools, impact on operations, if any, and the expected results.

- (xiv) The Engineering Consultant shall provide assistance to the Employer during the handover of the completed construction works by the contractors. This shall include but not be limited to the following: oversee tests of systems, sub-systems, components and materials; and witness tests done by the contractors as per the contracts; verify and validate the contractor's test results; monitor that all 'as-built' drawings, all operations and maintenance manuals, spare parts and adequate operations and maintenance training are provided by the contractor(s)/ suppliers to the Employer.

3.4 *Project Manager.* The Employer may appoint and notify that the Engineering Consultant (by name) will be the Project Manager as required under the General Conditions of Contract (ADB's Standard Bidding Documents for Plant). As Project Manager, the Engineering Consultant will represent and act for the Employer at all times during the performance of the contract. All notices, instructions, orders, certificates, approvals and all other communications under the contract shall be given by the Project Manager, except as may be otherwise provided in the contract. Approval of the Employer will be necessary before taking any of the following actions:

- (i) Approval of any amendments to the detailed design, specification or design standards to be adopted.
- (ii) Approving the subcontracting of any parts of the Works.
- (iii) Certifying additional cost.
- (iv) Determining an extension of time.
- (v) Issuing of any and all change orders related to quantities and prices.

3.5 Institutional Strengthening and Operational Safety

3.5.1 The Consultant will support UTY in strengthening functions related to monitoring environmental safeguards for both ADB- and UTY- funded activities.

3.5.2 Furthermore, the Consultant will carry out the following tasks with regards to operational safety for general public along the railway:

- (i) conduct an assessment of the existing and anticipated safety situation to the general public including children, facing the increased train frequencies and speeds as well as the increased risk of shock hazard due to the high-voltage of the electrification,
- (ii) provide recommendation to the UTY the development of practical countermeasures against the issues found in the assessment, and
- (iii) prepare and execute training of staff to plan future railway developments in the safest manner, including the sharing experience with other railway operators in the world.

3.5.3. Training of customer specialists to ensure operational safety and planning the future development of the railway from the experience of railway companies in Japan. Engineer for his own expense will provide training for customer specialists to ensure the operational safety and planning future railway development experience of railway companies in Japan for 10 UTY specialists. During the training in Japan for illustrative teaching material should be provided with access to current international projects. All costs associated with training (visa support, accommodation, flights, meals, etc.) refers to the engineer.

Inputs

4. Schedule and Requirement of consulting services

4.1 A team of international and national consultants is required for the assignment. It is expected that around 116 person-months of international consultants and around 102 person-months of national consultants will be required during the project period of about 36 months.

4.2 The firm has to propose administrative support staff including office manager (1 person), secretary (1 person), translators (2 persons), drivers (2 persons), and tax specialist (1 person) for the entire duration of the consulting service assignment (36 months). Related administrative cost shall be included under out-of-pocket expenses as part of the price proposal.

4.3 The Engineering Consultant will provide the services of national consultants through direct engagement of individual experts and/or through association arrangements of national consulting firm/s. In addition the Consultant will also provide support staff to adequately carry out the assignment.

4.4 The Engineering Consultant's team shall be led by a Team Leader. The Team Leader is responsible for all jobs to be done under the contract for the consulting services. He/she shall assign in writing the work to be done by and/or responsibilities of other experts in the team. He/she will coordinate with other members of the team so that the assigned work can be carried out efficiently and economically. A copy of the assignment of work/ responsibilities to other members of the team will be provided to the Employer. The Team Leader will be ultimately responsible for the delivery and performance of the work.

4.5 The requirement of international and national experts is summarized below.

No.	Description	Duration (person-months)
A.	International Experts	111
1	Team Leader -Project Specialist/Railway Engineer	36
2	Procurement and Contracts Specialist	9
3	Power Supply and SCADA Specialist	30
4	Signaling and Telecommunications Specialist	34
5	Railway Safety Specialist	2
B.	National Experts and Support Staff	120
1	Power Supply and SCADA Specialist	36
2	Signaling and Telecommunications Specialist	36
3	Civil Construction Specialist	36
4	Environment Specialist	12

No. = number, SCADA = Supervisory Control and Data Acquisition.

4.6 *Qualifications of International Experts*

4.6.1 *Team Leader (Project Specialist/Railway Engineer)*: The Team Leader will ideally have a Bachelor's Degree or equivalent in engineering with work experience of at least 15 years, of which about 5 years shall be in similar railway systems; and should have professional knowledge in the fields of the indicated contracts, experience in interface management, and project and contract management. The Team Leader should have good skills in English language and preferably working knowledge in Russian language.

The Team Leader must hold a power of attorney from the consulting firm to act as the Project Manager/ Engineer for the works.

4.6.2 Procurement and Contracts Specialist: The Procurement and Contracts Specialist will ideally have a Master Degree or equivalent with procurement experience of at least 10 years in projects financed by multilateral development banks; professional knowledge in procurement procedures as per ADB guidelines; and contract management. The Specialist should be with strong engineering background and have hands-on experience in projects of similar nature and scope (railway projects) as leader of the procurement team. The Specialist should have good skills in English language and preferably working knowledge in Russian language.

4.6.3 Power Supply and SCADA Specialist: The Power Supply and SCADA Engineer will ideally have Bachelor's Degree or equivalent in engineering with experience of at least 10 years work in the field of power supply and supervisory control and data acquisition (SCADA) systems for control center facilities for control of systems; professional knowledge in the fields of the indicated contracts, experience in interface management, and project and contract management. The Engineer should have good skills in English language and preferably working knowledge in Russian language.

4.6.4 Signalling and Telecommunications Specialist: The Signalling and Telecommunications Engineer will ideally have Bachelor's Degree or equivalent in engineering with experience of at least 15 years in the field of signalling and telecommunications; professional knowledge in the fields of the indicated contracts, experience in interface management, and project and contract management. The Engineer should have good skills in English language and preferably working knowledge in Russian language.

4.6.5 Railway Safety Specialist: The railway safety specialist will ideally have a Bachelor's degree or equivalent qualification and at least 10 years experience of company management in the railway sector. The consultant should be familiar with the railway safety practice in the railway operators in the world.

4.7 Tasks to be performed by International Experts

4.7.1 Team Leader (Project Specialist/Railway Engineer): The Team Leader will coordinate closely with the PIU in the performance of the services. For ADB-financed portion, he/she will review the preliminary design and/or detailed design carried out by UTY and/or contractors to determine its technical and operational soundness and implement ability. He/she will assist the Employer/PIU in all aspects of contract management up to the stage of completion and hand over of works to the Employer. He/she will coordinate with the related UTY staff who is in charge of recently electrified sections and ensure compatibility of designs and facilities and interfacing for efficient and economic operations. If assigned by the Employer, the Team Leader will be the Project Manager as required under the General Conditions of Contract (ADB's Standard Bidding Documents for Plant). The Team Leader will take all necessary actions, including assigning of functions to other specialists in the team, for satisfactory performance of services under this TOR and under the consulting services contract.

4.7.2 Procurement and Contracts Specialist: The Procurement specialist will assist the PIU in the procurement of goods, works, plant and services for the project. He/she will be responsible for execution of all required procedures up to the stage of contracts awards and signing. He/she will assist the Employer to invite expressions of interest, preparation of short list, issuance of requests for proposals, evaluation, and negotiations to the stage of contract signing. He/she will also assist in the management of contracts in the initial start-up period. He/she will develop and execute a procurement capacity building program which includes training of trainers with the long term objective to systematically institutionalize a strong procurement function within UTY.

4.7.3 Power Supply and SCADA Specialist: For ADB-financed portion, the Power Supply and SCADA Engineer will review the preliminary design and/or detailed design of facilities for

electrification, including overhead catenary systems, power supply and local and remote control systems, carried out by UTY and/or contractors to determine its technical and operational soundness and implement ability. He/she will: (i) assist the Employer/PIU in management of relevant contracts up to the stage of completion and hand over of works to the Employer; (ii) review all aspects of interfacing of various components under the project; (iii) review the safety plans submitted by the bidders for assuring safety during construction. The Specialist will perform all jobs as may be assigned by the Team Leader in accordance with this TOR and for successful completion of the consulting services.

4.7.4 Signalling and Telecommunications Specialist. For ADB-financed portion, the Signaling and Telecommunications Engineer will review the preliminary design and/or detailed design of signaling and telecommunications facilities under the project prepared by UTY and/or contractors to determine its technical and operational soundness and ability for implementation. He/she will: (i) assist the Employer/PIU in management of relevant contracts up to the stage of completion and hand over of works to the Employer; (ii) review all aspects of interfacing of new installations with the existing facilities and ensure phasing for uninterrupted operation of train services; (iii) review the safety plans submitted by the bidders for ensuring safety during construction. The Specialist will perform all jobs which may be assigned by the Team Leader in performance of this TOR and for successful completion of the consulting services.

4.7.5 Railway Safety Specialist. The Specialist will (i) conduct an assessment of the existing and anticipated safety situation to the general public including children, facing the increased train frequencies and speeds as well as the increased risk of shock hazard due to the high-voltage of the electrification, (ii) provide recommendation to the UTY the development of practical countermeasures against the issues found in the assessment, and (iii) prepare and execute training of staff to plan future railway developments in the safest manner, including the sharing experience with other railway operators in the world. The training may include a trip to other country(s) to exchange the ideas and plans for the railway safety with relevant railway operator(s). The Specialist will perform all jobs which may be assigned by the Team Leader in performance of this TOR and for successful completion of the consulting services.

4.8 Qualifications and Tasks for National Experts

4.8.1 All national experts should have basic qualification and work experience of at least 10 years in the relevant fields of railway engineering and operations in Uzbekistan; professional knowledge in the fields of the indicated contracts. The experts should have fluent skills in the Russian language; working knowledge of English language will be given preference.

4.8.2 Power Supply and SCADA Specialist. The national expert will perform tasks allocated to them by the Team Leader and by the International Specialist/ Engineer in performance of this TOR and for successful completion of the consulting services. The national expert will assist the international Specialist/ Engineer, for ADB-financed portion, in (i) reviewing the preliminary design and/or detailed design of facilities for electrification; (ii) management of relevant contracts up to the stage of completion and hand over of works to the Employer; and (iii) reviewing all aspects of interfacing of various components under the project and the safety plans submitted by the bidders for assuring safety during construction. Based on his/her experience with local conditions the national expert will give appropriate advice to the international specialist/ expert for ensuring sustainability of the designs and new technologies used for the project.

4.8.3 Signalling and Telecommunications Specialist. The national expert will perform tasks allocated to them by the Team Leader and by the International Specialist/ Engineer in performance of this TOR and for successful completion of the consulting services. The national expert will assist the international Specialist/ Engineer, for ADB-financed portion, in (i) reviewing the preliminary design and/or detailed design of signaling and telecommunications facilities under the project; (ii) management of relevant contracts up to the stage of completion and hand over of works to the Employer; and (iii) reviewing all aspects of interfacing of various

components under the project and the safety plans submitted by the bidders for assuring safety during construction. Based on his/her experience with local conditions the national expert will give appropriate advice to the international specialist/ expert for ensuring sustainability of the designs and new technologies used for the project.

4.8.4 Civil Construction Specialist. The national expert will perform tasks allocated to them by the Team Leader and by the International Specialists/ Engineers in performance of this TOR and for successful completion of the consulting services. The national expert will assist the team leader and the employer, for ADB-financed portion, in (i) reviewing the preliminary design and/or detailed design of all relevant civil works; (ii) management of relevant contracts up to the stage of completion and hand over of works to the Employer; and (iii) reviewing civil construction aspect of interfacing of various components under the project. Based on his/her experience with local conditions the national expert will give appropriate advice to the team leader and/or international specialists/ experts for ensuring sustainability of the designs and new technologies used for the project.

4.8.5 Environment Specialist

The national expert shall (i) continually monitor the Contractors' mitigation measures in accordance with the EMP through weekly site inspections of the Contractors for both ADB- and UTY-funded activities; (ii) advise and endorse Contractors' site-specific EMPs (SEMPs) before submission to PIU for approval prior to commencement of physical works; (iii) preparing a section on Environment, Health and Safety (EHS) in the monthly and quarterly project progress reports; (iv) assist PIU in updating IEE/EMP as necessary; (v) assist PIU in preparing semi-annual environmental monitoring reports; and (vi) provides a short training program on EHS to the PIU safeguard staff and Contractors' environment officers. The national expert will also assist UTY in supervising the implementation of the CAPs, including a post-construction environmental audit, as applicable to the associated/existing facilities which are funded by UTY and not included in the project scope. The national expert will assist the PIU and contractors in liaising with local and national authorities for obtaining necessary environmental permits.

4.9 Curriculum vitae

Curriculum vitae for all positions of international and national must be supplied by the Consultant in its proposal. The support staff shall be nominated by the Consultant, on the basis of CV's to the satisfaction of the Employer, at least one month before their input commences as scheduled in the consultant's accepted staffing schedule and work plan to be detailed in the Inception Report.

4.10 Consultant Selection

4.10.1 An international consultant will be selected in accordance with the "*Guidelines on the Use of Consulting Services by the Asian Development Bank and its Borrowers*" using the Quality and Cost-Based Selection (QCBS) procedures, with the submission of a Full Technical Proposal (FTP).

4.10.2 The Engineering Consultant's services will be needed over an estimated period of 46 months with tentative commencement date of 30 August 2017. Candidates for positions of Team Leader, Power Supply and SCADA Specialist, and Signaling and Telecommunications Specialist are preferred from full time staff of the international consultant.

4.10.3 The total scope of services should be divided in two Phases:

Phase I –Tendering process which includes evaluation of the bids and signature of the contracts.

Phase II – Execution of the Contracts, from commencement to completion of the contracts, and commissioning of all systems built under the project for full scale operations.

4.10.4 During implementation of the project, in case of some delays in realization of the main contracts of the project, the services may need to be re-scheduled and/or postponed, the Employer will not be responsible for any losses nor will any compensation be provided for any losses during this period. Therefore, the Engineering consultant should consider these cases and include into the total price all relevant costs including the travel cost for its international experts. At least two such cases of delays for a total period of 1 year should be considered.

E. Reporting Requirements

5. Submission of Reports

5.1 During the duration of the consulting services, the Consultant is required to report regularly the progress of the services concurrently to the Employer and ADB. The progress shall be reported through both formal progress meetings (including videoconferences with ADB as necessary) and the submission of progress reports to the Employer and ADB as set out in the table below.

Report	Purpose	Frequency	Comment
Inception Report	To describe the Consultant's approach to the Scope of Work	Once	Due one month after mobilization
Monthly progress report	To document the progress achieved in the previous month, highlight any issues and describe the net month's work plan	Monthly throughout the duration of the Consultancy Services	Due on the last calendar day of the month
Quarterly progress report	To document the progress achieved in the previous quarter and program for the next quarter, highlighting issues and actions taken and matters referred to for guidance..	Quarterly throughout the duration of the Consultancy Services	Due on the last calendar day of the quarter
Final Report	To document the services as completed for preliminary design, describe the drawings, documents and plans prepared, status of the budget and provide details of any delays, variations and claims. A Draft Final Report (DFR) shall be prepared and submitted to the Employer for comment (within one month).	Draft Final Report (DFR) and Final Report	The DFR shall be submitted one month before completion of preliminary design. Final Report to be submitted one month after receipt of comments from the Employer.
Project Completion Report	To document the results of completion inspection and instruction for necessary corrective work including as built drawings and summary of the Project.	Upon completion of the construction	This is the assistance in the preparation of the said report.
Other Reports	As defined by the Employer that may include: Monthly certificate of payment; Semi-annual environmental monitoring report; Inspection report; Handover report; and Defects liability report	As defined by the Employer during the construction	This is the assistance in the preparation of the said document and reports.

5.2 The inception report, monthly progress reports, quarterly progress reports and project completion report shall be submitted in 5 copies (Russian) and 2 copies (English) to UTY, 2 copies (English) each to ADB and URM; and draft final report (DFR) and final report shall be submitted in 10 copies (Russian) and 5 copies (English) to UTY and 2 copies (English) each to ADB and URM.

5.3 The Engineering Consultant shall:

- (i) Prepare the various reports in a format and level of detail agreed with the Employer and ADB.
- (ii) Maintain records documenting information supplied by the field teams, decisions made at meetings, progress on civil works, certified achievements and milestones, financial records, and any deviations from or changes to the contract plans; all reports shall be approved, dated and signed by the Head PIU.

- (iii) Assist UTY in preparing quarterly progress reports, a project completion report, and monitoring and evaluation reports as required under the Loan and Project Agreements between the Government and ADB.
- (iv) In addition to the hardcopy format, an electronic copy of all reports shall be submitted. The electronic copy shall be in the format of the original software used to create the report (e.g. MS Word, Excel, PowerPoint, AutoCAD, etc.) and in pdf format. Electronic copies shall be submitted on a CD, DVD or equivalent.

G. Facilities to be provided by the Government and Employer

6.1 Facilities to be provided by the Government and Employer are described in detail in the Section 2 Data Sheet of the Request for Proposal. After completion of the services, the Engineering Consultant shall document and hand over to the Employer all equipment and furniture purchased under the consultant's contract at the same condition in view of depreciation.

VII. SAFEGUARDS

44. The UTY through the PIU will ensure that all safeguard requirements prescribed in IEE and LARP are implemented. The Project, in accordance to ADB SPS 2009, is categorized as “B” category for environment and Involuntary Resettlement. Therefore, the following safeguard documents were prepared during the project preparation:

- (i) Initial Environmental Examination (IEE) including two Environmental Management Plans (EMPs), one to cover the electrification of the railway line and traction substations, and another to cover the external power supply transmission line. The IEE also includes due diligence assessment and corrective action plans (CAPs) for the associated and existing facilities which will be funded by UTY and are not included in the project scope. This report identified potential impacts that would be generated from the Project, and proposed EMPs consisting of mitigation measures, monitoring plan, and arrangements for EMP implementation.
- (ii) Draft Land Acquisition and Resettlement Plan (LARP), which shall be further developed into two implementable LARPs, one to cover the electrification of the railway line, and the other to cover the external power supply.

45. **Prohibited investment activities.** Pursuant to ADB’s Safeguard Policy Statement (2009), ADB funds may not be applied to the activities described on the ADB Prohibited Investment Activities List set forth at Appendix 5 of the Safeguard Policy Statement (2009).

A. Environment

46. Impacts from the Project are expected to be limited in magnitude and a short-time nature during construction, mostly related to operation phase. The main concerns includes impact of electromagnetic fields (EMF) from catenary and external power supply transmission lines; railway and electric shock safety; change in the level of noise and vibration due to the increased speed and frequency of train movement. Environmental impacts during construction phase will be related to waste generation related to equipment replacement and facility improvement; installation works of electric polls/catenary for the main track and the 6.7-km new by-pass alignment, construction of the two traction substations.

47. The PIU at UTY will be responsible for implementation of the EMPs to comply with ADB’s safeguards requirements and environmental national regulations. For this, PIU has hired a qualified full-time safeguard staff who will be assisted by the environmental specialists of the Construction Supervision Consultant (CSC) in overseeing the implementation of EMP. The cost for implementing EMP will be included in the construction contracts, and the cost for environmental supervision will be included in the consulting service of the CSC, the cost for environmental instrumental monitoring, capacity building for environmental management and railway safety will be included in PIU budget. PIU is responsible for overall environmental compliance with SPS 2009. A grievance redress mechanism to handle both environmental and social safeguard issues will be established after the project effectivity.

48. UTY is responsible for CAP implementation using UTY own resources. It is mandatory that ZVOS (Uzbekistan EIA) be prepared and relevant approvals be obtained from Glavgosecoexpertiza of Goskompiroda prior to the commencement of the project activities.

49. EMPs will form part of the bidding documents. To ensure that mitigation actions are implemented in accordance with the requirements of the EMPs, monitoring shall be undertaken as follows:

- Instrumental Monitoring for environmental quality such as air, noise, vibration, water – This shall be performed monthly by a certified laboratory of Sanitarian Epidemiological Station which is affiliated entities of UTY. Schedules, parameters, locations are indicated by the Project EMP and shall be endorsed by the CSC.
- Observational Monitoring – Throughout the construction phase the CSC shall continually monitor the Contractors in both ADB and UTY-funded activities. This will be achieved through weekly inspections of the Contractors environmental performance by CSC's national environmental specialist. CSC shall have the right to suspend works or payments if the Contractor is in violation of any of his obligations under the EMP and SSEMPs.

50. Contractors will be responsible for implementing mitigation measures. Within 30 days after contract award and prior to commencing any physical works, Site-specific Environmental Management plans (SSEMPs) will be developed by the Contractors under the guidance of the CSC, and be endorsed by CSC before submission to PMU for approval. SSEMP is the document that the Contractors shall prepare outlining how he intends to implement the EMP at a specific site or for a specific issue to ensure that all mitigations are implemented as specified in the EMP. SSEMPs will be needed for major environmental issues and most critical sites relating to sensitive receptors. During construction, the Contractors must retain the expertise of a full-time Environmental Officer (EO) to implement and continually update the SSEMPs, and to report on the implementation of mitigation measures throughout the contract period.

51. The CSC is tasked with specific responsibility to assist PIU in ensuring safeguard compliance of civil works – with particular emphasis on the monitoring of implementation of EMP through the SSEMPs and related aspects of the project. CSC shall mobilize a national environmental specialist (NES) to ensure that the Contractor is compliant with his environmental obligations. It is required that the NES provides a short training program to the PIU safeguard person and Contractors EO prior to the start of construction to develop their knowledge and understanding of the environmental, social, health and safety aspects of the Project. TORs for NES can be found in the CSC contract.

52. PIU is responsible for overall EMP implementation and will be assisted by the CSC. The PIU's responsibilities include the following, but not limited to:

- Implement the EMP developed within the IEE, follow up with UTY on CAPs for associated and existing facilities;
- Ensure the bidding documents of CSC and Contractors include all tasks as described in the approved EMP;
- Supervise the CSC and Contractors in EMP implementation for overall compliance with SPS 2009 requirements and project environment-related legal covenants;
- Ensure all necessary government permits and license, including ecological expertise opinion, for all civil works will be obtained;
- Approve SSEMPs which will be prepared by the Contractors and endorsed by the CSC;
- With assistance of the CSC, prepare, submit to the EA and ADB, and disclose semi-annual environmental monitoring reports on ADB website and in UZB;

- Report in a timely manner to ADB of any non-compliance or breaches with ADB safeguard requirements and take corrective actions promptly;
- Update the IEE in case of technical design changes or unanticipated impacts;
- Establish a Grievance Redress Mechanism (GRM) after the project effectivity and act as the GRM secretary to make sure that the GRM is operational to effectively handle environmental and social concerns of project affected persons;
- Build up and sustain institutional capacity in environmental management and railway safety, including conducting public awareness programs

53. State Nature Protection Committee through its branches in Namangan and Andijan provinces will be also involved in the process of project implementation and the railway operation. Provincial Nature Protection Committee will review local Environmental Assessment (ZVOS) and provide approval as appropriate. Moreover, requirements indicated in Environmental Appraisal will be mandatory for implementation and it will be monitored by inspectors from district branches of Nature Protection Committee. Representatives of the Committee will also participate into the hand-over process as member of State Acceptance Commission. The Provincial Nature Protection Committee will receive the project's semi-annual environmental monitoring reports from the PIU.

B. Resettlement

54. The land acquisition and resettlement impacts are estimated to be limited in this project. The UTY, through its PIU, will ensure that land acquisition will be carried out in accordance with ADB's SPS (2009), and applicable laws and regulations in Uzbekistan that have been referred to in the LARP. The PIU will ensure that LARP will be implemented and its implementation monitored to ensure that no affected people will suffer by unattended impacts associated with land acquisition. Based on a conceptual design, the draft LARP indicated that a total of 10.84 hectares of land will be acquired permanently for the project, comprising 114 land parcels and as many land owners. Approximately 24 house structures as well as 4388 trees will be affected. Upon completion of the detailed design, a detailed measurement survey is required to be done comprising a census and assets inventory of the affected persons, leading to preparing two implementable LARPs for (i) the external power supply, and (ii) electrification and 2 traction substations. For implementing this LARP, the PIU will ensure that:

- (i) A resettlement specialist is recruited as part of the PIU team to implement the LARPs and address complaint related with compensation, if any.
- (ii) It will develop two implementable LARPs and carry out adequate consultation with affected people. However, no change should be made on the entitlement matrix of the draft LARP that provided clear guidance on entitlements for compensation.
- (iii) The implementable LARPs have to be submitted to ADB for concurrence prior to implementation, and have to be prepared as early as possible after detailed design is available.
- (iv) The implementable LARPs will be disclosed through ADB's website and the PIU will be responsible to disclose relevant information from the LARPs to the affected people.
- (v) The awarding of civil works contract will be done only after the affected households receive full payment of compensation, and a report on full payment of compensation shall be submitted to ADB. The advance payment to the contractor can only be released by ADB after the report on full compensation payment is received by ADB.

- (vi) Reports on monitoring the implementation of LARPs, including any grievances, will be submitted to ADB on a semi-annual basis.
- (vii) The PIU will also record any unanticipated impacts due to land acquisition and take necessary mitigation measures in accordance with the provisions described in the LARPs.

55. A small section of the electrification (6.7kms) will be over tracks that are being constructed by the government to bypass the existing tracks travelling through neighboring Kyrgyz Republic. The construction of this bypass is outside the project scope and is being conducted by the government and UTY regardless of ADB financing for the electrification project. The government and UTY confirmed that the bypass construction was initiated without anticipation of ADB financing the project. The bypass is therefore considered an associated facility which is not funded as part of the project but essential for or dependent on the project. There is also an existing facility outside of the project scope, comprising the building and maintenance activities at the Andijan Depot.

56. For the associated and existing facilities which are out of the project scope, ADB's SPS requires assessment of impacts and risks to the project. A social due diligence/audit has therefore been conducted, and corrective actions developed from the involuntary resettlement point of view. All the corrective actions will be implemented and monitored by UTY. UTY/PIU will provide to ADB, progress reports on semi-annual basis on land acquisition, resettlement, payment of compensation and assistance to the APs and corrective actions taken. UTY will ensure that no physical and economic displacement will occur until compensation and assistance is paid to the affected persons prior to construction.

57. UTY will establish a grievance redress mechanism in accordance with the LARP in order to receive and facilitate the resolution of the affected persons concerns and grievances about physical and economic displacement and other project impacts, paying particular attention to the impacts on vulnerable groups. A three-level grievance redress mechanism has been proposed, such as, (i) Level-1 (any railway station of Pap-Namangan-Andijan section), (ii) Level-2 (UTY's secretariat in Tashkent), (iii) Level - 3 (Economic court). PIU will ensure that grievances and complaints on any aspect of the land acquisition, compensation, and resettlement are addressed in a timely and satisfactory manner through the GRM. The project level grievance mechanism shall not impede an aggrieved person's access to the country's judicial or administrative remedies. The aggrieved persons can approach a court of law at any time and independent of the project level grievance redress process. UTY and its PIU will keep records of complaints received for its use and monitoring as well as for review by ADB during regular supervision missions. The GRM was presented at the PPTA stage to the communities during public consultations. However all the relevant information on the GRM will be disseminated via the LARP information leaflet/brochure that will be distributed to affected persons. The project information will be disseminated through the disclosure of the LARP and the social due diligence report to the ADB and UTY websites. LARP related information leaflets/brochures in local language will be distributed to the affected persons. All relevant information in local language will also be made available at the district level.

58. UTY through the PIU and supervisions consultants will ensure that meaningful consultations are carried out with the APs throughout the project cycle with particular attention to the needs of the vulnerable and the disadvantaged groups.

C. Indigenous Peoples

59. The country does not have indigenous people’s communities as defined in the SPS for operational purposes. As such, the project is classified as C for indigenous peoples safeguard and no further action is required.

VIII. GENDER AND SOCIAL DIMENSIONS

60. The lack of access to safe and affordable transport significantly hinders the social and economic development of rural households as well as industrial and agricultural sectors. A social and poverty assessment ascertained the project will contribute to reducing transport cost and travel time, ensure safety, and increase access to jobs, markets, healthcare and education facilities for the local population. The primary beneficiaries will be passengers (especially the university community, which is presently the primary user of the railway), freight transporters and agro-industrial producers. It is also expected that new employment will be created during the implementation and operation stage. Women and children will have access to safe transport, with gender-inclusive facilities in trains and at modernized stations. Currently, women and children face unsafe and crowded travel conditions through the use of informal taxis and vans. Electrification of the railway will increase the opportunities of tourism development in the Fergana Valley. This will also contribute to the creation of new jobs in the tourism sector, which is traditionally occupied by women.

61. The project will support measures to mitigate any potential negative social impacts that may arise, particularly on operational safety of the electrified railway. A specific project output will help improve operational safety through (i) conducting an assessment of the existing and anticipated safety situation for the general public including women and children, (ii) supporting the development of practical countermeasures, and (iii) training staff (inclusive of female staff) to plan future railway developments in the safest manner.

IX. PERFORMANCE MONITORING, EVALUATION, REPORTING, AND COMMUNICATION

A. Project Design and Monitoring Framework

Impacts the Project is Aligned with			
Stimulated economic growth in the Fergana Valley (Defined by Project)			
Increased regional trade along CAREC Corridor 2 (CAREC TTFS 2020) ^a			
Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
Outcome	By 2022		
Level of passenger and freight service on the Pap-Namangan–Andijan railway line improved	a. Travel time for passengers from Namangan to Tashkent reduced to 3 hours (2016 baseline: 5 hours via car) b. Average running speed for freight trains increased to 80km/h (2016 baseline:	a-b. UTY annual report b. UTY annual report	Competition from road transport reduce uptake of railway services

Key Activities with Milestones
Project Management Activities
Requests for proposals of project management and construction supervision consultants launched by Q1 2017, and contracts awarded by Q3 2017. Major procurement packages bidded out in Q2 2017, and contracts awarded by Q1 2018.
Inputs
ADB: \$80 million (OCR loan) Government and UTY: \$97.45 million
Assumptions for Partner Financing
Not Applicable

ADB = Asian Development Bank; CAREC = Central Asia Regional Economic Cooperation; CO₂ = carbon dioxide; km = kilometer; TTFS = Transport and Trade Facilitation Strategy; OCR = ordinary capital resources; Q = quarter; UTY = O'zbekiston Temir Yo'llari.

^a ADB. 2014. *CAREC Transport and Trade Facilitation Strategy 2020*. Manila.

Source: Asian Development Bank

B. Monitoring

62. **Project performance monitoring.** UTY and ADB will monitor the overall performance of the project through the project performance monitoring system (PPMS) and project performance reporting (PPR) system,⁷ respectively. UTY will establish PPMS, within 6 months from project commencement, and collect and update baseline data for performance monitoring. The key indicators and targets, assumptions, and risks outlined at the impact, outcome, and output levels in the project's design and monitoring framework (DMF) will be the primary data required for analysis. For this purpose, ADB's inception mission will provide UTY a checklist of the above data in a word file, which will be updated (in track changes) and reported quarterly through UTY's quarterly progress reports and after each ADB review mission. These quarterly reports will provide information to regularly update ADB's PPR system. UTY will involve the beneficiaries in the collection of data on impacts and outcomes. During each review mission, the updated project performance will be shared with the interested representatives of project beneficiaries

63. **Compliance monitoring.** Compliance to the covenants will be jointly monitored by UTY and ADB through monthly and semi-annual updates provided by the engineering and construction supervision consultants. The consultants will submit to ADB a status report on the covenants with the explanation and time-bound actions on partly or non-complied covenants. ADB's resident mission in Tashkent will hold semi-annual review meetings with UTY to ensure the full compliance of the covenants.

64. Safeguards monitoring

- **Environment.** Instrumental Monitoring for environmental quality such as air, noise, vibration, water will be performed monthly by a certified laboratory of Sanitarian Epidemiological Station which is affiliated entities of UTY. Schedules, parameters, locations are indicated by the Project EMP and shall be endorsed by the CSC. The Contractor(s) EO is responsible for the preparation of weekly

⁷ ADB's project performance reporting system is available at <http://www.adb.org/Documents/Slideshows/PPMS/default.asp?p=evaltool>

environmental checklists and environmental section in monthly progress reports that shall be submitted to the CSC for review. Based on site inspection and Contractors' reports, the CSC shall be responsible for preparing an environmental section in monthly and Quarterly project progress Reports to submit to PIU. The CSC is also responsible for assisting PIU in preparing semi-annual Environmental Monitoring Reports (EMRs) and final EMR including post-construction environmental audits.

- **Resettlement.** UTY will submit semi-annual resettlement monitoring reports to ADB which will broadly include; setting up of relevant institutions, status on land for land compensation especially finding the alternate land, land development in the alternate site, status on disbursement of compensation and assistance, number of consultations carried out, number of grievance recorded and redressed, status on progress of physical construction, difficulties (if any) found during the implementation of LARP and corrective actions under the social due diligence report for the 6.7km realignment section and further mitigation measures etc.

65. **Gender and social dimensions monitoring.** The supervision consultant mobilized under the project will support the improvement of operational safety of the railways. They will monitor and report on the implementation of countermeasures in favor of improved safety. Such countermeasures will take into account the special safety needs of women and children, which may include (i) safety of crossing points frequented by women and children, and (ii) public campaigns tailored specifically to women and/or children.

C. Evaluation

66. A project inception mission will be fielded soon after the loan agreement for the project is declared effective. Thereafter, regular reviews will follow at least annually. As necessary, special loan administration missions and a midterm review mission will be fielded, under which any changes in scope or implementation arrangement may be required to ensure achievement of project objectives. The PIU will monitor project implementation in accordance with the schedule and time-bound milestones, and keep ADB informed of any significant deviations that may result in the milestones not being met. A project completion report will be submitted by PIU within 3 months of physical completion of the project, providing detailed evaluation of the progress of implementation, costs, consultant performance, social and economic impact, and other details as requested by ADB.⁸

D. Reporting

67. The UTY will provide ADB with (i) quarterly progress reports in a format consistent with ADB's project performance reporting system; (ii) consolidated annual reports including (a) progress achieved by output as measured through the indicator's performance targets, (b) key implementation issues and solutions, (c) updated procurement plan, and (d) updated implementation plan for the next 12 months; and (iii) a project completion report within 6 months of physical completion of the project. In January and July every year, UTY will submit semi-annual environmental monitoring reports to ADB and relevant government authorities, and these reports will be disclosed to the public on the UTY's (in Uzbek or Russian) and ADB (in English)

⁸ Project completion report format is available at: <http://www.adb.org/Consulting/consultants-toolkits/PCR-Public-Sector-Landscape.rar>

websites. To ensure that projects will continue to be both viable and sustainable, project accounts and the executing agency audited financial statement together with the associated auditor's report should be adequately reviewed.

E. Stakeholder Communication Strategy

Project Documents	Means of Communication	Responsible Party	Audience	Frequency
PDS	ADB's website	ADB	General Public	Initial PDS upon approval of the concept paper; subsequent PDS at least bi-annually or as necessary
IPSA	ADB's website	ADB	General Public, project-affected people in particular	Upon approval of the concept paper
IEE	ADB's website	ADB	General Public	Upon receipt by ADB
DDR	ADB's website	ADB	General Public, project-affected people in particular	Upon receipt by ADB
Documents Produced under PPTA	ADB's website	ADB	General Public	Upon completion
RRP and linked documents	ADB's website	ADB	General Public	Upon approval by the Board
DMF	ADB's website	ADB	General Public	Upon approval of the RRP by the Board
PAM	ADB's website	ADB	General Public	Upon approval of the RRP by the Board; as necessary
LA and PA	ADB's website	ADB	General Public	Upon signing
Amendments to the LA and PA	ADB's website	ADB	General Public	Within 2 weeks of effectiveness
Social and Environmental Monitoring Reports	ADB's and UTY's website	ADB and UTY	General Public, project-affected people in particular	Semi-annually, to be disclosed upon receipt by ADB
Major Change in Scope	ADB's website	ADB	General Public	Upon approval of the change by the Board
APFS and Auditor's Opinion on the Financial Statements	ADB's website	ADB	General Public	As indicated in the loan agreement
PCR	ADB's website	ADB	General Public	Upon circulation to the Board for information
Independent Evaluation Reports	ADB's website	ADB	General Public	Upon circulation to Management and the Board, except for IED annual evaluation reports that will be posted on the ADB website upon discussion by the Board's Development Effectiveness Committee

Project Documents	Means of Communication	Responsible Party	Audience	Frequency
Performance of the project with clearly defined information requirements and indicators, business opportunities, bidding process and guidelines, results of bidding process, and summary progress report of the project	UTY website	UTY	General Public	per project progress, no less than monthly

X. ANTICORRUPTION POLICY

68. ADB reserves the right to investigate, directly or through its agents, any violations of the Anticorruption Policy relating to the project.⁹ All contracts financed by ADB shall include provisions specifying the right of ADB to audit and examine the records and accounts of the executing agency and all project contractors, suppliers, consultants, and other service providers. Individuals and/or entities on ADB's anticorruption debarment list are ineligible to participate in ADB-financed activity and may not be awarded any contracts under the project.¹⁰

69. To support these efforts, relevant provisions are included in the loan and project agreements as well as the bidding documents for the project. All contracts financed by ADB shall include provisions specifying the right of ADB to audit and examine the records and accounts of UTY and PIU, and all contractors, suppliers, consultants, and other service providers as they relate to the project. Individuals/entities on ADB's anticorruption debarment list are ineligible to participate in ADB-financed activity and may not be awarded any contract under the Project.

70. ADB's Anticorruption Policy designates the Office of Anticorruption and Integrity as the point of contact to report allegations of fraud or corruption among ADB-financed projects or its staff. Office of Anticorruption and Integrity is responsible for all matters related to allegations of fraud and corruption. For a more detailed explanation refer to the Anticorruption Policy and Procedures. Anyone coming across evidence of corruption associated with the Project may contact the Anticorruption Unit by telephone, facsimile, mail, or email at the following numbers/addresses:

- by email at integrity@adb.org or anticorruption@adb.org
- by phone at +63 2 632 5004
- by fax to +6326362152
- by mail at the following address (**Please mark correspondence Strictly Confidential**):
Office of Anticorruption and Integrity
Asian Development Bank
6 ADB Avenue
Mandaluyong City 1550
METRO MANILA, PHILIPPINES

⁹ Anticorruption Policy: <http://www.adb.org/Documents/Policies/Anticorruption-Integrity/Policies-Strategies.pdf>

¹⁰ ADB's Integrity Office web site: <http://www.adb.org/integrity/unit.asp>

XI. ACCOUNTABILITY MECHANISM

71. People who are, or may in the future be, adversely affected by the project may submit complaints to ADB's Accountability Mechanism. The Accountability Mechanism provides an independent forum and process whereby people adversely affected by ADB-assisted projects can voice, and seek a resolution of their problems, as well as report alleged violations of ADB's operational policies and procedures. Before submitting a complaint to the Accountability Mechanism, affected people should make an effort in good faith to solve their problems by working with the concerned ADB operations department. Only after doing that, and if they are still dissatisfied, should they approach the Accountability Mechanism.¹¹

¹¹ Accountability Mechanism. <http://www.adb.org/Accountability-Mechanism/default.asp>.

XII. RECORD OF CHANGES TO THE PROJECT ADMINISTRATION MANUAL

72. All revisions and/or updates during the course of implementation should be retained in this section to provide a chronological history of changes to implemented arrangements recorded in the PAM, including revision to contract awards and disbursement s-curves.

Table 9: Record of Changes to the Project Administration Manual

Version	Date	Revisions
1: Pre fact-finding	21 October 2016	First draft of the PAM.
2: Fact-finding	26 November 2016	Second draft of the PAM
3: Post ADB internal review	31 January 2017	Third draft incorporating ADB reviewers' comments
4: Post ADB management review	19 February 2017	Fourth draft incorporating ADB management comments
5: Negotiated draft	10 March 2017	Fifth draft as confirmed at loan negotiations