

Updated Facility Administration Manual

Project Number: 44483

MFF Number: 0059-UZB

Loan Number: 2772-UZB (Project 1); 2965-UZB (Project 2); 3355-UZB (Project 3)

November 2015

Multitranche Financing Facility

Republic of Uzbekistan: Second Central Asia

Regional Economic Cooperation Corridor 2 Road

Investment Program

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Facility Administration Manual Purpose and Process

The facility administration manual (FAM) describes the essential administrative and management requirements to implement the investment program on time, within budget, and in accordance with Government and Asian Development Bank (ADB) policies and procedures.

The Republican Road Fund (Road Fund) under the Ministry of Finance is wholly responsible for the implementation of ADB-financed CAREC Corridor 2 Road Investment Program II, as agreed jointly between the Government and ADB, and in accordance with Government and ADB's policies and procedures. ADB staff is responsible to support implementation including compliance by the Road Fund of their obligations and responsibilities for program implementation in accordance with ADB's policies and procedures.

At Loan Negotiations the Government and ADB agreed to the FAM and ensured consistency with the Framework Financing Agreement (FFA), and the Loan Agreements for the first, second, and third projects. Such agreements were reflected in the minutes of the Loan Negotiations.

In the event of any discrepancy or contradiction between the FAM on one hand, and the FFA and the Loan Agreements on the other hand, the provisions of the FFA and the Loan Agreements shall prevail.

After ADB Board approval of the investment program'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 FAM.

ABBREVIATIONS

ADB	–	Asian Development Bank
ADF	–	Asian Development Fund
CAREC	–	Central Asia Regional Economic Cooperation
DMF	–	design and monitoring framework
EARF	–	environmental assessment and review framework
EIA	–	environmental impact assessment
EMP	–	environmental management plan
EMPF	–	ethnic minority planning framework
FAM	–	facility administration manual
FIDIC	–	International Federation of Consulting Engineers
FFA	–	framework financing agreement
GAP	–	gender action plan
ICB	–	international competitive bidding
IEE	–	initial environmental examination
LAR	–	land acquisition and resettlement
LARF	–	land acquisition and resettlement framework
MFF	–	multitranche financing facility
MOE	–	Ministry of Economy
MOF	–	Ministry of Finance
NCB	–	national competitive bidding
NGO	–	nongovernment organization
OCR	–	ordinary capital resources
PAI	–	project administration instructions
PFR	–	periodic financing request
PMU	–	program management unit
PPP	–	public–private partnership
PPTA	–	project preparatory technical assistance
QCBS	–	quality- and cost-based selection
RRP	–	Report and Recommendation of the President to the Board
SOE	–	statement of expenditure
SPS	–	safeguard policy statement
TOR	–	terms of reference

I. PROGRAM DESCRIPTION

1. The government gives high priority to the improvement of corridor Beyneu–Kungrad–Bukhara–Navoi–Samarkand–Tashkent–Andijan that includes 1,204 km of A380 highway from Guzar to Dautata and 404 km of A373 highways from Tashkent to Osh for completion by 2017.

2. Uzbekistan is a key transit country in Central Asia for trade among themselves, as well as with the rest of Asia and Europe. Transport plays a key role in promoting regional and domestic trade. The investment program¹ (the investment program II) reconstructs the Uzbekistan section of CAREC Corridor 2, which connects Uzbekistan to Afghanistan, Kazakhstan, the Kyrgyz Republic, Tajikistan, and Turkmenistan. This reconstruction will improve connectivity, road safety, and boost domestic and international trade.

3. **Impact:** Increased domestic and international trade.

4. **Outcome:** Improved road connectivity, safety, and effective management for the Uzbekistan sections of CAREC Corridor 2 Road.

5. **Outputs:**

- (i) About 220 kilometer (km) of selected sections of CAREC Corridor 2 Road reconstructed by the Road Fund;
- (ii) Road sector sustainability plans implemented by the Road Fund; and
- (iii) MFF tranches completed as targeted and budgeted.

6. ADB approved a multitranche financing facility (MFF) for the investment program II² on 23 August 2011 for an aggregate amount not exceeding \$500 million.

7. A Framework Financing Agreement (FFA) was signed by the Republic of Uzbekistan and ADB on 4 July 2011 for the investment program II.

8. Loan 2772. The first tranche of the investment program II was approved for \$130 million for (i) road development—reconstruction of approximately 74 km of the A373 highway between Km116 and Km190; and (ii) road system sustainability comprising road safety management. The scope of the first component has been reduced from reconstruction of 74 km to that of 58 km. At the request of the government, ADB approved a minor change to a project cancelling the procurement of solar road safety signs since the Road Fund has already included the supply and installation of road signs without solar panel in the ongoing civil works contract for the same section of A373 highway. Consequently, loan allocation of \$500,000 was cancelled effective 1 April 2014 at the concurrence of the government.

¹ The investment program II is an extension of the ongoing investment program (ADB. 2010. *Report and Recommendation of the President to the Board of Directors: Proposed Multitranche Financing Facility to the Republic of Uzbekistan for the Central Asia Regional Economic Cooperation Corridor 2 Road Investment Program*. Manila).

² ADB. 2011. *Report and Recommendation of the President to the Board of Directors: Proposed Multitranche Financing Facility to the Republic of Uzbekistan for the Second Central Asia Regional Economic Cooperation Corridor 2 Road Investment Program*. Manila.

9. Loan 2965. The second tranche of the investment program II was approved for \$220 million for (i) completion of the remaining section of the A373 highway under Project 1, using additional financing for civil works; and (ii) approximately 75 km of reconstructed Uzbekistan section of CAREC Corridor 2 Road (between km 0 and km 75 of A373/4R112 Pungan–Namangan highway).

II. IMPLEMENTATION PLANS

A. Program Readiness Activities

10. The Road Fund is the executing agency. It has established a program management unit (PMU) and appointed a director and a team of 9 professional and support staff for the implementation of investment program I. The PMU is currently structured with a specific mandate—technical; legal; procurement; monitoring, reporting, and evaluations; safeguards, and gender development. For implementing investment program II, the Road Fund has expanded the PMU with additional 11 professionals and support staff (deputy project director, two road engineer, financial management specialist, results monitoring specialist, procurement specialist, accountant, legal specialist, office manager, interpreter, and driver).

11. Project 3 readiness is high. Feasibility Study has been completed and advance procurement actions are being taken. Bid documents for the major ICB civil works contract are under preparation. Overall program readiness activities are in Table 2.1.

Table 2.1: Project 3 Readiness Activities

Indicative Activities	Year/Month																		Responsible Party
	2014		2015												2016				
	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3		
Government counterpart funds allocation	✓																		MOF and Road Fund
Completion, approval, and disclosure of safeguards documents – Project 3	✓																		Road Fund and ADB
Advance contracting actions A. Construction supervision consultants Recruitment commencement														✓					Road Fund and ADB
B. Civil Works bidding–advertisement														✓					Road Fund and ADB
ADB Management approval of Tranche 3													✓						ADB
Issuance of corresponding government resolution															✓				Government and Road Fund
Loan signing														✓					ADB and Government
Loan effectiveness															✓				ADB and Government

ADB = Asian Development Bank, MOF = Ministry of Finance.

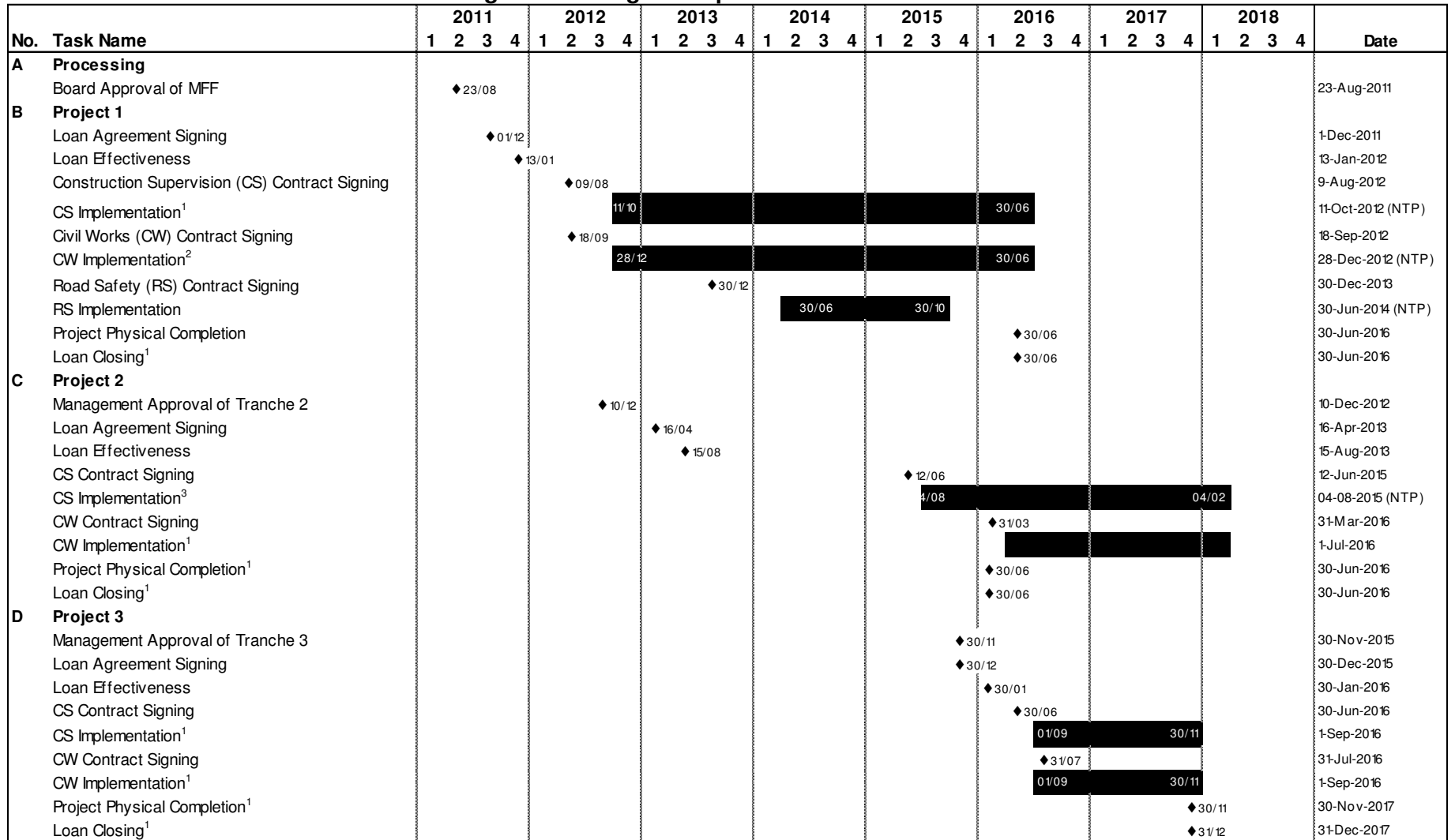
Source: Road Fund and ADB.

B. Overall Program Implementation Plan

12. The Investment Program II is scheduled for completion by 31 December 2017. The physical implementation of Project 1 will be completed by 30 June 2016, that for Project 2 will be by 31 December 2015, and that for Project 3 will be by 30 September 2017. Current, loan closing date for Tranche 1 (Loan 2772) is 30 June 2016. Loan closing date for Tranche 2 (Loan 2965) is 30 June 2016. Loan closing date for Tranche 3 will be 31 December 2017.

13. Overall program implementation plan is shown in Figure 2.1. This may be updated annually by the Road Fund (the executing agency) together with ADB. The updated draft implementation plan will be submitted to ADB in month 10 of the preceding year for no objection, a response on which will be provided on or before month 12.

Figure 2.1: Program Implementation Plan

¹ Likely to be extended.² The Contractor mobilized in April 2013.³ The government will finance the remaining services in case the loan will not be extended.

Note: Delay in Project 2 procurement caused by change in scope of works and the resulting rebidding.

C. Assessment of Physical Progress during Implementation

14. Each project implementation activity carries certain weight and should be accounted for while computing the physical progress. In this respect, Table 2.2 shows guidelines for computing physical progress of the Project 1, and Table 2.3 shows guidelines for computing physical progress of the Project 2. These will be used both by Road Fund and ADB for the assessment of physical progress at any time during the project implementation.

Table 2.2: Project 1 Implementation Schedule

Activities	Year 1 2011	Year 2 2012	Year 3 2013	Year 4 2014	Year 5 2015	Year 6 2016	(a) Assigned Weight (%)	(b) Actual Progress (%)	(a)×(b) Weighted Progress (%)
Detailed Design and Tender Documents	■						10	100	10
Additional Staffing of PMU		■					5	100	5
Consultants Recruitment		■					5	100	5
Tendering of Civil Works	■						10	100	10
Physical Completion of Works			■	■	■	■	45	42	19
Overall Disbursements of the Loan		■	■	■	■	■	20	63	13
Road Safety Consultancy Services				■	■		5	100	5
Total Weight							100		
Implementation Progress									67

(a) Assigned weight for each activity.

(b) Actual progress of each activity.

(a)×(b) = Weighted progress for each activity.

Implementation progress = sum of all weighted progress for each activity.

Table 2.3: Project 2 Implementation Schedule

Activities	Year 1 2012	Year 2 2013	Year 3 2014	Year 4 2015	Year 5 2016	(a) Assigned Weight (%)	(b) Actual Progress (%)	(a)×(b) Weighted Progress (%)
Detailed Design and Tender Documents		■				10	100	10
Consultants Recruitment	■	■	■	■		10	100	10
Tendering of Civil Works (Rebidding)				■		15	0	0
Physical Completion of Works*					■	65	0	0
Total Weight								
Implementation Progress						100		20

(a) Assigned weight for each activity.

(b) Actual progress of each activity.

(a)×(b) = Weighted progress for each activity.

Implementation progress = sum of all weighted progress for each activity.

* Loan extension will be processed upon receipt of government's request. The schedule will be revised accordingly.

Table 2.4: Project 3 Implementation Schedule

Activities	Year 1 2015	Year 2 2016	Year 3 2017	(a) Assigned Weight (%)	(b) Actual Progress (%)	(a)×(b) Weighted Progress (%)
Detailed Design and Tender Documents	■			10	50	5
Consultants Recruitment		■		10	0	0
Tendering of Civil Works	■			15	0	0
Physical Completion of Works*			■	65	0	0
Total Weight						
Implementation Progress				100		5

(a) Assigned weight for each activity.

(b) Actual progress of each activity.

(a)×(b) = Weighted progress for each activity.

Implementation progress = sum of all weighted progress for each activity.

* MFF and loan will be extended upon receipt of government's request. The schedule will be revised accordingly.

D. Physical Progress S-curve

15. Figures 2.2, 2.3, and 2.4 show graphs of expected overall physical progress over the life of the Project 1 and Project 2. These graphs will help in identifying the status of project either achieving the expected targets or underperforming with delays. This data will also be used for the project performance rating and early warning system.

Figure 2.2: Tranche 1 Project Expected Physical Progress S-Curve

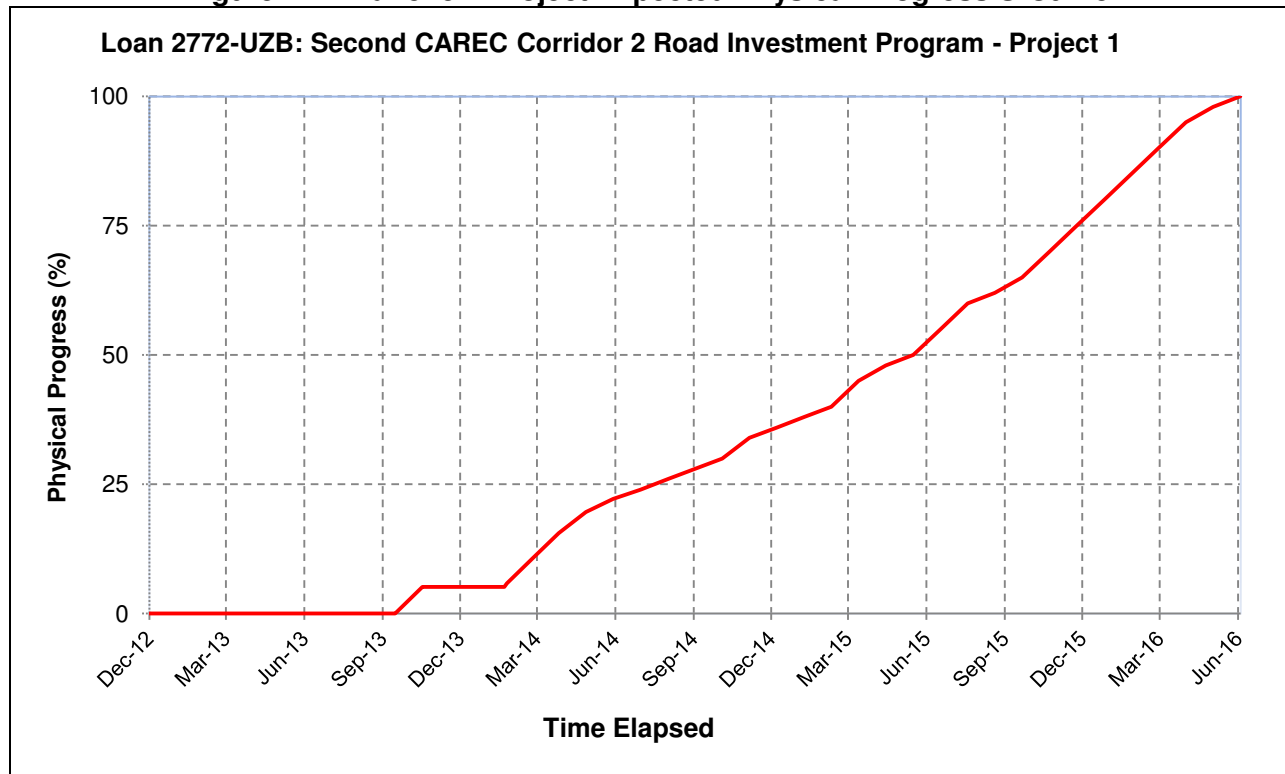
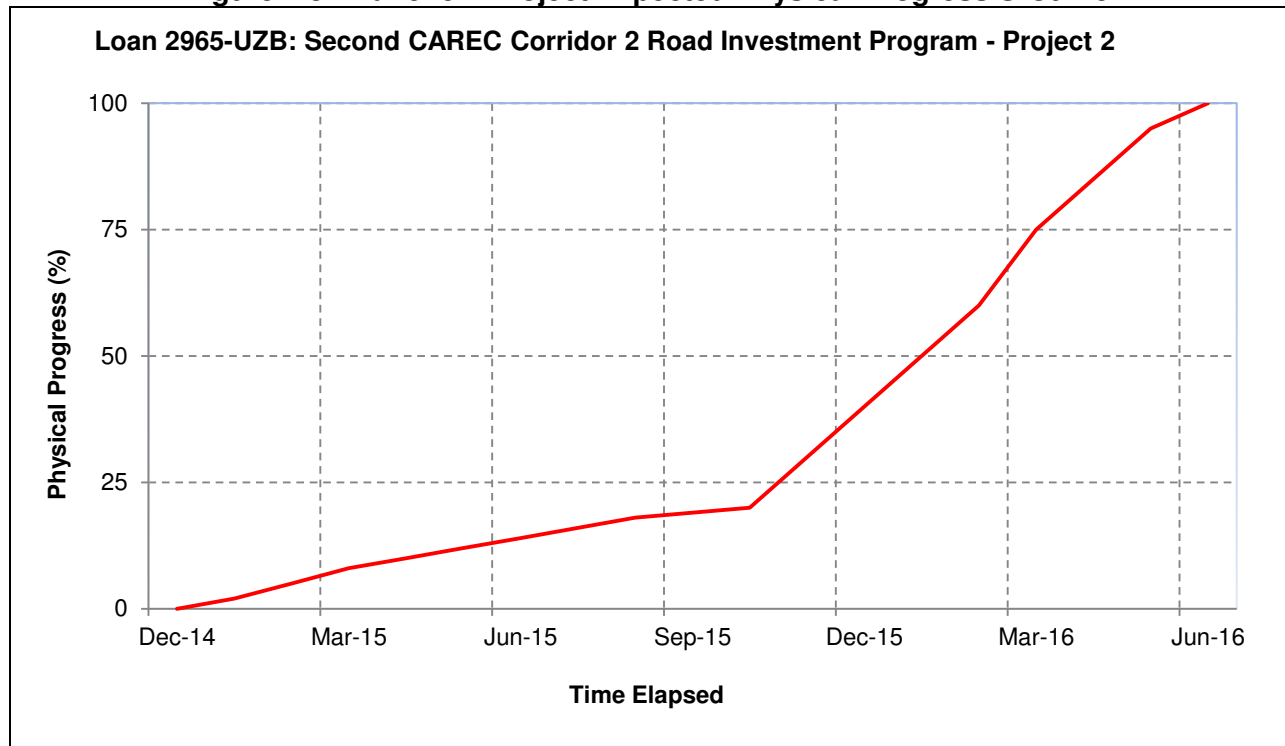
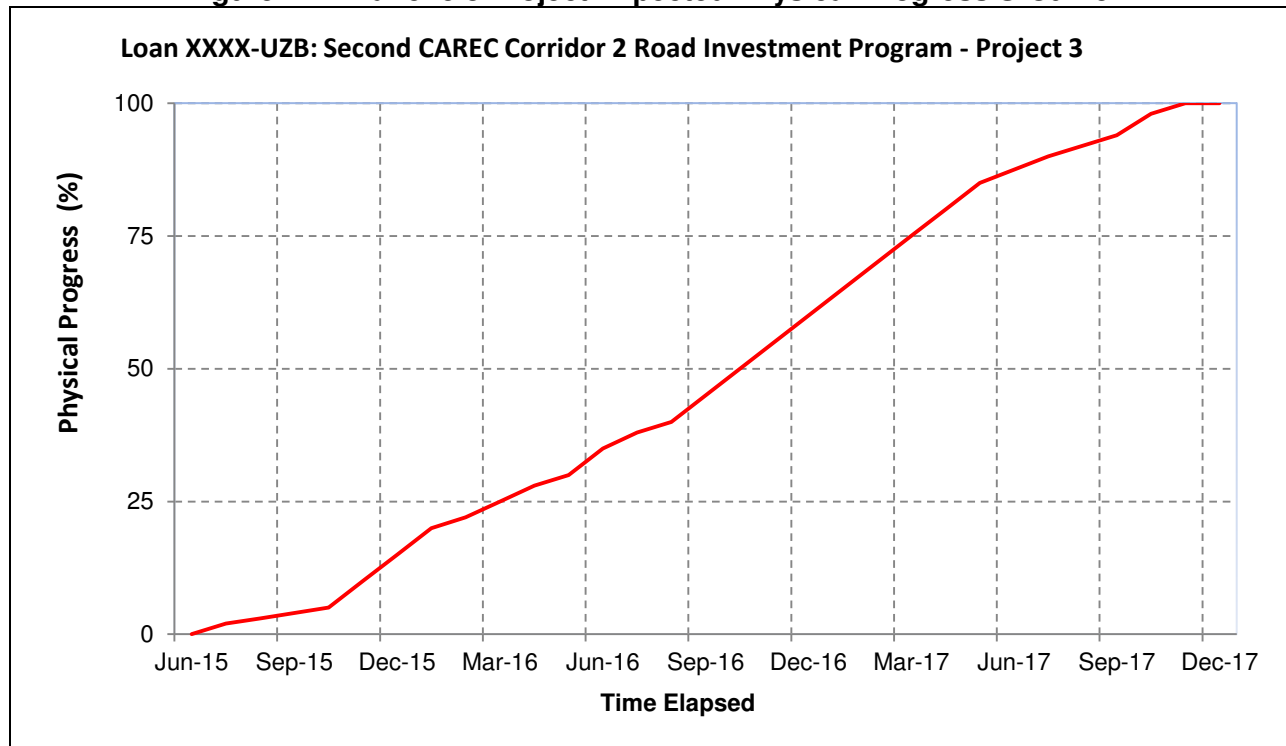


Figure 2.3: Tranche 2 Project Expected Physical Progress S-Curve

Note: Current loan closing is June 2016. Due to delay in procurement of civil works contract, the loan closing date will need to be extended.

Figure 2.4: Tranche 3 Project Expected Physical Progress S-Curve

III. PROGRAM MANAGEMENT ARRANGEMENTS

A. Stakeholders – Roles and Responsibilities

Stakeholders	Management Roles and Responsibilities
<ul style="list-style-type: none"> ➤ Republican Road Fund (the executing agency) 	<ul style="list-style-type: none"> • hire additional staff for PMU with the required expertise; • recruit consultants; • finalize surveys, detailed design, bidding documents, and contract awards; • timely provide agreed counterpart funds for project activities; • monitor and evaluate project activities and outputs, including periodic review, preparation of review reports reflecting issues and time-bound actions taken (or to be taken); • involve beneficiaries and civil society representatives in all stages of project design and implementation; • publicly disclose project outputs; • ensure quality of works, and services of consultants and counterpart staff; • establish strong financial management system and timely submit withdrawal applications to ADB, conducting timely financial audits as per agreed timeframe and take recommended actions; • comply with all loan covenants (road sector reforms, social and environmental safeguards, financial, economic, and others); • prepare regular periodic progress reports, and project completion reports and ensure timely submission to ADB; • ensure projects' sustainability during post implementation stage and report to ADB on the assessed development impacts; • prepare project appraisal report and PFRs for subsequent tranches; and • establish and maintain imprest account.
<ul style="list-style-type: none"> ➤ Asian Development Bank 	<ul style="list-style-type: none"> • assist the Road Fund and its PMU in providing timely guidance at each stage of the project for smooth implementation in accordance with the agreed implementation arrangements; • review all the documents that require ADB approval; • conduct periodic loan review missions, a mid-term review, a completion mission for each project under the MFF, and an overall program completion mission; • supervise compliance of all loan covenants (road sector reforms, social and environmental safeguards, financial, economic, and others); • timely process withdrawal applications and release eligible funds; • supervise the compliance of financial audit recommendations; • regularly update the project performance review reports with the assistance of Road Fund; and • regularly post on ADB web the updated project information documents for public disclosure, and also the safeguards documents as per disclosure provision of the ADB safeguards policy statement.

Stakeholders	Management Roles and Responsibilities
➤ Ministry of Finance	<ul style="list-style-type: none"> • sign the FFA and the Loan Agreement for each project; • monitor the investment program implementation and provide respective coordination and facilitation; • allocate and release counterpart funds; • endorse to ADB the authorized staff with approved signatures for WAs processing; and • process and submit to ADB any request, when required, for reallocating the loan proceeds.
➤ Road Research Institute under Uzavtoyul	<ul style="list-style-type: none"> • Closely cooperate in developing Road Safety Strategy and relevant manuals in planning and designing roads.
➤ Uzbek Agency for Road and River Transport	<ul style="list-style-type: none"> • Closely cooperate in developing Road Safety Strategy and relevant manuals in planning and designing roads.
➤ Ministry of Foreign Economic Relations, Investments, and Trade	<ul style="list-style-type: none"> • Appraise and register contracts for imported goods and international services under MFF.

B. Key Persons Involved in Implementation

Executing Agency

The Road Fund	Shukhrat Tagaev Deputy Director +998 71 239 4679 mff-pmu-uz@bk.ru 29, Istiklol str. 100017 Tashkent Republic of Uzbekistan
Program Management Unit	Nikolay Savitsky Director, Program Management Unit (authorization awaited) +998 71 239 4958 mff-pmu-uz@bk.ru 29, Istiklol str. 100017 Tashkent Republic of Uzbekistan

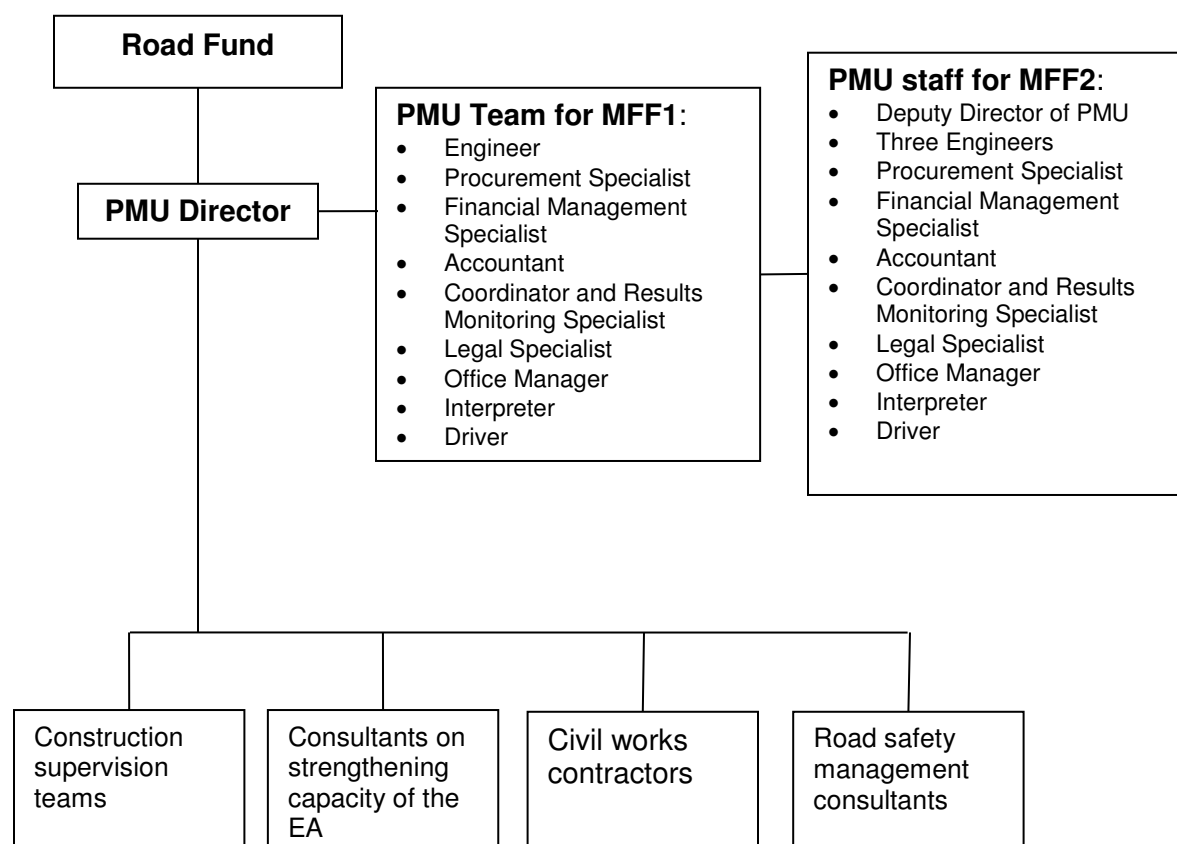
Asian Development Bank

Division Director	Xiaohong Yang Director, Transport and Communications Division Central and West Asia Department (CWRD) Telephone No: +63 2 632 6765 Email address: xyang@adb.org 6 ADB Avenue, Mandaluyong City, 1550 Metro Manila, Philippines
Mission Leader	Narendra Singru Principal Portfolio Management Specialist, CWRD Telephone No: +63 2 632 5298 Email address: nsingru@adb.org 6 ADB Avenue, Mandaluyong City, 1550 Metro Manila, Philippines

C. Program Organization Structure

16. The Road Fund will be the executing agency. It has already established a program management unit (PMU) and appointed a director and a team of 9 professional and support staff for the implementation of investment program 1. The PMU is currently structured with a specific mandate—technical; legal; procurement; monitoring, reporting, and evaluations; safeguards, and gender development. For implementing investment program II, the Road Fund has expanded the PMU with 12 professionals (deputy project director, two road engineers, financial management specialist, coordinator and results monitoring specialist, procurement specialist, legal specialist, accountant, office manager, interpreter, and driver).

Figure 3.1: Program Organization Structure



17. Under the Road Safety component, the PMU and Road Fund will coordinate with Uzavtoyul and Uzbek Agency for Road and River transport in developing the road safety strategy and other safety manuals.

IV. COSTS AND FINANCING

A. Detailed Cost Estimates by Expenditure Category

18. The total cost of the Investment Program II is estimated at \$654.50 million equivalent including taxes and duties, physical and price contingencies, interest, and other charges. The total cost of Tranche 1 including taxes, duties, physical and price contingencies, interest, and other charges is estimated at \$160 million equivalent. The total cost of Tranche 2 is estimated at \$265 million equivalent, including the additional financing for Project 1 civil works. The total cost of Tranche 3 is estimated at \$230 million equivalent. The summary of cost estimates for the Investment Program II is in Table 4.1.

Table 4.1: Cost Estimate for Investment Program II
(\$ million)

Item	Project			Total Cost ^a
	1 (OCR)	2 (OCR)	3 (OCR)	
Road Development				
Civil works	107.40	195.35	176.00	478.75
Construction supervision consultants	3.00	3.20	3.50	9.7
External monitoring consulting services for social safeguards		0.30	0.90	1.2
Land acquisition and resettlement		8.90	1.50	10.4
Road Sustainability Component				
Road asset management support				
Capacity strengthening			0.40	0.4
Road safety consultancy services	1.80			1.8
Road safety equipment ^b				
Community development program				
Financial auditor			0.10	0.1
Recurrent costs ^c	0.30	0.96	1.20	2.46
Taxes and duties	25.80	31.00	31.15	87.95
Total Base Cost	138.30	239.71		378.51
Physical and price contingencies ^d	17.00	20.19	11.90	49.09
Financing charges during implementation ^e	4.20	5.10	3.35	12.65
Total	159.50	265.00	230.00	654.50

^a In 2012 prices.

^b Cancelled allocation for Goods (road safety equipment) amounting \$0.50 million effective 1 April 2014.

^c Program Management Unit (PMU) expenses related to the Investment Program including: PMU staff salary, operational expenses, travel, training, computers, software, office equipment and spares, and other eligible expenditures, office furniture (under Projects 2 and 3), financial audits (except for Project 3), and other eligible expenditures, excluding single social payment. The inclusion in the recurrent cost category of office equipment, office furniture, computers and software, is justified by administrative simplicity, consistency with earlier treatments, and on the basis that these costs are not material in comparison to the total cost category.

^d Physical is estimated at about 10% of the total base cost. Price contingencies estimated at about 5% include provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^e Includes interest and commitment charges.

Source: Asian Development Bank estimates.

19. As per the Framework Financing Agreement (FFA), the maximum financing amount available under the Facility is \$500 million comprising \$320 million from ADB's ordinary capital resources (OCR) for tranche 1 and 3, and \$180 million equivalent from ADB's Special Funds resources (i.e. from the Asian Development Fund ADF) for tranche 2 to help finance part of the investment program II. However, the FFA allows for a change in the terms of each tranche depending on the project, capital market conditions, and ADB financing policies, all prevailing at the time the tranche is documented in a loan agreement. Owing to the increase in the costs for Tranche 1, the Republic of Uzbekistan has requested ADB for increasing the OCR amount to \$350 million comprising \$130 million for Tranche 1 and \$220 million for Tranche 2. Under Tranche 1, the government requested for cancellation of \$0.5 million effective 1 April 2014. In July 2014, the government requested for Tranche 3 amounting to \$150 million using OCR. The total amount available under the Facility is \$499.50 million.

Table 4.2: ADB Financing by Expenditure Category

(\$ million)				
ADB Expenditure Category	Tranche 1 ^a	Tranche 2	Tranche 3	Total
Civil works	107.40	195.35	132.00	434.75
Goods	0.00	0.00	0.00	0.00
Consultant services	4.80	3.50	4.90	13.20
Recurrent cost	0.30	0.96	1.20	2.46
Unallocated	17.00	20.19	11.90	49.09
Total	129.50	220.00	150.00	499.50

^a Cancelled allocation for Goods (road safety equipment) amounting \$0.50 million effective 1 April 2014.

Source: Asian Development Bank estimates.

Table 4.3: Detailed Cost Estimates by Expenditure Category for Project 1

(\$ million) ^a				
Item	Foreign Exchange	Local Currency	Total Cost	% of Total Base Cost
A. Base Costs				
1. Road Development				
a. Civil Works	107.40	0.00	107.40	77.66
b. Consulting Services	3.00	0.00	3.00	2.17
2. Road Sustainability				
a. Road Safety Equipment ^b	0.00	0.00	0.00	0.00
b. Road Safety Consulting Services	1.80	0.00	1.80	1.30
3. Recurrent Costs ^c	0.30	0.00	0.30	0.22
4. Taxes and Duties	0.00	25.80	25.80	18.66
Subtotal (A)	112.50	25.80	138.30	100.00
B. Physical and Price Contingencies^d	17.00	0.00	17.00	12.29
C. Financing Charges During Implementation^e	0.00	4.20	4.20	3.04
Total Project Cost (A+B+C)	129.50	30.00	159.50	115.33

^a In mid-2010 prices.

^b Cancelled allocation for Goods (road safety equipment) amounting \$0.50 million effective 1 April 2014.

^c Program Management Unit (PMU) expenses related to the Investment Program including: PMU staff salary, operational expenses, travel, training, financial audits, and other eligible expenditures; excluding single social payment.

^d Physical and price contingencies. Price contingencies include provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^e Includes interest and commitment charges.

Source: Asian Development Bank estimates.

Table 4.4: Detailed Cost Estimates by Expenditure Category for Project 2
(\$ million)^a

Item	Foreign Exchange	Local Currency	Total Cost	% of Total Base Cost
A. Base Costs				
1. Civil Works				
a. Project 1 (additional financing)	31.35	0.00	31.35	13.08
b. Project 2	164.00	0.00	164.00	68.42
2. Consulting Services	3.50	0.00	3.50	1.46
3. Land Acquisition and Resettlement	0.00	8.90	8.90	3.71
4. Recurrent Costs ^b	0.96	0.00	0.96	0.40
5. Taxes and Duties	0.00	31.00	31.00	12.93
Subtotal (A)	199.81	39.90	239.71	100.00
B. Physical and Price Contingencies^c	20.19	0.00	20.19	8.42
C. Financing Charges During Implementation^d	0.00	5.10	5.10	2.13
Total Project Cost (A+B+C)	220.00	45.00	265.00	110.55

^a In mid-2012 prices.

^b Program Management Unit (PMU) expenses related to the Investment Program including: PMU staff salary, operational expenses, travel, training, financial audits, and other eligible expenditures; excluding single social payment.

^c Physical contingency computed at about 7% for civil works. Price contingencies computed at about 4% on foreign exchange costs and local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^d Includes interest and commitment charges.

Source: Asian Development Bank estimates.

Table 4.5: Detailed Cost Estimates by Expenditure Category for Project 3
(\$ million)^a

Item	Foreign Exchange	Local Currency	Total Cost	% of Total Base Cost
A. Base Costs				
1. Civil Works	176.00	0.00	176.00	81.96
2. Consulting Services				
a. Construction supervision	3.50	0.00	3.50	1.63
b. Capacity development for the Road Fund and Uzavtoyul	0.40	0.00	0.40	0.19
c. Procurement, safeguards and contract management support	0.90	0.00	0.90	0.42
d. Financial auditor	0.10	0.00	0.10	0.05
3. Land Acquisition and Resettlement	0.00	1.50	1.50	0.70
4. Recurrent Costs ^b	1.20	0.00	1.20	0.56
5. Taxes and Duties	0.00	31.15	31.15	14.51
Subtotal (A)	182.10	32.65	214.75	100.00
B. Contingencies^c	11.90	0.00	11.90	5.54
C. Financing Charges During Implementation^d	0.00	3.35	3.35	1.56
Total Project Cost (A+B+C)	194.00	36.00	230.00	107.10

^a In 2014 prices.

^b Program Management Unit (PMU) expenses related to the PMU staff salary, operational expenses, travel, training, computers, software, office furniture, office equipment and spares, and other eligible expenditures, in line with Operations Manual Section H3/OP para 10. These recurrent costs will be financed under the Tranche 3.

^c Physical contingency is estimated at about 3% of the total base cost. Price contingencies are estimated following ADB's cost escalation factors, including provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^d Includes interest and commitment charges.

Source: Asian Development Bank estimates.

B. Allocation and Withdrawal of Loan Proceeds

20. Table 4.3 shows allocation and withdrawal of funds under all the categories within Tranche 1 scope. Table 4.4 shows allocation and withdrawal of funds for Tranche 2.

Table 4.6: Allocation and Withdrawal of Loan Proceeds for Tranche 1

Category			ADB Financing
Number	Item	Total Amount Allocated for ADB Financing (\$) Category	Percentage and Basis for Withdrawal from the Loan Account
1	Civil Works	107,400,000	100 percent of total expenditure claimed*
2	Equipment**	0	
3	Consulting Services (Construction Supervision and Road Safety Impact Assessment)	4,800,000	100 percent of total expenditure claimed*
4	Recurrent Costs (including PMU staff salaries, travel expenses, training, and financial audits)	300,000	100 percent of total expenditure claimed*
5	Unallocated	17,000,000	
	Total	129,500,000	

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

** Cancelled effective 1 April 2014.

Table 4.7: Allocation and Withdrawal of Loan Proceeds for Tranche 2

Number	Item	Total Amount Allocated for ADB Financing (\$)		Basis for Withdrawal from the Loan Account
		Category	Subcategory	
1	Works	195,350,000		
1a	Works (A373 highway under Project 1)		31,350,000	100 percent of total expenditure claimed*
1b	Works (75 km of the A373/4R112 highway)		164,000,000	100 percent of total expenditure claimed*
2	Consulting Services	3,500,000		100 percent of total expenditure claimed*
3	Recurrent Costs (including PMU staff salaries, travel expenses, office furniture and financial audits)	960,000		100 percent of total expenditure claimed*
4	Unallocated	20,190,000		
	Total	220,000,000		

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

Table 4.8: Allocation and Withdrawal of Loan Proceeds for Tranche 3

Category			ADB Financing
Number	Item	Total Amount Allocated for ADB Financing (\$) Category	Percentage and Basis for Withdrawal from the Loan Account
1	Works	132,000,000	75 percent of total expenditure claimed*
2	Consulting Services	4,900,000	100 percent of total expenditure claimed*
3	Recurrent Cost (including PMU staff salary, operational expenses, travel, training, computers, software, office furniture, office equipment and spares, and other eligible expenditures)	1,200,000	100 percent of total expenditure claimed*
4	Unallocated	11,900,000	
	Total	150,000,000	

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

C. Expenditure Accounts by Financiers

Table 4.9: Summary Financing Plan—Investment Program
(\$ million)

Financier	Project 1	% of Cost	Project 2	% of Cost	Project 3	% of Cost	Total	% of Cost
Asian Development Bank	129.50	81	220.00	83	150.00	65	499.50	76
Government	30.00	19	45.00	17	80.00	35	155.00	24
Total	159.50	100	265.00	100	230.00	100	654.50	100

Source: Asian Development Bank estimates.

D. Expenditure Accounts by Outputs/Components

Table 4.10: Detailed Cost Estimates by Financiers—Project 1
(\$ million)^a

Item	ADB	Government	Total
Road Development			
Civil works	107.4	0.0	107.4
Consulting services	3.0	0.0	3.0
Road Sustainability			
Road safety equipment ^b	0.0	0.0	0.0
Road safety consulting services	1.8	0.0	1.8
Recurrent costs ^c	0.3	0.0	0.3
Taxes and duties	0.0	25.8	25.8
Total Base Cost	112.5	25.8	138.8
Physical and price contingencies ^d	17.0	0.0	17.0
Financing charges during implementation ^e	0.0	4.2	4.2
Total	129.5	30.0	159.5

^a In mid-2010 prices.

^b Cancelled allocation for Goods (road safety equipment) amounting \$0.50 million effective 1 April 2014.

^c Program Management Unit (PMU) expenses related to the Investment Program including: PMU staff salary, operational expenses, travel, training, financial audits, and other eligible expenditures; excluding single social payment.

^d Physical and price contingencies. Price contingencies include provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^e Includes interest and commitment charges.

Source: Asian Development Bank estimates.

Table 4.11: Detailed Cost Estimates by Financiers—Project 2
(\$ million)^a

Item		ADB	Government	Total
Civil works		195.35		195.35
Project 1 (additional financing)	31.35			
Project 2	164.00			
Consulting services		3.50		3.50
Land acquisition and resettlement			8.90	8.90
Recurrent costs ^b		0.96		0.96
Taxes and duties			31.00	31.00
Physical and price contingencies ^c		20.19		20.19
Financing charges during implementation ^d			5.10	5.10
Total		220.00	45.00	265.00

^a In mid-2012 prices.

^b Program Management Unit (PMU) expenses related to the Investment Program including: PMU staff salary, operational expenses, travel, training, financial audits, and other eligible expenditures; excluding single social payment.

^c Physical contingency computed at about 7% for civil works. Price contingencies computed at about 4% on foreign exchange costs and local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^d Includes interest and commitment charges.

Source: Asian Development Bank estimates.

Table 4.12: Detailed Cost Estimates by Financiers—Project 3
(\$ million)^a

Item		ADB	Government	Total
Civil Works		132.00	44.00	176.00
Consulting Services				4.90
Construction supervision		3.50		
Capacity development of Road Fund & Uzavtoyul		0.40		
Procurement, safeguards and contract management support		0.90		
Financial auditor		0.10		
Land acquisition & resettlement			1.50	1.50
Recurrent costs ^b		1.20		1.20
Taxes and duties			31.15	31.15
Total Base Cost				214.75
Physical and price contingencies ^c		11.90		11.90
Financing charges during implementation ^d			3.35	3.35
Total Cost		150.00	80.00	230.00

^a In 2014 prices.

^b Program Management Unit (PMU) expenses related to the PMU staff salary, operational expenses, travel, training, computers, software, office furniture, office equipment and spares, and other eligible expenditures, in line with Operations Manual Section H3/OP para 10. These recurrent costs will be financed under the Tranche 3.

^c Physical contingency is estimated at about 3% of the total base cost. Price contingencies are estimated following ADB's cost escalation factors, including provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^d Includes interest and commitment charges.

Source: Asian Development Bank estimates.

E. Detailed Cost Estimates by Year

Table 4.13: Detailed Cost Estimates for the Investment Program
(\$ million)^a

Item	Tranche			Total Cost
	1 (OCR)	2 (OCR)	3 (OCR)	
Road Development				
Civil works	107.40	195.35	176.00	478.75
Construction supervision consultants	3.00	3.20	3.50	9.70
External monitoring consulting services for social safeguards		0.30		0.30
Procurement, safeguards and contract management support			0.90	0.90
Land acquisition and resettlement		8.90	1.50	10.40
Road Sustainability Component				
Road asset management support				
Capacity strengthening			0.4	0.40
Road safety consultancy services	1.80			1.80
Road safety equipment ^b				
Financial auditor			0.10	0.10
Recurrent costs ^c	0.30	0.96	1.20	2.46
Taxes and duties	25.80	31.00	31.15	85.90
Total Base Cost	138.30	239.71	214.75	591.21
Physical and price contingencies ^d	17.00	20.19	11.90	49.09
Financing charges during implementation ^e	4.20	5.10	3.35	14.70
Total	159.50	265.00	230.00	654.50

^a In mid-2010 prices for Tranche 1, mid-2012 prices for Tranche 2, and mid-2014 prices for Tranche 3.

^b Cancelled allocation for Goods (road safety equipment) amounting \$0.50 million effective 1 April 2014.

^c Program Management Unit (PMU) expenses related to the Investment Program including: PMU staff salary, operational expenses, travel, training, computers, software, office furniture, office equipment and spares, and other eligible expenditures, in line with Operations Manual Section H3/OP para 10; office furniture (under Project 2), financial audits (except for Project 3), and other eligible expenditures; excluding single social payment.

^d Physical is estimated at about 10% of the total base cost. Price contingencies estimated at about 1%-5% include provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^e Includes interest and commitment charges.

Source: Asian Development Bank estimates.

Table 4.14: Detailed Cost Estimates by Year for the Project 1
(\$ million)^a

Item	Year ^b						Total
	2011	2012	2013	2014	2015	2016	
Road Development							
Civil works	0.00	20.81	10.48	10.24	65.87	0.00	107.40
Consulting services	0.00	0.32	0.09	0.29	2.30	0.00	3.00
Road Sustainability							
Road safety management and solar signs	0.00	0.00	0.00	0.20	1.18	0.00	1.38
Recurrent costs ^c	0.00	0.07	0.03	0.10	0.10	0.00	0.30
Taxes and duties	0.00	4.60	9.90	11.30	0.00	0.00	25.80
Total Base Cost	0.00	25.80	20.50	22.13	69.87	0.00	138.30
Physical and price contingencies ^d	0.00	0.00	3.50	6.90	6.60	0.00	17.00
Financing charges during implementation ^e	0.00	0.00	0.20	1.20	2.80	0.00	4.20
Total	0.00	25.80	24.20	30.23	79.27	0.00	159.50

^a In mid-2010 prices.

^b Base cost figures (except taxes and duties) are actuals for 2012 and 2013.

^c Program Management Unit (PMU) expenses related to the Investment Program including: PMU staff salary, operational expenses, travel, training, financial audits and other eligible expenditures; excluding single social payment.

^d Physical is estimated at about 10% of the total base cost. Price contingencies estimated at about 5% include provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^e Includes interest and commitment charges.

Source: Asian Development Bank estimates.

Table 4.15: Detailed Cost Estimates by Year for the Project 2
(\$ million)^a

Item	Year								Total
	2014		2015		2016		2017		
	ADB	Govt	ADB	Govt	ADB	Govt	ADB ^b	Govt	
Civil Works									
Project 1 (additional)	0.00		0.00		31.35				31.35
Project 2	0.00		0.00		8.50		155.5		164.00
Land Acquisition and Resettlement		8.90							8.90
Construction Supervision & safeguards monitoring	0.01		0.00		1.20		2.29		3.50
Recurrent costs ^c	0.24		0.32		0.30		0.10		0.96
Taxes and duties		5.00		10.00		12.00		4.00	31.00
Total Base Cost	0.25	13.90	0.32	10.00	41.35	12.00	157.89	4.00	239.71
Physical and price contingencies ^d	0.00		0.00		0.00		20.19		20.19
Financing charges during implementation ^e		1.20		1.20		1.20		1.50	5.10
Total	0.25	15.10	0.32	11.20	41.35	13.20	178.08	5.50	265.00

^a In 2012 prices.

^b Loan extension will be processed upon receipt of government's request. The estimates will be revised accordingly.

^c Program Management Unit (PMU) expenses related to the Investment Program including: PMU staff salary, operational expenses, travel, training, financial audits and other eligible expenditures; excluding single social payment.

^d Physical contingency computed at about 7% for civil works. Price contingencies computed at about 4% on foreign exchange costs and local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^e Includes interest and commitment charges.

Source: Asian Development Bank estimates.

Table 4.16: Detailed Cost Estimates by Year for the Project 3
(\$ million)^a

Item	Year						Total
	2016		2017		2018		
	ADB	Govt	ADB	Govt	ADB ^b	Govt	
Civil Works			22.6	10.0	109.4	34.0	176.00
Consulting Services			1.2		3.7		4.90
Land Acquisition and Resettlement		1.5					1.50
Recurrent costs ^c			0.2		1.0		1.20
Taxes and duties				15.0		16.2	31.15
Total Base Cost		1.5	24.0	25.0	114.1	50.2	214.75
Physical and price contingencies ^d					11.9		11.90
Financing charges during implementation ^e		1.5		1.8		0.1	3.35
Total	0.0	3.0	24.0	26.8	126.0	50.2	230.00

^a In 2014 prices.

^b MFF and loan will be extended upon receipt of government's requests. The estimates will be revised accordingly.

^c Program Management Unit (PMU) expenses related to the PMU staff salary, operational expenses, travel, training, computers, software, office furniture, office equipment and spares, and other eligible expenditures, in line with Operations Manual Section H3.

^d Physical contingency is estimated at about 3% of the total base cost. Price contingencies are estimated following ADB's cost escalation factors, including provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^e Includes interest and commitment charges.

Source: Asian Development Bank estimates.

F. Contract Award and Disbursement S-curves

21. Figures 4.1, 4.2, and 4.3 show the estimated and actual contract awards and disbursement progress over the implementation periods of the Tranche 1, Tranche 2, and Tranche 3 projects, respectively. This will help to assess contract award and disbursement performance at any time during the project implementation. In case of delays and poor disbursements, these will help as an early warning system for taking timely remedial measures.

Figure 4.1: Actual vs Projected Contract Awards and Disbursements for Project 1

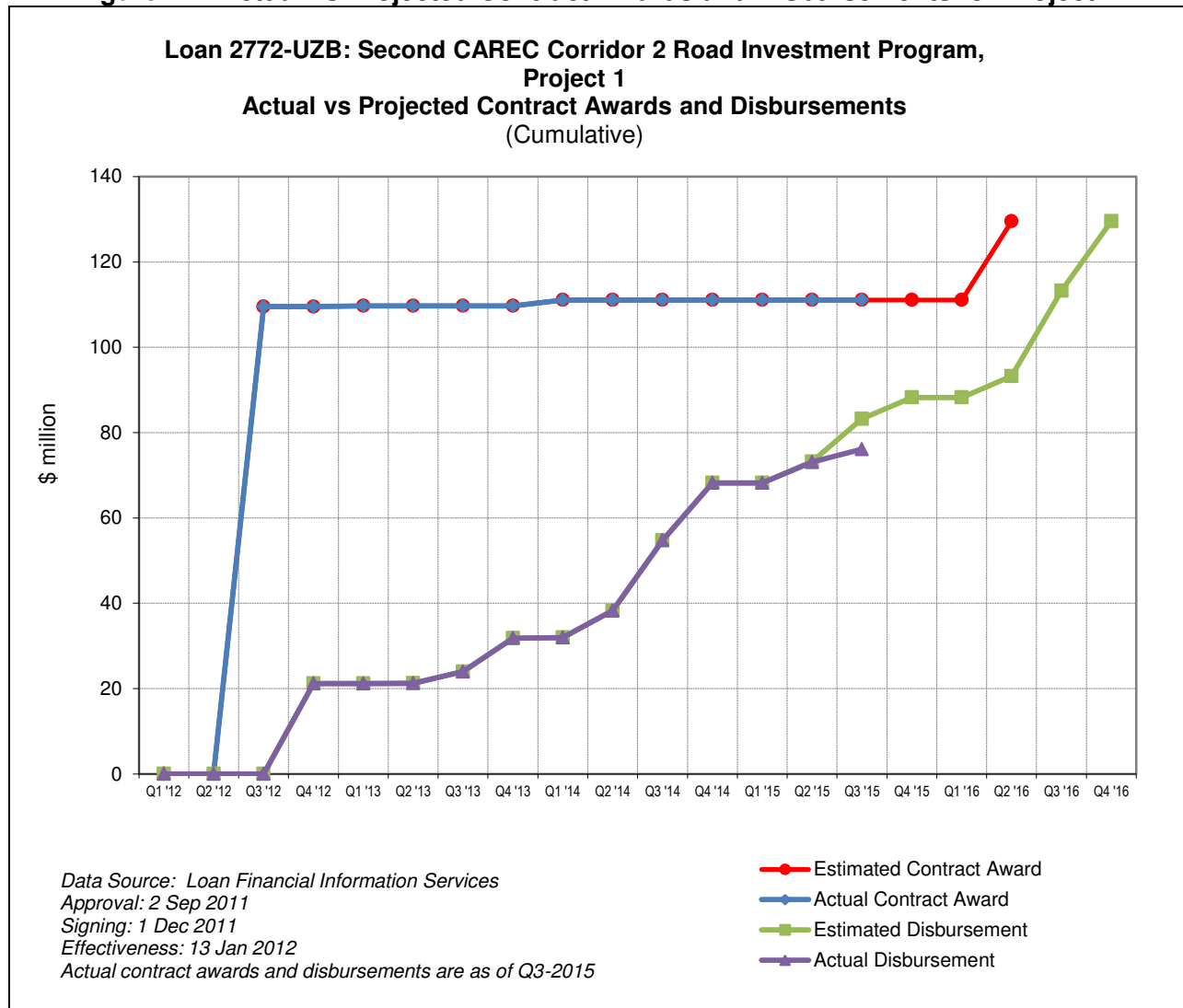


Figure 4.2: Actual vs Projected Contract Awards and Disbursements for Project 2

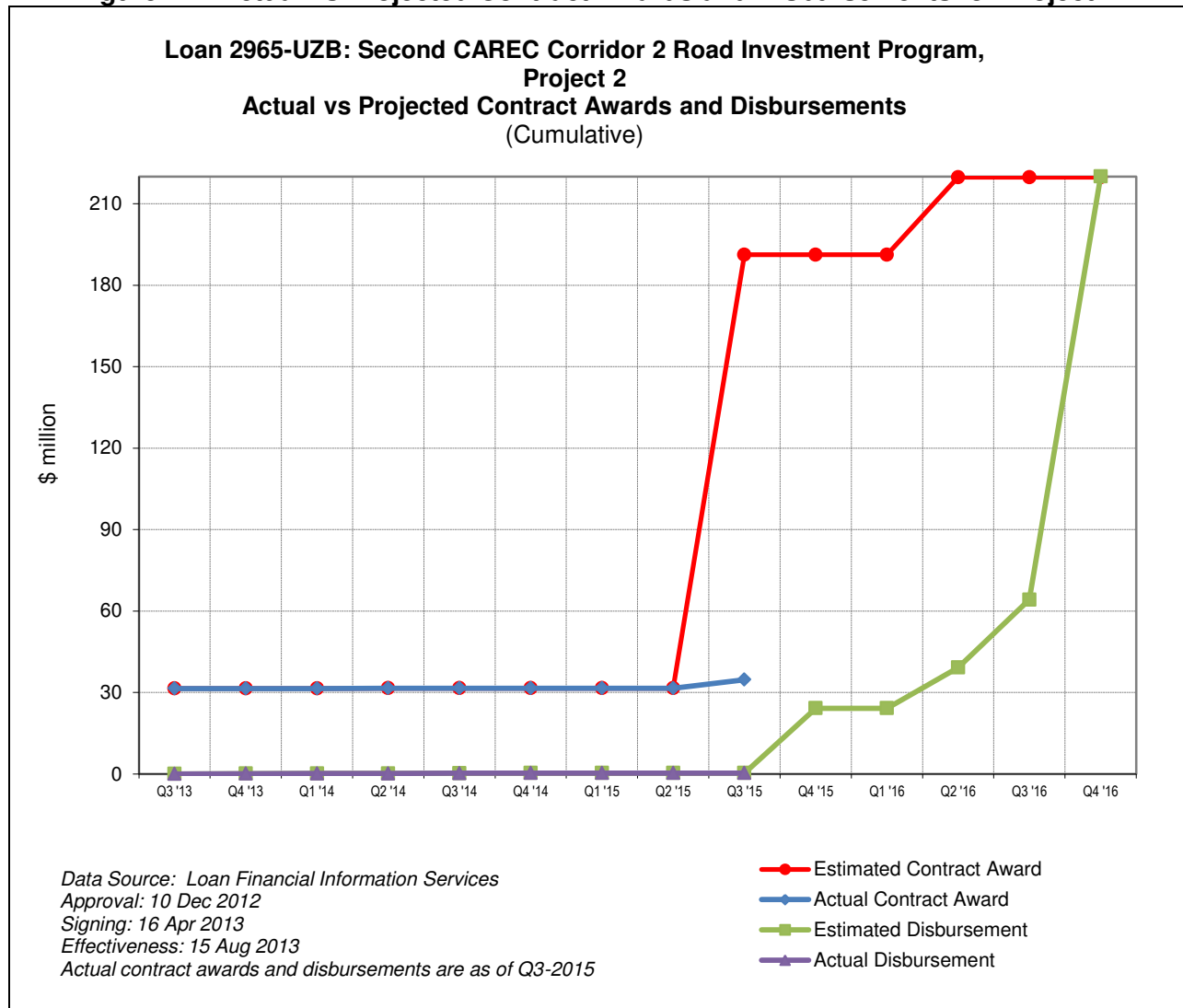


Figure 4.3: Actual vs Projected Contract Awards and Disbursements for Project 3

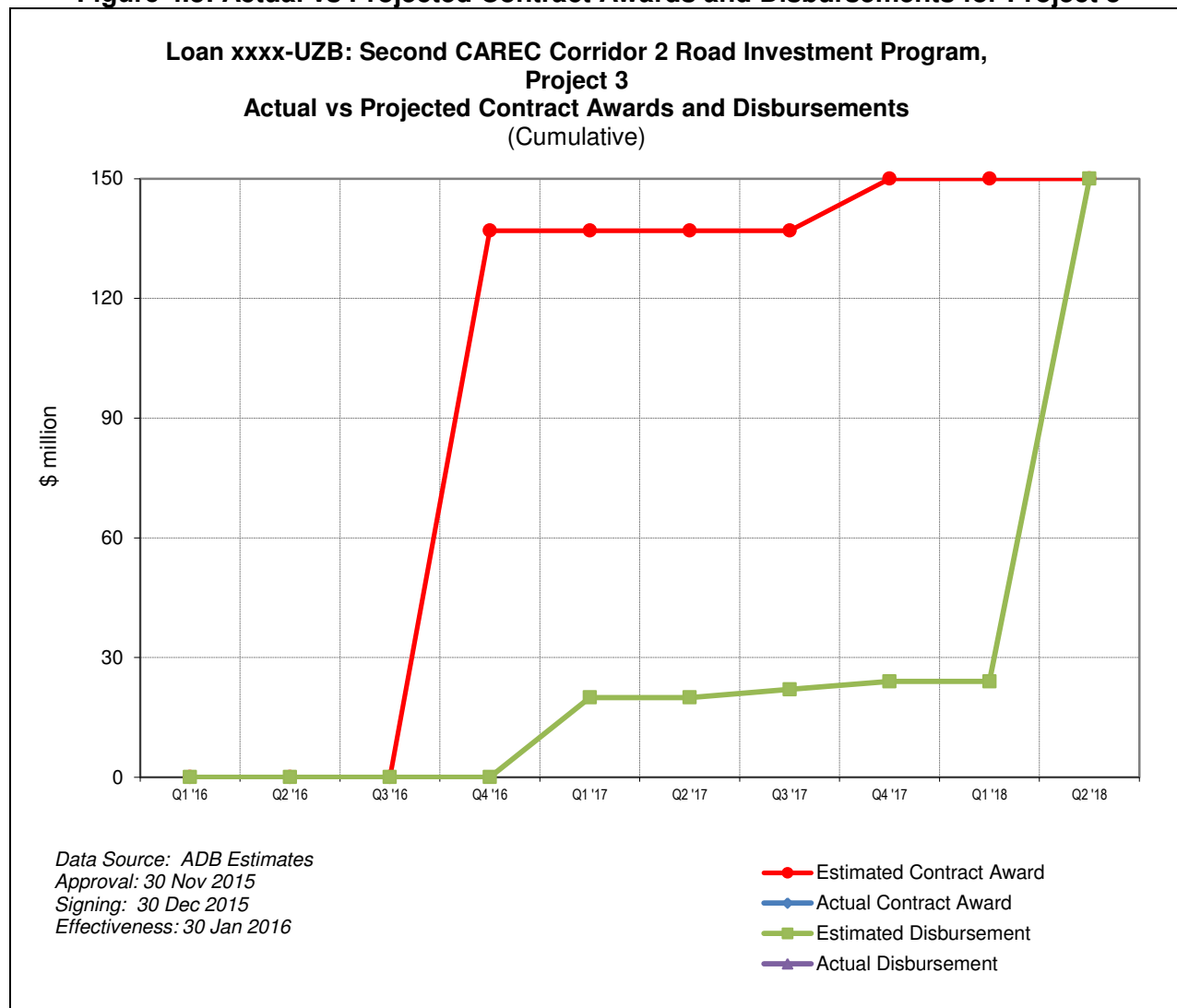


Table 4.17: Baseline Projections for Project 3

Year	Contract Awards (in USD million)					Disbursements (in USD million)					
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	
2016	0.000	0.000	0.000	137.000	137.000	0.000	0.000	0.000	0.000	0.000	
2017	0.000	0.000	0.000	13.000	13.000	20.000	0.000	2.000	2.000	24.000	
2018	0.000	0.000	0.000	0.000	0.000	50.000	76.000	0.000	0.000	126.000	
	Total Contract Awards					150.000	Total Disbursements				150.000

Total ADB Financed/Administered Net Amount: 150.000

Total Unallocated Amount: 11.900

Total IDC Amount: 0.000

Total FEF Amount: 0.000

Total SC Amount: 0.000

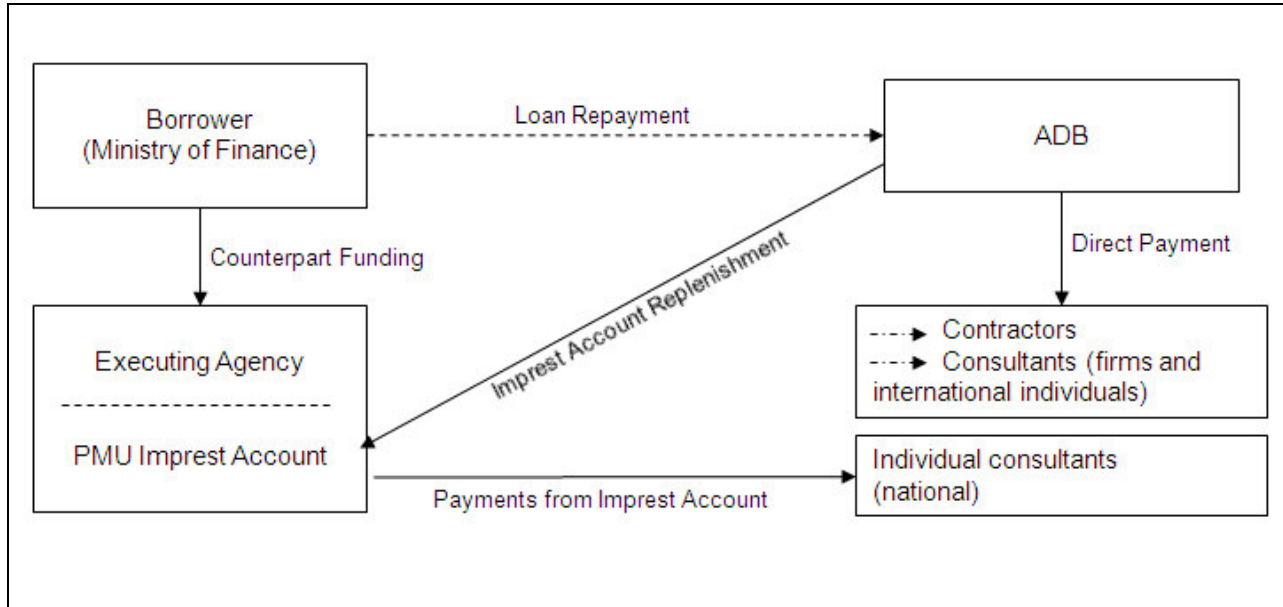
Total Value of Contract to be Awarded: 150.000

Total Value for Disbursement: 150.000

H. Fund Flow Diagram

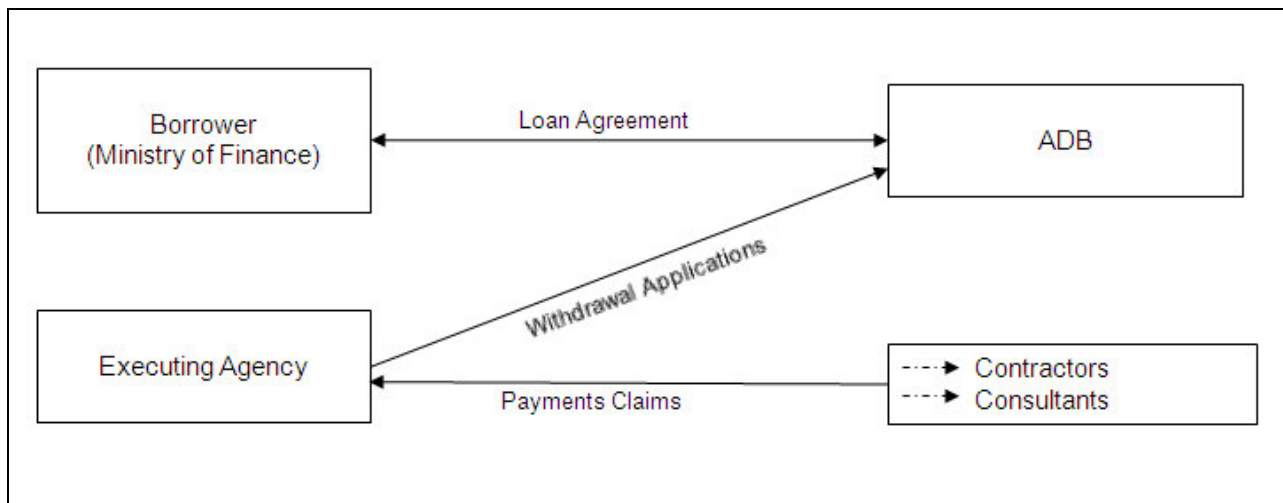
22. Fund flow diagram, as illustrated in Figure 4.5, shows how the funds will flow from ADB, and the Government to implement projects 1, 2, and 3.

Figure 4.5: Fund Flow Diagram



ADB = Asian Development Bank, PMU = Program Management Unit.

Figure 4.6: Flow of Financial Documents



ADB = Asian Development Bank.

V. FINANCIAL MANAGEMENT

A. Financial Management Assessment

23. In 2014, ADB conducted an update on the Financial Management Assessment (FMA) of the Second CAREC Corridor 2 Road Investment Program in accordance with ADB's Guidelines for the Financial Management and Analysis of Projects. The assessment rated the overall risk as *substantial* and recommended several actions, which are currently being implemented. The FMA considered the Road Fund and its existing PMU, in its role as the proposed project executing agency (EA) and PMU for Tranche 3. Although the risk level was rated *substantial*, the FMA found that the Road Fund and PMU have sufficient financial management capability to (i) record required financial transactions and balances, (ii) provide regular and reliable financial statements and monitoring reports, (iii) safeguard the financial assets. A summary of FMA findings is in **Table 5.1**.

Table 5.1: Summary of the Financial Management Assessment

Particulars	Conclusions
A. Executing Agency	Road Fund is a separate entity that is accountable to the Ministry of Finance (MOF) of the Republic of Uzbekistan. Road Fund is well experienced in managing and implementing large scale projects. It has been implementing number of ADB-financed projects and there are no major concerns raised by ADB as well as external auditors.
B. Funds Flow Arrangements	Entities' funds flow arrangements are reliable. Road Fund has capability to work under the proposed funds flow arrangements acceptable to ADB. The same funds flow arrangements applied in Tranche 1 and 2 of Corridor 2 Road Investment Program will be applied to Tranche 3.
C. Staffing	Road Fund and existing PMU are well staffed with experienced financial specialists. Within the Road Fund, a project management unit (PMU) has been established with 2 teams. One team is for MFF1 (Tranche 1, 2, 3) and another team is for MFF2 (Tranche 1 and 2 and proposed Tranche 3) to implement CAREC Investment Program. Both teams have adequate staff and have undergone ADB's training on disbursement.
D. Accounting Policies and Procedures	The Road Fund's accounting policy is based on the Uzbekistan National Accounting Standards and Financial Reporting Regulations for State Budget Financed Organizations. Uzbekistan National Accounting Standards are progressively being modernized in accordance with International Accounting Standards. A separate accounting guideline for PMU has been established. However, it needs to be updated to include the role and responsibility of staff.
E. Internal Audit	Sub Control and Revision Unit (CRU) which is considered internal audit in Road Fund who perform monthly review Road Fund's activities.
F. External Audit	The Road Fund is audited annually by Chamber of Accounts. PMU is audited by independent external auditors on an annual basis in accordance with the International Standards on Auditing (ISA).
G. Reporting and Monitoring	The Road Fund reports comply with the reporting requirements of the MOF, the Ministry of Economy (MOE), the State Tax Committee, and other government bodies. Current PMU reports (Quarterly Progress Reports) have been submitted to ADB on timely manner and in accordance with ADB requirements.

Particulars	Conclusions
H. Information Systems	The Road Fund and PMU operate accounting system "1C Accounting". Reports are prepared with help of the program and using spreadsheets. 1C Accounting is not complicated system, which well suits the requirements of the Project, although some reports cannot be automatically generated.

24. Actions required to be taken by the Road Fund and PMU in 2015 are as follows:

- (i) ADB training on Financial Management Procedures shall be conducted for PMU and Road Fund finance staff.
- (ii) PMU shall update accounting guidelines to include role and responsibility of staff
- (iii) Program 1C Accounting should be continued to be used for Tranche 3. Direct Payment, which currently is maintained separately in Excel, shall be recorded in 1C Accounting. This is to reduce reconciliation and improve data integrity.
- (iv) All finance staff in PMU shall be trained to use 1C Accounting software (currently, only accountant familiarize 1C Accounting). This will ensure uninterrupted financial operations when staff is on leave.
- (v) The Government shall ensure expedient review and approval of the contracts with foreign suppliers/consultants by the Ministry for Foreign Economic Relations, Investments and Trade of Uzbekistan within the deadlines set by the legislation. Expedient approval of the contracts with foreign suppliers/consultants will help to avoid delays in project implementation and change of contract prices (price quotations are usually valid during a specified period of time and subject to change after such period).
- (vi) The Road Fund and PMU should further provide training to enhance the staff professional capacity.

25. **Risk Analysis:** An update on the procurement capacity assessment was also carried out in 2014 by ADB staff, which found that the current capacity of the Road Fund and the PMU to be adequate. The overall risk rating was *high*. Recommendations from the assessment are currently being implemented. During the implementation phase, the PMU might face some risks that can generally be divided in two main categories: (i) country level; and (ii) organization/project level. Unavailability or delay in the release of counterpart funds can be attributed as major country specific risk for the investment program. Further, all the contracts with foreign suppliers/consultants financed out of loan funds are subject to approval by the Ministry for Foreign Economic Relations, Investments and Trade of Uzbekistan, which takes considerable time and eventually negatively affect the project implementation. This, together with project-specific risks and activities to mitigate them, are summarized as follows. Financial management risks shall need to be considered and updated throughout the life of the investment program. Risk mitigation measures shall also be updated accordingly.

Table 5.2: Risk Assessment and Mitigation Measures

Risk	Risk Assessment*	Risk-Mitigation Measures
Inherent Risk		
1. Country-specific Risks	S	Written guarantees at MOF and Road Fund are required to ensure the timely release counterpart funds. Private audit firm to audit the project financial statement. This is an internal procedure of the government, which cannot be changed.
2. Entity-specific Risks	M	Road Fund has experience in implementing ADB-financed projects and shall continue to maintain its supports to PMU during project implementation.
3. Project-specific Risks	M	Road Fund shall continue to maintain its supports to PMU during the implementation of ADB-financed projects. Professional accounting training should be provided to finance staff in PMU in 2015.
Overall Inherent Risk	S	
Control Risk		
1. Implementing Entity	M	PMU staff should attend professional course training yearly organized by ADB in 2015.
2. Funds Flow	M	Timely availability of counterpart funds will be ensured by implementing the proposed funds flow arrangements.
3. Staffing	M	PMU should ensure financial management staff can back up accountant and vice versus in case one is on leave.
4. Accounting Policies and Procedures	M	Accounting guidelines need to update to include role and responsibility of staff. This activity should be completed by December 2016.
5. Internal Audit	M	Sub Control and Revision unit under Road Fund has been appointed to review PMU's activities.
6. External Audit	M	Audit of the project financial statement should be done in accordance with the International Standards on Auditing and by the independent auditor acceptable to ADB.
7. Reporting and Monitoring	M	PMU will be required to report in accordance with ADB requirements with inherent adequate control mechanisms.
8. Information Systems	M	PMU should record financial transactions related to direct payment in 1C accounting system which is currently captured in Excel. By December 2015, this should be mainstreamed for all projects.
Overall Control Risks	M	
Overall Risk	S	

* Risk assessment: H – High, S – Substantial, M – Moderate, N – Negligible or Low.

C. Disbursement

26. The Loan proceeds will be disbursed in accordance with ADB's *Loan Disbursement Handbook* (2015, as amended from time to time).³

27. The disbursement arrangements are same for both Tranches 1, 2 and 3.

28. **Direct payment.** The procedures will generally be used for civil works contracts and consulting services.

29. **Imprest account.** For payment of expenses related to recurrent costs, the Road Fund will establish a separate imprest account for each tranche at a commercial bank in accordance with ADB's *Loan Disbursement Handbook*.⁴ The currency of the imprest account will be US Dollars. The government may request for initial and additional advances to the imprest account based on 6 months estimated expenditures to be financed through the imprest account. The imprest account will be established, managed, and liquidated in accordance with ADB's *Loan Disbursement Handbook* and detailed arrangements agreed by the Government and ADB. The statement of expenditure (SOE) procedure will be used to reimburse eligible expenditure and to liquidate and replenish the imprest account for individual payments of \$100,000 equivalent and below. SOE records should be maintained and made readily available for review by ADB's disbursement and review mission or upon ADB's request for submission of supporting documents on a sampling basis, and for independent audit.⁵

30. For recurrent cost related to PMU employees' salaries, and travel expenses in SUM will go through one pass-through account.

31. According to instruction from Central Bank of Uzbekistan (CBU) dated 16 March 2009 and registered by the Ministry of Justice on 27 April 2009, any registered legal entity in the country can have only one pass-through account. PMU under the Road Fund was established and registered as one legal entity to implement road MFF projects funded by ADB. This means that all payments of salaries, and travel expenses in local currency (SUM) should be made from one pass-through account. USD imprest account is still opened and maintained separately for each tranche.

32. PMU accountant will reconcile the pass-through account monthly. This will help PMU to monitor any unpaid fund in the account, fully aware of the source of the payment which project the payment came from, and take appropriate actions to clear it.⁶

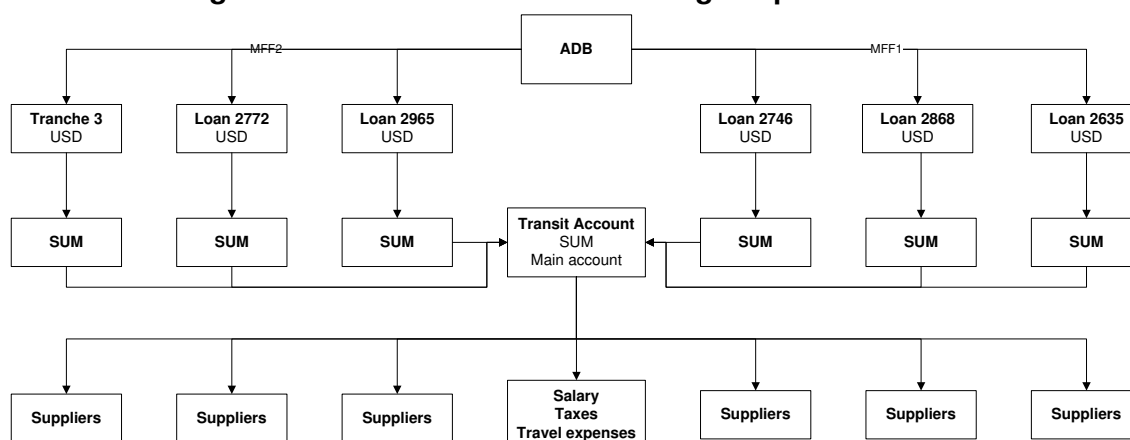
³ Available at: <http://www.adb.org/documents/loan-disbursement-handbook>

⁴ The bank charges on the imprest account will be financed from the proceeds of the loan.

⁵ Checklist for SOE procedures and formats are available at: <http://www.adb.org/documents/loan-disbursement-handbook>

⁶ Imprest account arrangement for Uzbek Sum was discussed and agreed with Controllers' Department in April 2014.

Figure 5.1: Fund Flow for Pass-through Imprest Account



33. ADB's *Loan Disbursement Handbook* describes which supporting documents should be submitted to ADB and which should be retained by the government for liquidation and replenishment of an imprest account.

34. Road Fund 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, the government shall 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 is \$100,000 equivalent. Individual payments below this amount should be paid (i) by borrower and subsequently claimed to ADB through reimbursement, or (ii) through the imprest fund procedure, unless otherwise accepted by ADB.

D. Accounting

35. The Road Fund will maintain, or cause to be maintained, separate books and records by funding source for all expenditures incurred on the project. The Road Fund 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.

E. Auditing and Public Disclosure

36. The Road Fund will cause the project financial statements to be audited in accordance with International Standards on Auditing and with the Government's audit regulations, by an independent auditor acceptable to ADB.⁷ The audited project financial statements will be submitted in the English language to ADB within six months of the end of the fiscal year by the Road Fund.

37. The annual audit report for the project accounts will include an audit management letter and audit opinions which cover (i) whether the project financial statements present a true and fair view or are presented fairly, in all material respects, in accordance with the applicable financial reporting framework; (ii) whether loan proceeds were used only for the purposes of the project or not; (iii) the level of compliance for each financial covenant contained in the legal

⁷ The auditors are financed from the loans.

agreements for the project; (iv) use of the imprest fund procedure; and (v) the use of the statement of expenditure procedure certifying to the eligibility of those expenditures claimed under SOE procedures, and proper use of the SOE and imprest procedures in accordance with ADB's Loan Disbursement Handbook and the project documents.

38. 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.

39. Ministry of Finance and Road Fund 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.⁸ ADB reserves the right to require a change in the auditor (in a manner 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.

40. For Projects 2 and 3, public disclosure of the project financial statements, including the audit report on the project financial statements, will be guided by ADB's Public Communications Policy (2011)⁹. After review, ADB will disclose the project financial statements for the project and the opinion of the auditors on the financial statements within 30 days of the date of their receipt by posting them on ADB's website. The Audit Management Letter will not be disclosed.

⁸ ADB approach and procedure on delayed submission of audited project financial statements:

- When audited project financial statements are not received by the due date, ADB will write to the executing agency advising that (i) the audit documents are overdue; and (ii) if they are not received within the next six 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.
- When audited project financial statements have not been 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 (i) inform the executing agency of ADB's actions; and (ii) advise that the loan may be suspended if the audit documents are not received within the next six months.
- When audited project financial statements have not been received within 12 months after the due date, ADB may suspend the loan.

⁹ Available from <http://www.adb.org/documents/pcp-2011?ref=site/disclosure/publications>

VI. PROCUREMENT OF GOODS, WORKS AND CONSULTING SERVICES

A. Advance Contracting and Retroactive Financing

41. Under each tranche, ADB may, subject to its policies and procedures, allow on request (a) advance contracting and (b) retroactive financing of eligible expenditures for up to 20% of the proposed individual loan, incurred prior to loan effectiveness but not earlier than 12 months before the date of signing of the related legal agreement. Uzbekistan acknowledges that any approval of advance contracting and/or retroactive financing will not constitute a commitment by ADB to finance the related project.

42. In line with the above, the Government requested for the Project 1 (i) advance action for procuring civil works and consulting services, and (ii) retroactive financing for only civil works up to 20% of the loan amount provided that expenditures are in accordance with agreed procedures and were incurred during the 12 months before the signing of the Loan Agreement. Advance contracting will be for works and consulting services; and the steps to be concluded in advance are (i) tendering, and bid evaluation for civil works packages; and (ii) recruitment of consultants. For Project 2, the Government requested for advance action for procuring civil works and consulting services. For Project 3, the Government requested for advance contracting for civil works and consulting services, and retroactive financing for consulting services for a maximum amount of \$1.3 million.

43. All advance contracting and retroactive financing will be undertaken in conformity with ADB's Procurement Guidelines (2013, as amended from time to time)¹⁰ and ADB's Guidelines on the Use of Consultants (2013, as amended from time to time).¹¹ The issuance of invitations to bid under advance contracting and retroactive financing will be subject to ADB approval.

B. Procurement of Goods, Works, and Consulting Services

44. Procurement of goods, civil works, and related services financed from the ADB loans will be done in accordance with ADB's Procurement Guidelines (2013, as amended from time to time) and the procurement plans for the projects. To ensure competitive bidding, international competitive bidding (ICB) contract packages will be adopted. ICB will be used for civil works over \$2 million and goods over \$500,000. National competitive bidding (NCB) for civil works could be conducted for contracts not exceeding \$2 million. Civil works contracts will be procured through ICB using post-qualification. ADB's prior review procedures will be followed. The Road Fund agreed to include the relevant sections of ADB's Anticorruption Policy (1998) in all bidding and contractual documents.

45. All consultants financed from ADB loan will be recruited and engaged according to ADB's Guidelines on the Use of Consultants (2013, as amended from time to time) and the specific procurement plans for the projects. Consulting firms will be selected and engaged using the quality- and cost-based selection (QCBS) method with 90:10 ratio and full technical proposals for the construction supervision package will be solicited.¹² Preference will be given to inclusion of permanent staff of the consulting firms for key positions in the consultant's team. The consultants will be required to report to both the Road Fund and ADB.

¹⁰ Available at: <http://www.adb.org/Documents/Guidelines/Procurement/Guidelines-Procurement.pdf>

¹¹ Available at: <http://www.adb.org/Documents/Guidelines/Consulting/Guidelines-Consultants.pdf>

¹² A 90:10 QCBS method is needed to focus on quality of consultants.

C. Procurement Plan

46. The updated procurement plan for Project 1 is in Figure 6.1, and the procurement milestones for civil work and construction supervision consultant contracts are shown in Table 6.1 and Table 6.2, respectively. The updated procurement plan for Project 2 is given in Figure 6.2 and the procurement milestones for civil works and construction supervision consultant contracts are provided in Table 6.3 and Table 6.4, respectively. The procurement plan for Project 3 is in Figure 6.3 and the procurement milestones for civil works and construction supervision consultant are in Table 6.5 and Table 6.6, respectively. Procurement plans for the subsequent project will be developed during its preparation.

Figure 6.1: Procurement Plan and Contract Packages for Project 1

Basic Data							
Project Name: CAREC Corridor 2 Road Investment Program II - Tranche 1							
Project Number: 44483-023				Approval Number: 2772			
Country: Uzbekistan				Executing Agency: Republican Road Fund			
Project Financing Amount: US\$ 159,500,000				Implementing Agency:			
ADB Financing: US\$ 129,500,000				Program Management Unit under the Road Fund			
Cofinancing (ADB Administered):				Project Closing Date: 30 June 2016			
Non-ADB Financing: US\$ 30,000,000							
Date of First Procurement Plan: 2 September 2011				Date of this Procurement Plan: 25 September 2015			
A. Methods, Thresholds, Review and 18-Month Procurement Plan							
1. Procurement and Consulting Methods and Thresholds							
Except as 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 for Goods		US\$ 500,000 and Above					
Shopping for Goods		Up to US\$ 75,000		Office Furniture and Equipment for PMU			
International Competitive Bidding for Works		US\$ 2,000,000 and Above					
Consulting Services							
Method				Comments			
Least-Cost Selection for Consulting Firm				Audit Service for PMU			
Quality- and Cost-Based Selection for Consulting Firm							
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)	Bidding Procedure	Advertisement Date (quarter/year)	Comments
None							

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
None							

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)	Bidding Procedure	Advertisement Date (quarter/year)	Comments
None								

Consulting Services								
Package Number	General Description	Estimated Value	Number of Contracts	Recruitment Method	Review (Prior/Post)	Advertisement Date (quarter/year)	Type of Proposal	Comments
MF2/P1/Audit03	Independent Audit Services (for FY 2015 up to financial closing of loan)	25,000.00	1	LCS	Prior	Q4 / 2015	BTP	Assignment: National Comments: Funded under Recurrent Costs

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)	Bidding Procedure	Comments
None							

Consulting Services							
Package Number	General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Recruitment Method	Review (Prior/Post)	Type of Proposal	Comments
None							

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 Ongoing 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	Comments
MFF2/CWP1	Civil Works: Reconstruction of A373 Tashkent-Osh Road Section of 58 km within Km 116 to Km 190	138,750,000.00	107,400,000.00	ICB	Q1 / 2011	29-JUN-12	ADB will finance the Civil Works under Project 1 (Loan 2772-UZB) at the amount of \$107.40 million and under Project 2 (Loan 2965-UZB) at the amount of \$ 31.35 million. Accordingly, total budget for Civil Works is \$138.75 million.

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
MFF2-P1-Audit02	Independent Audit Services (for FY 2014)	25,000.00	7,400.00	LCS	Q1 / 2015	22-JUL-15	Funded under Recurrent Costs
MFF2-CS-P1	Project Management and Construction Supervision	2,500,000.00	2,138,150.00	QCBS	Q1 / 2011	09-AUG-12	
MFF2-P1-RS01	Road Safety Consultancy Services	1,800,000.00	1,375,000.00	QCBS	Q1 / 2012	30-OCT-13	

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
Contract No. 1/190	Office Computers, Equipment for PMU	10,000.00	8,792.66	SHOPPING	Q2 / 2012	11-APR-14	11-APR-14	6 personal computers, 3 printers, 1 scanner; funded under Recurrent Costs; approved by ADB as per letter dated

Contract No. 147	Office Furniture	8,000.00	1,288.27	SHOPPING	Q1 / 2013	11-APR-14	11-APR-14	11 Apr 2014 4 metal cabinets; funded under Recurrent Costs; approved by ADB as per letter dated 11 Apr 2014
Contract No. 83	USB HDD (4 units)	1,000.00	677.44	SHOPPING	Q2 / 2013	11-APR-14	11-APR-14	For data storage; funded under Recurrent Costs; approved by ADB as per letter dated 11 Apr 2014

Consulting Services

Package Number	General Description	Estimated Value	Awarded Contract Value	Recruitment Method	Advertisement Date (quarter/year)	Date of ADB Approval of Contract Award	Date of Completion	Comments
MF2-P1-Audit01	Independent Audit Services (for FY 2012 and FY 2013)	20,000.00	9,865.00	LCS	Q2 / 2013	14-NOV-13	28-MAY-14	Funded under Recurrent Costs

Figure 6.2 – Procurement Plan and Contract Packages for Project 2

Basic Data	
Project Name: CAREC Corridor 2 Road Investment Program II - Tranche 2	
Project Number: 44483-026	Approval Number: 2965
Country: Uzbekistan	Executing Agency: Republican Road Fund
Project Financing Amount: US\$ 265,000,000	Implementing Agency: Program Management Unit under the Road Fund
ADB Financing: US\$ 220,000,000	Project Closing Date: 30 June 2016
Cofinancing (ADB Administered):	
Non-ADB Financing: US\$ 45,000,000	
Date of First Procurement Plan: 10 December 2012	Date of this Procurement Plan: 23 September 2015

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

1. Procurement and Consulting Methods and Thresholds

Except as 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 for Goods	US\$ 500,000 and Above	
Shopping for Goods	Up to US\$ 99,999	
International Competitive Bidding for Works	US\$ 2,000,000 and Above	

Consulting Services	
Method	Comments
Least-Cost Selection for Consulting Firm	Audit Service for PMU
Quality- and Cost-Based Selection for Consulting Firm	
Individual Consultants Selection for Individual Consultant	

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)	Bidding Procedure	Advertisement Date (quarter/year)	Comments
MFF2/CWP2	Reconstruction of A373/4R112 Pungan-Namangan Highway (75km)	181,700,000.00	ICB	Prior	1S2E	Q4 / 2015	Prequalification of Bidders: N Domestic Preference Applicable: N Bidding Document: Large Works Comment: Estimated value of \$181,700,000.00 excludes contingencies

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
MFF2/P2/IND-EM02	External Monitoring Consulting Services	159,000	ICS	Prior	Q3 / 2015		Assignment: National Expertise: External Monitoring

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)	Bidding Procedure	Advertisement Date (quarter/year)	Comments
None								

Consulting Services								
Package Number	General Description	Estimated Value	Number of Contracts	Recruitment Method	Review (Prior/Post)	Advertisement Date (quarter/year)	Type of Proposal	Comments
MFF2/P2/Audit02	Independent Audit Services (FY2015 up to financial closing of loan)	25,000.00	1	LCS	Prior	Q4 / 2015	BTP	Assignment: National Comments: Funded under Recurrent Costs

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)	Bidding Procedure	Comments
None							

Consulting Services							
Package Number	General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Recruitment Method	Review (Prior/Post)	Type of Proposal	Comments
None							

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 Ongoing 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	Comments
None							
Consulting Services							
Package Number	General Description	Estimated Value	Contract Value	Recruitment Method	Advertisement Date (quarter/year)	Date of ADB Approval of Contract Award	Comments
MFF2/P2/IND-EM01	External Monitoring Consulting Services	300,000.00	141,000.00	ICS	Q3 / 2013	27-FEB-14	Contract termination procedure underway since consultant's health does not allow travel to project site
MFF2/P2/Audit01	Independent Audit Services (for FY2013, FY2014)	25,000.00	11,600.00	LCS	Q1 / 2015	22-JUL-15	Funded under Recurrent Costs
MFF2-CS-P2	Project Management and Construction Supervision	3,200,000.00	3,139,800.00	QCBS	Q4 / 2012	20-MAY-15	

2. Completed 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	Date of Completion	Comments
MFF2/P2/PMU02	Vehicle for PMU	25,000.00	23,790.00	SHOPPING	Q4 / 2013	02-APR-14	08-JAN-14	Funded under Recurrent Costs
MFF2/P2/PMU04	Office Equipment for PMU	14,000.00	7,200.20	SHOPPING	Q1 / 2015	05-JUN-15	24-FEB-15	Funded under Recurrent Costs
MFF2/P2/PMU03	Personal Computers for PMU	10,000.00	8,354.26	SHOPPING	Q1 / 2015	05-JUN-15	16-APR-15	Funded under Recurrent Costs
MFF2/P2/PMU01	Office Furniture for PMU	15,000.00	12,495.00	SHOPPING	Q4 / 2013	16-JAN-15	16-DEC-14	Funded under Recurrent Costs

Figure 6.3 – Procurement Plan and Contract Packages for Project 3

Basic Data							
Project Name: CAREC Corridor 2 Road Investment Program II - Tranche 3							
Project Number: 44483-027				Approval Number:			
Country: Uzbekistan				Executing Agency: Republican Road Fund			
Project Procurement Classification: Category A				Implementing Agency:			
Project Procurement Risk: High				Program Management Unit under the Road Fund			
Project Financing Amount: US\$ 230,000,000				Project Closing Date: 31 December 2017			
ADB Financing: US\$ 150,000,000							
Cofinancing (ADB Administered):							
Non-ADB Financing: US\$ 80,000,000							
Date of First Procurement Plan: 27 August 2015				Date of this Procurement Plan: 27 August 2015			
A. Methods, Thresholds, Review and 18-Month Procurement Plan							
1. Procurement and Consulting Methods and Thresholds							
Except as 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 for Works		US\$ 1,000,000 and Above					
Consulting Services							
Method				Comments			
Least-Cost Selection for Consulting Firm				for recruitment of financial auditor			
Quality- and Cost-Based Selection for Consulting Firm				90:10 quality:cost ratio			
Individual Consultants Selection for Individual Consultant							
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)	Bidding Procedure	Advertisement Date (quarter/year)	Comments
MFF2/ CWP3	Reconstruction of about 87 km of the A380 highway (between Km228 and Km315)	176,000,000.00	ICB	PRIOR	1S2E	Q4 / 2015	Prequalification of Bidders: N Domestic Preference Applicable: N Bidding Document: Large Works
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
MF2/CM/P3	Contract management consultant	420,000.00	ICS	PRIOR	Q4 / 2015		Assignment: International Expertise: Contract management
MF2/CS/P3	Engineering and construction supervision	3,500,000.00	QCBS	PRIOR	Q4 / 2015	FTP	Assignment: International Quality-Cost Ratio: 90:10 Comments: 90:10 ratio will be included in the PFR Report and FAM
MF2/FA/P3	Financial auditor	100,000.00	LCS	PRIOR	Q3 / 2016	BTP	Assignment: National Comments: Number of contracts to be determined during project implementation
MF2/IC D/P3	Capacity development specialist for RAMS	400,000.00	ICS	PRIOR	Q4 / 2015		Assignment: International Expertise: Capacity development
MF2/IP/P3	Procurement specialist	375,000.00	ICS	PRIOR	Q4 / 2015		Assignment: International Expertise: Procurement

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)	Bidding Procedure	Advertisement Date (quarter/year)	Comments
None								

Consulting Services								
Package Number	General Description	Estimated Value	Number of Contracts	Recruitment Method	Review (Prior/ Post)	Advertisement Date (quarter/year)	Type of Proposal	Comments
MF2/SG/P3	Safeguards support	60,000.00	4	ICS	PRIOR	Q4 / 2015		Assignment: National Expertise:

								Environment, resettlement
								Comments: Number of contracts - to be determined during project implementation

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)	Bidding Procedure	Comments
None							

Consulting Services							
Package Number	General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Recruitment Method	Review (Prior/Post)	Type of Proposal	Comments
None							

Table 6.1: Civil Work Contract's Procurement Schedule for Project 1

No.	Activity	Calendar Days	Date	Cumulative Days
1	GPN & IFB/Preparation (RF to upload- ADB)	0	5-Dec-10	0
2	Early Draft Bidding Documents Preparation	15	20-Dec-10	15
3	Detailed Design Completed by RF	41	31-Jan-11	56
4	BDs ready including BOQ and Tech Specs	0	31-Jan-11	56
5	Clearance and approval of BD by State of Architecture & EA's Bidding Committee	10	10-Feb-11	66
6	Submit completed draft BD to ADB for Approval	2	12-Feb-11	68
7	ADB No-Objection to the Draft BD	34	8-Mar-11	102
8	Posted IFB in Newspaper Pravda Vostok, http://www.adb.org/ and http://www.mf.uz/	2	10-Mar-11	104
9	Issue Bid Documents to Interested Contractors	1	11-Mar-11	105
10	EA made first extension the deadline for the submission of bids from 22 April 2011 to 6 May 2011.	32	12-Apr-11	137
11	EA made second extension of the deadline for the submission of bids from 6 May 2011 to 20 May 2011.	21	3-May-11	158
12	Receive bids and Opening of Tech Qualifications	17	20-May-11	175
13	Post Qualification & Technical Evaluation by RF	7	27-Jun-11	182
14	Clearance and approval by EA's Bidding Committee	0	27-Jun-11	182
15	ADB's Comments and No objection of the technical evaluation	84	19-Sep-11	266
16	Opening of Price Bids	2	21-Sep-11	268
17	Overall Evaluation Report by RF	5	26-Sep-11	273
18	Clearance and approval by EA's Bidding Committee	0	26-Sep-11	273
19	Forward Overall Evaluation Report with Recommendations to ADB including Draft Contract	0	26-Sep-11	273
20	ADB's Comments and recommendation on price bid negotiation	85	20-Dec-11	358
21	EA submitted bid price negotiation plan to ADB	5	25-Dec-11	363
22	ADB approval on bid price negotiation plan	31	25-Jan-12	394
23	Commence bid price negotiation	20	14-Feb-12	414
24	Issuance of Letter Of Acceptance to Contractor inc forwarding	205	8-Sep-12	619

No.	Activity	Calendar Days	Date	Cumulative Days
	Contract Agreement			
25	Contract Signing	9	17-Sep-12	628
26	Contractors Submits Performance Security	21	8-Oct-12	649
27	Contract approval by MFERIT	17	25-Oct-12	666
28	NTP & submit copy of Contract to ADB	0	25-Oct-12	666
29	Mobilization	20	15-Nov-12	686

Table 6.2: Supervision Consultant's Recruitment Schedule for Project 1

No.	Activity	Calendar Days	Date	Cumulative Days
1	Publication of EOI in ADB BO, EA website, local Newspaper, DgMarket, etc.	0	10-Apr-11	0
2	Receipt of EOI	30	10-May-11	30
3	SL & RFP Submission to ADB (Submission #1) by EA	58	8-Jul-11	88
4	ADB Approval of RFP & SL	57	5-Sep-11	145
5	Issue RFP to Short listed Firms by EA	25	30-Sep-11	170
6	Receipt of Proposal (Tech and Financial)	44	14-Nov-11	214
7	Technical Evaluation & Submission (#2) to ADB	21	5-Dec-11	235
8	ADB's approval of technical evaluation	115	30-Mar-12	350
9	Issue of notice- Public Opening Financial Proposal	8	7-Apr-12	358
10	Public Opening of Financial Proposal by EA	88	5-Jul-12	446
11	Overall Ranking and approval of the EA's Bidding Committee	1	6-Jul-12	447
12	Submission (# 3) to ADB	3	9-Jul-12	450
13	ADB's Approval of the Final Ranking	11	20-Jul-12	461
14	EA Issue Invitation for contract negotiation	0	20-Jul-12	461
15	Notification for contract Negotiations	0	20-Jul-12	461
16	Negotiation Period	6	26-Jul-12	467
17	Submission (#4) Minutes of Negotiations & Draft Contract to ADB	11	6-Aug-12	478
18	ADB's approval of contract	3	9-Aug-12	481
19	Signing of Contract	0	9-Aug-12	481
20	Contract approval by MFERIT	32	11-Oct-12	513
21	EA issuance Notice to Proceed	0	11-Oct-12	513
22	Consultant's Mobilization	22	1-Nov-12	535

Table 6.3: Civil Work Contract's Procurement Schedule for Project 2

No.	Activity	Calendar Days	Date	Cumulative Days
1	GPN at ADB BO for three tranches under MFF	0	12-Aug-11	0
2	Feasibility Study, Cost Estimate and Preliminary Design	437	22-Oct-12	437
3	Detailed Design and BoQ Completed by RF	299	17-Aug-13	736
4	First Draft - Bidding Documents approval Working Level Tender Committee (WLTC) or Inter Ministerial Tender Committee (IMTC)	10	27-Aug-13	746
5	Revised Bidding Documents approval Working Level Tender Committee (WLTC) or Inter Ministerial Tender Committee (IMTC)	87	22-Nov-13	833
6	Bidding Documents approved by ADB	5	27-Nov-13	838
7	Issuing IFB in ADB BO, MoF Website	1	28-Nov-13	839
8	Issue IFB in Newspaper	0	28-Nov-13	839
9	Issue Bid Documents to Interested Contractors	1	29-Nov-13	840
10	Receive bids and Opening of Tech Qualifications by EA's Working Level Bidding Committee	53	21-Jan-14	893
11	Extension of deadline - Receive bids and Opening of Tech Qualifications by EA's Working Level Bidding Committee	14	04-Feb-14	907
12	Bidding Committee Chairman signed a letter No. BYu/28-18-806/241 for cancellation of the bids opened on 4 February 2014 which is based on ADB recommendation letter dated 26 Feb 2014 and requesting the 6 Bidders to submit fresh bid.	30	06-Mar-14	937
13	Receive refresh bids and Opening of Tech Qualifications by EA's	21	27-Mar-14	958

No.	Activity	Calendar Days	Date	Cumulative Days
	Working Level Bidding Committee			
14	Post Qualification & Technical Evaluation by RF	39	05-May-14	997
15	Clearance and approval by EA's Working Level Bidding Committee (WLTC)	3	08-May-14	1000
16	ADB's Comments and No objection of the technical bid evaluation report (TBER)	28	05-Jun-14	1028
17	Opening of Price Bids by EA's Working Level Bidding Committee	33	08-Jul-14	1061
18	Price Bid Evaluation Report (PBER) by EA	15	23-Jul-14	1076
19	Forward Price Bid Evaluation Report with Recommendations to ADB including Draft Contract	1	24-Jul-14	1077
20	ADB's Comments and No objection - price bid evaluation report	27	20-Aug-14	1104
21	EA Request ADB for No Objection of Contract Negotiation as per ADB's recommendations	36	25-Sep-14	1140
22	ADB's No objection for contract negotiation and approved negotiation plan	1	26-Sep-14	1141
23	Issuance of letter of invitation for bid price negotiation due to the lowest bid exceeded the budget	1	27-Sep-14	1142
24	Negotiation meeting with Bidder Yuksel (Turkey)	13	10-Oct-14	1155
25	EA informed ADB on the results of contract negotiation with Bidder Yuksel	6	16-Oct-14	1161
26	ADB's recommendations	5	21-Oct-14	1166
27	EA requested for rebidding	8	30-Jan-15	1267

Table 6.5: Supervision Consultant's Recruitment Schedule for Project 2

No.	Activity	Calendar Days	Date	Cumulative Days
1	Publication of EOI in ADB BO - CSRN	0	4-Nov-12	0
2	Receipt of EOI	29	3-Dec-12	29
3	CSC meeting and evaluation	115	28-Mar-13	144
4	SL & RFP submission to ADB (Submission #1) by EA, 1st review	25	22-Apr-13	169
	SL & RFP submission to ADB (Submission #1) by EA, 2nd review	39	31-May-13	208
5	ADB approval of SL & RFP	33	3-Jul-13	241
6	Issuance of RFP to shortlisted firms by EA	125	5-Nov-13	366
7	Receipt of proposal (technical and financial), including extension due to new year holiday	77	21-Jan-14	443
	Technical proposal evaluation	38	28-Feb-14	481
8	Technical proposal evaluation submission to ADB (Submission #2) by EA	14	14-Mar-14	495
9	ADB's approval of technical evaluation	40	23-Apr-14	535
10	Issuance of invitation for public opening of financial proposals	72	4-Jul-14	607
11	Public opening of financial proposals by EA	4	8-Jul-14	611
12	Financing proposal evaluation, overall ranking and approval of the EA's Bidding Committee	7	15-Jul-14	618
13	Financial proposal evaluation and overall ranking submission to ADB (Submission #3) by EA	6	21-Jul-14	624
14	ADB's approval of the final ranking	8	29-Jul-14	632
15	EA clearance and Interministry Bidding Committee Approval	93	30-Oct-14	725
16	Notification for contract negotiations	99	6-Feb-15	824
17	Start of negotiation	32	10-Mar-15	856
18	Minutes of Negotiations & Draft Contract submission to ADB (Submission #4) by EA	69	18-May-15	925
19	ADB's approval of contract	1	19-May-15	926
20	Signing of Contract	24	12-Jun-15	950
21	Contract approval by MFERIT	52	3-Aug-15	1002
22	EA issuance Notice to Proceed based on the status of civil works Contract	1	4-Aug-15	1003
23	Consultant's Mobilization	31	4-Sep-15	1034

Table 6.6: Civil Work Contracts Procurement Schedule for Project 3

No.	Activity	Calendar Days	Planned	
			Date	Cumulative Days
1	Advance Contracting Notice at ADB BO requested	0	01-Nov-15	0
2	Feasibility Study, Cost Estimate and Preliminary Design	0	01-Nov-15	0
3	Detailed Design and BoQ Completed by RF	0	01-Nov-15	0
4	Draft Bidding Documents Preparation and approval of BD by State of Architecture & EA's Bidding Committee and MFERIT	30	01-Dec-15	30
5	Bidding Documents approved by ADB	15	16-Dec-15	45
6	Issuing IFB in ADB BO, MoF Website	1	17-Dec-15	46
7	Issue IFB in Newspaper	0	17-Dec-15	46
8	Issue Bid Documents to Interested Contractors	1	18-Dec-15	47
9	Receive bids and Opening of Tech Qualifications by EA's Working Level Bidding Committee	42	29-Jan-16	89
10	Post Qualification & Technical Evaluation by RF	14	12-Feb-16	103
11	Clearance and approval by EA's Working Level Bidding Committee	7	19-Feb-16	110
12	ADB's Comments and No objection of the technical evaluation	21	11-Mar-16	131
13	Opening of Price Bids by EA's Working Level Bidding Committee	7	18-Mar-16	138
14	Overall Evaluation Report by EA	14	01-Apr-16	152
15	Forward Overall Evaluation Report with Recommendations to ADB incl Draft Contract	0	01-Apr-16	152
16	ADB's Comments and No objection	14	15-Apr-16	166
17	Issuance of Letter of Acceptance to Contractor inc forwarding Contract Agreement	7	22-Apr-16	173
18	Technical Meeting with Contractor	60	21-Jun-16	233
19	Signing Contract and Contractor Submits Performance Security	9	31-Jul-16	273
20	Contract Submit to MFERIT for registration and submit copy of Contract to ADB	1	01-Aug-16	274
21	Contract approval by MFERIT	31	01-Sep-16	305
22	Letter of contract effectiveness	0	01-Sep-16	305
23	Mobilization	0	01-Sep-16	305

Table 6.7: Supervision Consultants' Recruitment Schedule for Project 3

No.	Activity	Calendar Days	Planned	
			Date	Cumulative Days
1	Publication of EOI in ADB BO - CSRN	0	05-Dec-15	0
2	Receipt of EOI	30	04-Jan-16	30
3	CSC Meeting and evaluation	10	14-Jan-16	40
4	SL & RFP Submission to ADB (Submission #1) by EA	1	15-Jan-16	41
5	ADB Approval of RFP & SL	14	29-Jan-16	55
6	Issue RFP to Short listed Firms by EA	7	05-Feb-16	62
7	Receipt of Proposal (Tech and Financial)	45	21-Mar-16	107
8	Technical Evaluation & Submission (#2) to ADB	21	11-Apr-16	128
9	ADB's approval of technical evaluation	10	21-Apr-16	138
10	Issue of notice- Public Opening Financial Proposal	7	28-Apr-16	145
11	Public Opening of Financial Proposal by EA	7	05-May-16	152
12	Overall Ranking and approval of the EA's Bidding Committee	14	19-May-16	166
13	Submission (# 3) to ADB	1	20-May-16	167
14	ADB's Approval of the Final Ranking	7	27-May-16	174
15	Notification for contract Negotiations	3	30-May-16	177
16	Negotiation start	14	13-Jun-16	191
17	Submit (#4) Min of Neg & Draft Contract to ADB	7	20-Jun-16	198
18	ADB's approval of contract	3	23-Jun-16	201
19	Signing of Contract	7	30-Jun-16	208

No.	Activity	Calendar Days	Planned	
			Date	Cumulative Days
20	Contract approval by MFERIT	45	14-Aug-16	253
21	EA issuance Notice to Proceed based on the status of civil works Contract	3	17-Aug-16	256
22	Consultant's Mobilization	15	01-Sep-16	271

3. Review of Contract Modifications

47. ADB will review contract modifications in accordance with the procedures set forth in the loan agreement between the government and ADB.

4. ADB's Review of Procurement Decisions

48. Contracts procured under international competitive bidding procedures and contracts for Consulting Services shall be subject to prior review by ADB, unless otherwise agreed between the Borrower and ADB and set forth in the Procurement Plan.

49. The Borrower shall seek ADB's approval before it:

- (i) grants any extension of the stipulated time for completion of a contract for Goods or Works; or
- (ii) agrees to any modification or waiver of the conditions of a contract for Goods or Works, including any change order that falls under I or (d) of this paragraph; or
- (iii) issues any change order under a contract for Goods or Works which would in aggregate increase the original contract price (for the avoidance of doubt, such aggregate shall take into account any previous or simultaneous change order or orders under such contract); or
- (iv) issues any change order under a contract for Goods or Works that would affect more than 15% of the original contract price (either through increase or decrease), even if the net effect of such change order would not in aggregate increase the original contract price. For the avoidance of doubt, such aggregate shall take into account any previous or simultaneous change order or orders under such contract.

50. ADB undertakes to respond to each request for approval under paragraph 50 above within 10 business days (in Manila) of ADB's receipt of such request. Such response will indicate that the request is (i) approved, (ii) declined, (iii) pending receipt of additional information or documentation or (iv) pending consideration by ADB's Procurement Committee, in each case as determined by ADB. If ADB fails to respond within 10 business days (in Manila) of ADB's receipt of such request, the request shall be deemed to have been approved by ADB. In the case of (iii), the Borrower shall promptly provide the requested information or documentation to ADB and ADB undertakes to respond to the relevant request within 10 business days (in Manila) upon receipt of such requested information or documentation satisfactory to ADB. In the case of (iv), ADB shall notify the Borrower of the decision by ADB's Procurement Committee within 10 business days (in Manila) of such decision by the Procurement Committee.

51. The government will ensure that the Project Executing Agency will:

- (i) provide a copy of all time extensions, modifications or waivers to the contracts (including change orders) requiring ADB's approval in accordance with paragraph 50 above to ADB for its record promptly after signing; and
- (ii) maintain an accurate record of all change orders under all contracts for Goods or Works which do not require ADB's prior approval and submit such record for ADB's review every 6 months.

52. The procurement plan covers the first 18 months of procurement activity for each project. Within one year after the date of loan effectiveness, the Road Fund shall submit a revised procurement plan to ADB for approval that captures all ongoing procurement and that planned for the following 18 months. The plan shall be updated annually (or as required after every loan review mission or after award of each major ICB contract), on the same basis for the duration of the project

53. When a need arises during project implementation to change procurement arrangements (threshold, review requirements, method of procurement, contract packaging), the Road Fund, in consultation with the ADB Project Officer, will prepare a letter justifying the change submitted together with an updated procurement plan, and present it for ADB approval.

54. **Consulting Services.** All consultants will be recruited according to ADB's Guidelines on the Use of Consultants (2010, as amended from time to time). The terms of reference for all consulting services are detailed in Sections D, E, and F.

55. For Project 1, an estimated 398 person-months (106 international, 298 national) of consulting services are required as detailed in the following:

- (i) **Construction Supervision** – Consulting firms will be engaged using the quality- and cost-based selection (QCBS) method with a standard quality:cost ratio of 90:10. A total of 60 person-months of international consultant inputs and 216 person-months of national consultants will be required. Consulting services are expected to take place over 26 months (actual duration of service shall be in line with civil works schedule). The Consultant team will administer the construction contracts and ensure that the contractual clauses for both quality and specifications of work are complied with, and the works are constructed in accordance with the provisions of the construction contracts.
- (ii) **Road Safety Management Support** - The consultation services, which will be rendered by consulting firms, will require a total input of about 33 person-months of international consultants and the 65 person-months of national consultants. Consulting firms will be engaged using the quality- and cost-based selection (QCBS) method with a quality:cost ratio of 90:10. The consultation service will be carried out over a 10-month period to help address concerns related to the Road safety management improvement with outputs (i) road safety checklist, guidelines, and measures that will improve road safety management; (ii) national road infrastructure safety strategy; (iii) a specific phased road safety program to be implemented for all the road sections under the investment program I and II.

56. For Project 2, an estimated 394 person-months (84 international, 310 national) of consulting services are required as detailed in the following:

- (i) **Construction Supervision** – Consulting firms will be engaged using the quality- and cost-based selection (QCBS) method with a standard quality:cost ratio of 90:10. A total of 84 person-months of international consultant inputs and 310 person-months of national consultants will be required. Consulting services are expected to take place over 24 months (actual duration of service shall be in line with civil works schedule). The Consultant team will administer the construction contracts and ensure that the contractual clauses for both quality and specifications of work are complied with, and the works are constructed in accordance with the provisions of the construction contracts

57. For Project 3, an estimated 474 person-months (108 international, 366 national) of consulting services are required as detailed in the following:

- (i) **Construction Supervision** – Consulting firms will be engaged using the quality- and cost-based selection (QCBS) method with a standard quality:cost ratio of 90:10. A total of 108 person-months of international consultant inputs and 366 person-months of national consultants will be required. Consulting services are expected to take place over 18 months (actual duration of service shall be in line with civil works schedule). The Consultant team will administer the construction contracts and ensure that the contractual clauses for both quality and specifications of work are complied with, and the works are constructed in accordance with the provisions of the construction contracts

D. Consultants' Terms of Reference – Project 1

a. CONSTRUCTION SUPERVISION CONSULTANT

1. Objectives

58. The civil works will be carried out under Project 1 (MFF-2) as one contract. The reconstruction includes preparatory works and site clearance, earthworks including drilling and blasting works, construction of base course, construction of cement treated base course, strengthening of shoulders using asphalt concrete, cement concrete pavement construction, shoulder filling and strengthening, concrete barriers installation on the median area and right side, road furniture (road markings and signs etc.), Construction of culverts and drainage.

Contract	Km Length	Bridges	Type of Pavement	Number of Lane	Treatment
MFF2/CWP1 A373 Tashkent-Osh Road Section from km 116 to km 190	74	None	Cement Concrete	4	80% Pavement Works

59. Civil works will be carried out based on the International Federation of Consulting Engineers (FIDIC) contract MDB (Version 2006). A consultant team (the Consultant) will be engaged under Contract Construction Supervision to act as the Engineer. The Consultant will administer the construction contracts and ensure that the contractual clauses for both quality and specifications of work are complied with, and the works are constructed in accordance with the provisions of the construction contracts. The Engineer's Representative will be a full-time professional resident engineer for the contract package, in accordance with the provisions of the construction contracts.

60. The Consultant, while supervising construction works, will make all necessary arrangements for implementation of quality assurance and quality control plans following industry standards and best practices. The Consultant in consultation with the Road Fund will make all engineering decisions required for the successful and timely completion of the construction contracts, and will have all the powers defined as those of the Engineer.

61. The Consultant will carry out a critical review of the detailed design prior to the commencement of works. This review will be carried out immediately after the services commence and will be completed within 4 weeks. Upon completion of the review, the Consultant will prepare a report, setting out all findings and recommendations for correcting any major defects, omissions, or any changes that may have been taken place.

62. The Consultant shall use a project scheduling software for administration of the construction contracts.

2. Scope of Services

63. The Consultant will be responsible for the construction supervision of the civil works Project 1 with the following scope of works:

- a. Review design.** Review the geometry, pavement, bridge, and other structural designs, drawings specifications, construction method etc, prepared by the employer. Recommend to revise or update the design for achieving greater economy, safety, reliability, and/or durability.
- b. Supervision and project administration actions**
 - (i) Supervise the contractor's work and certify the contractor's work in accordance with contract conditions. Ensure that the construction methods proposed by the contractor for carrying out the works are satisfactory.
 - (ii) Develop quality assurance system and quality control plan, especially concentrating on provisions of cement concrete pavement.
 - (iii) Inspection of Contractor's construction equipment, results of material and soil tests, safety of the works, property and personnel. Inspect and test all materials and works to ensure compliance with specifications and giving immediate notice to the Contractor to remedy in the event that such materials and works fail to comply with the specifications.
 - (iv) Recommend the EA of the rates for any unscheduled items of work that may arise.
 - (v) Certify work volume and process interim and final payments of the Contractors.
 - (vi) 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, requests for time extension, and Contractor's claims and invoices.
 - (vii) Ensure project financial management procedures are in place and are strictly followed, specifically relating to payments, financial accounting, financial reporting and record keeping.
 - (viii) Check "as built" drawing prepared by the Contractors. Keep and record a complete set of as built drawings in paper and electronic formats for archiving in the Employers repository.

- (ix) Ensure that road safety design requirements are implemented in accordance with the contract documents and specifications.
- (x) Assist the EA for provisional and final hand over by the contractors. Prepare a project completion report.

c. Safeguard compliance monitoring

- (i) Monitor Contractors' conformity with environmental and social impact controls.
- (ii) If land acquisition and resettlement is necessary, prepare and supervise the implementation of the land acquisition and resettlement plan.
- (iii) Monitor Contractors' conformity with traffic control and road safety action plan during construction.
- (iv) Carry out the following duties related to environmental mitigation: (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 management plan (EMP); and (c) in the event of occurrence of any unexpected environmental impacts, coordinate with the PMU to recommend necessary mitigation measures to the EA and ADB for implementation..
- (v) Monitor Contractors' compliance with and performance of required actions regarding HIV/AIDS, human trafficking, and labor core standards in accordance with the contract documents, such as awareness and education of laborers and workers.
- (vi) If required, collect baseline data to prepare a LARP and the other impacts assessments carried out in accordance with ADB's Safeguard Policy Statement (2009) and relevant laws and regulations in Uzbekistan.

d. Due diligence for Projects 2 and 3: This will include (a) Technical review of technical due diligence of the project 2 and 3 including the overall project scope, traffic forecasting, road safety impact assessment, rationale for ADB intervention, and design and monitoring framework; (b) Economic and financial. Economic and financial viability and sustainability; (c) Environmental and Social. This will cover (1) frameworks/plans addressing environmental, involuntary resettlement (including any potential livelihood impacts due to construction work and other temporary impacts), indigenous people safeguard issues; (2) social dimensions including gender assessments and labor impacts; (3) the corresponding undertakings: and (d) Updating Sector Road Map: any policy refinements and updates in the previously agreed sector roadmap will be assessed with the recommended actions, further work will be as follows:

- (i) Due-diligence Report Preparation.
- (ii) Update project cost and the economic analysis. Prepare project implementation schedule and reflect it in the procurement plan. Prepare the project disbursement schedule and identify critical project preparation activities.
- (iii) Review the investment program compliance to the framework financing agreement (FFA) and loan agreements.
- (iv) Draft periodic financing requests in accordance with a format agreed with the EA and ADB
- (v) Prepare an environment impact assessment (EIA) report in accordance with the Safeguard Policy Statement (SPS) (2009) and relevant laws and

regulations in Uzbekistan. In the review of potential environmental impacts, temporary and permanent damage to the environment, particularly forests, wildlife reservations, areas with archaeological value, and potential risks from toxic and hazardous chemicals should be included. An environmental management and monitoring plan should be included in the EIA report. The consultation with affected people will also be carried out during the preparation of EIA.

- (vi) The consultant will (a) determine costs of the proposed environmental measures, (b) appraise the level of cost against expected environmental benefits, (c) incorporate appropriate mitigating measures into the designs of all subprojects under the investment program, and (d) prepare contractor specifications for environmental management and monitoring.
- (vii) Public consultation with stakeholders and affected peoples will be carried out in accordance with SPS. Complete records of public consultation, including lists of participants, will be maintained and submitted as part of the report.
- (viii) The consultant shall determine any possible need for temporary and permanent land acquisition and compensation/ resettlement arrangements; and prepare a land acquisition and resettlement plan (LARP) as required, according to the format and scope required by the ADB.
- (ix) Assess the investment program impacts and benefits: (i) livelihood improvement of local populations; (ii) core-labor standards issues; (iii) gender impacts (if any); (iv) civil works and road operations impacts; (v) communicable diseases/sexually transmitted infections (STI), and; (vi) human or drug trafficking. Reflect the results of the above and update the poverty and social assessment (PSA) prepared under the previous tranches.
- (x) The updated PSA will include the socioeconomic and poverty status of the project areas of influence, including the nature, extent, and determinants of poverty in these areas; identify and estimate the likely socioeconomic and poverty reduction impacts of the project; and prepare proposals for monitoring and evaluating the benefits and impacts before and after implementing the projects under the investment program. Prepare a consultation and participation plan.
- (xi) Update the gender action plan prepared under the previous tranches. If necessary, conduct additional gender analysis and identify elements in the MFF design that have the potential to address gender equity. Identify existing gender issues in the transport and communication (roads) sector and assess the conditions of roads in terms of comfortable short and long distances traveling, from a gender perspective.
- (xii) Conduct generalized analysis and desk study based on available gender-related information and gender-sensitive indicators in transport sector (such as access to roads and transport, activity patterns, time use, income-generating effects, migration, etc). Conduct small-scale social survey and consultations with the main stakeholders to identify gender issues in the project area.
- (xiii) The consultant shall assess quantitatively the poverty impact of the Project. Define the project influence area as the basis for the analysis and outline the mechanisms through which the Project helps reduce poverty. Identify relevant indicators and formulate a methodology to monitor the

impact of the Project on poverty in the project influence area, and ensure that such indicators are introduced in the Project's DMF.

3. Reporting

- a. Monitor the record-keeping and instruct the Contractor to keep further contemporary records including any statutory requirements concerning the Contractor's reporting of dangerous occurrences or accidents to government or other public authorities.
- b. Reporting and updating the works implementation schedule, highlighting any foreseen delays, and timely proposing corrective measures. Ensure that prior consultation with Road Fund is required for any adjustment of the works implementation schedule.
- c. Collect baseline data based on the indicators agreed in the project's design and monitoring framework; and measure the indicators over time during the assignment period. Undertake project performance monitoring and evaluation in 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. Design a simple MS Excel or similar system for recording the baseline and periodic data.
- d. Prepare the following reports, in a format and content acceptable to the employer and as per the guidelines in the Facility Administration Manual.
- e. Maintain up to date financial and other records for review, if and when needed, by ADB.

64. If so required by the EA, the Consultant will provide any of the following as additional services: (i) prepare reports, including technical appraisals, additional contract documentation, and/or review and comment on the Contractor's proposals, as may be required for the successful completion of the Project; and (ii) provide any other specialist services as may be required from time to time.

65. The EA will authorize any additional service, other than minor extras that do not materially affect the scope of the supervision work, at the rates established in the construction supervision Contract, or at the rates mutually agreed upon when the services require the use of specialists not listed in the contract.

4. Inputs

66. The services will be carried out by international firms in association with national consultants, to be selected by the EA in accordance with ADB's Guidelines on the Use of Consultants (2007, as amended from time to time). A total of 60 person-months of international consultant inputs and 216 person-months of national consultants will be required.

67. Consulting services are expected to take place about 20 months. The team leader will be a graduate civil engineer with sufficient experience in cement concrete pavement, road construction, and project management. The other experts should also have relevant

qualifications and experience. All experts, international and national, must be proficient in both written and spoken English.

**Proposed Key Staffing
for Supervision and Project Appraisal of Tranches 2 and 3**

Position	No.	Person -Month	Position	No.	Person- Month
Chief Resident Engineer/Team Leader	1	18	Deputy Resident Engineer/Highway Engineer	1	20
Highway Engineer	1	3.5	Design Engineer	1	12
Material Engineer	1	12	Material Engineer	2	34
Cement Concrete Pavement Expert/Drainage Engineer	1	15	Site Inspector (4 persons)	4	68
Contract Specialist	1	8	Environmental Safeguard Specialist	1	10
			Social Safeguard Specialist	1	9
<i>For Project Appraisal:</i>			Quantity Surveyor (2 persons)	2	34
Transport Economist	1	q.5	Cement Concrete Specialist	1	12
Environmental Specialist	1	1	Drainage/Culvert Engineer	1	8
Social Development/ Resettlement Specialist	1	1	Gender Development Specialist	1	9
International Consultants	8	60	National Consultants	15	216

All input shall be in field.

68. Qualification descriptions of each expert are as follows:

- (i) **Chief Resident Engineer/Team Leader [International, 18 Person-months]:** He/she shall be leading the team and be responsible for the overall tasks. He/she shall hold a bachelor degree in civil engineering and preferably a master degree holder in road engineering. He/she will coordinate and supervise the road construction works in the field. The chief resident engineer, with minimum 15 years experience in major road construction, will (i) maintain records and advise the EA with the day-to-day coordination and supervision of Project 1 and its components, including the preparation of regular progress reports, (ii) coordinate and review updated designs and cost estimates prepared by the design consultants, (iii) coordinate and supervise the work of field teams in supervising and certifying construction in accordance with contract conditions. He/she shall be familiar with various international standards for design and construction (FIDIC) including stage of works and method of construction such as temporary works, construction plans, schedules, construction method, assignments of equipment and personnel, testing and trials, and drawings.
- (ii) **Highway Engineer [International, 3.5 Person-months]:** The highway engineer should have a bachelor degree in civil engineering with preferably 12 years experience in highway design, drainage, and supervision especially in cement concrete design and construction for roads. He/she will review the concrete and asphalt concrete pavement design, advise the CRE on the material quality and specifications, concrete mixing methodology, concrete additives, drainage design and construction additives, safety protection, laboratory and -field material tests for quality control, field equipment, and cement concrete asphalt concrete placing and calibration of equipment. He/she will also advise the field teams in

the using of cement concrete and certifying construction in accordance with contract conditions. He/she will also (i) maintain records and assist the EA with the day-to-day coordination and supervision of Project 1, (ii) coordinate and review updated designs and cost estimates prepared by the design consultants, and (iii) coordinate and supervise the work of field teams in supervising and certifying construction in accordance with contract conditions.

- (iii) **Material Engineer [International, 12 Person-months]:** The material engineer shall have a bachelor degree in civil engineering with minimum 12 years experience in major road construction works especially in material testing, will (i) advise the CRE on the contractors' compliance to material specifications and testing, (ii) provide input to the design team, and (iii) coordinate and supervise the work of field teams in supervising and certifying construction in accordance with contract conditions including acceptance standards of materials, approval of source supply, and material testing methods.
- (iv) **Cement Concrete Pavement Expert/Drainage Engineer [International, 15 Person-months]:** The Cement Concrete Pavement Expert/Drainage Engineer should have minimum 12 years experience in pavement design, drainage, and supervision, especially in cement concrete design and construction for roads. He/she will review the concrete pavement design, advise the CRE on the material quality and specifications, concrete mixing methodology, concrete additives, safety protection, laboratory and-field material tests for quality control, field equipment, and cement concrete placing and calibration of equipment. He/she will advise the field teams in the using of cement concrete and certifying construction in accordance with contract conditions. He/she will also (i) maintain records and assist the EA with the day-to-day coordination and supervision of Project 1, (ii) coordinate and review updated designs and cost estimates prepared by the design consultants, and (iii) coordinate and supervise the work of field teams in supervising and certifying construction in accordance with contract conditions.
- (v) **Contract Specialist [International, 8 Person-months]:** Contract Specialist, an economist/lawyer with minimum 15 years experience in road works contract administration including FIDIC contract administration will (i) evaluate and settle variations and standard format of claims and (ii) asses contract amendments and updated particular conditions of contract.
- (vi) **Transport Economist (International, 1.5 person-months)** with a graduate degree and preferably a master degree holder in Transport Economist and at least 12 year of relevant experience, will undertake an economic evaluation of the Investment Program by following related updated ADB guidelines, estimate economic internal rate of return, estimate benefits of all tranches, undertake sensitivity analysis, and carry out quantitative risk analysis in accordance with ADB's *Handbook for Integrating Risk Analysis in the Economic Analysis of Projects*, and develop a set of related performance indicators that can be verified and monitored.
- (vii) **Environment Specialists (International – 1 person-months)** with a graduate degree and preferably a master degree holder in environment/engineering and at least 12 year of relevant experience, will analyze impacts and risks assessment.

Following the initial environmental examination and depending on significance of the Project impacts and risks to be confirmed during the PPTA, the assessment may comprise a full scale environmental impact assessment.

- (viii) **Social Development/Resettlement Specialists** (International – 1 person-months), with a minimum bachelor degree and preferably a master degree holder in sociology/economics and at least 12 years of experience in social safeguards, will review and update the previously prepared RF, EMPF, conduct due diligence for any future and/or past LAR impacts, activities or other LAR related pending issues in project areas and as required prepare RP(s), LAR correction action plan, and/or IPP/EMP to comply with ADB's Safeguard Policy Statement (SPS), 2009, and conduct social survey for poverty analysis.
- (ix) **Deputy Resident Engineer/Highway Engineer [National, 20 Person-months]:** He/she will assist CRE on coordination and supervision the road construction works in the field including coordination and liaison with Employer. The Assistant Resident Engineer shall have a bachelor degree in civil engineering with minimum 12 years experience in road construction. He/she will assist CRE in day-to-day construction supervision, monitoring schedule, preparing monthly certificates, reviewing and approving shop drawings and as-built-drawings.
- (x) **Design Engineer [National, 12 Person-months]:** He/she will assist CRE in ensuring that the design complies with technical and safety standards. The road design engineer shall have a bachelor degree in civil engineering with minimum 10 years experience in road design and construction. He/she will update designs and cost estimates prepared by the design consultants.
- (xi) **Material Eng (2 persons) [National, 34 Person-months]:** The material engineer shall have a bachelor degree in civil engineering with minimum 8 years experience in major road construction works especially in material testing. Under the guidance of the international material engineer, he/she will undertake day-to-day supervision of compliance to material specifications and testing, supervise the contractors work, and certify the construction in accordance with contract conditions including acceptance standards of materials, approval of source supply, and material testing methods.
- (xii) **Site Inspector (4 persons) [National, 68 Person-months]:** The site inspectors shall have bachelor degree in civil engineering with minimum 8 years experience in major road construction works especially in workmanship and construction method. Under the guidance of the international highway engineer, they will undertake day-to-day supervision for roads and small structures, monitor contractors' work and certify the construction in accordance with contract conditions.
- (xiii) **Environmental Safeguard Specialist [National, 10 Person-months]:** The safeguard specialist shall have a bachelor degree in environment sciences preferably with minimum 8 years experience in civil works. He/she will (i) review all documents and reports regarding the integration of environmental including contractor's environmental action plan, (ii) supervise the contractors' compliance to EMP, and (iii) prepare compliance reports.

- (xiv) **Social Safeguard Specialist [National, 9 Person-months]:** The social safeguard specialist, a social related university graduate, with 8 years experience in supervising civil works contracts, will assess the contractors' compliance to contract provisions specifically on social safeguards. He/she will check the implementation of land acquisition and resettlement (if relevant), compliance to contractors' obligation in addressing communicable diseases/sexually transmitted infections (STI), compliance to core labor standards.
- (xv) **Quantity Surveyor (2 persons) [National, 34 Person-months]:** The quantity surveyor, a civil engineer with minimum 10 years experience in supervision of major road projects, will assist Highway Engineer in daily supervision, check the quantity, variations, justification and verify the monthly certificates.
- (xvi) **Cement Concrete Specialist [National, 12 Person-months]:** The cement concrete specialist, a civil engineer with minimum 8 years experience in cement concrete pavement design and technology will assist the international highway engineer in undertaking day-to-day supervision of the cement concrete pavement construction.
- (xvii) **Drainage/Culvert Engineer [National, 8 Person-months]:** The Drainage/Culvert Engineer shall have bachelor degree in civil engineering with minimum 8 years experience in major road construction works especially in workmanship and construction method. Under the guidance of the international highway engineer, they will undertake day-to-day supervision for roads and culvert structures, monitor contractors' work and certify the construction in accordance with contract conditions.
- (xviii) **Gender Development Specialist [National, 9 Person-months]:** The consultant will have a university degree in social sciences with additional training in gender and development, and experience in gender mainstreaming of development projects. He/she will have excellent Russian and Uzbek language skills (oral and written). English language skills are an advantage but not a requirement. The consultant will (a) develop a work plan for the timely implementation of the Gender Action Plan (in line with project implementation); (b) coordinate parallel construction of road side development¹³ of local Khokimiyat with Highway construction; (c) initiate restoration and maintenance of basic sanitary facilities for men and women and develop a commercial scheme to run the maintenance by women of road side communities. Work closely with women of National Women's Committee at Makhalla level on this; (d) work with PMU and communities (National Women Committee members of Makhalla's on road safety (establishment of safety signs, lightening and road crossing point for communities); (e) conduct outreach/ information dissemination activities on training opportunities; (f) assist National Women's Committee to implement capacity development pilot project (training and skills building of local women entrepreneurs); (g) conduct outreach/information dissemination activities about the project among women committees of Makhalla; (h) conduct of gender awareness training for the Road Fund and for the project affected staff of the Khokimiyats; (i) conduct training on traffic safety and HIV/AIDS prevention for

¹³ Cabinet of Ministries Degree for Measure on Development of Road Site Infrastructure and Services of Uzbek National Highway No. 277, 22, Oct 2009.

communities along tranche 1 of the investment program; (j) inform National Women's Committee on implementation status of GAP; (k) contribute social and gender related inputs to PMU's progress reports; (l) facilitate the collection and monitoring of sex-disaggregated indicators related to road investments; (m) report GAP implementation issues to ADB's national gender specialist at URM and report every 3 months on implementation status; and (n) attend roundtables of all gender specialist recruited under ADB investments in UZB (roundtable held by URM gender specialist).

5. Other Requirements

a. Deliverables

69. The Consultant will prepare reports including monthly reports on the project progress in a format and level of detail agreed with the EA and ADB. The Consultant will 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. The Consultant will assist PMU in preparing quarterly progress reports, safeguard compliance reports, a project completion report, and monitoring and evaluation reports as required under the Financing Framework Agreement and Loan Agreement for Project 1.

b. Reports

70. The Consultant will submit the reports in hardcopy and softcopy as follows:

Type of Reports	Format	Recipient		Submission Date
		Road Fund (English & Russian)	ADB (English)	
Inception Report		3+4	3	Within 2 (two) month after commencement
Monthly Progress Report	<i>ADB's</i>	3+4	3	10 th of each following month
Quarterly Progress Report	<i>Standard</i>	3+4	3	14 th of each following quarter
Project Completion Report	<i>Formats</i>	3+4	3	Maximum one month after Contract completed

71. Minimum contents of the reports:

- (i) Inception Report: initial findings and the work program for the balance of the assignment.
- (ii) Monthly Progress Report: brief details of the works carried out during the previous month, the problems encountered or anticipated, together with the steps taken or recommendations for their correction, and financial and physical progress to date.
- (iii) Quarterly Report: detailed description of the achieved progress of works, difficulties and delays encountered or anticipated, and remedial actions taken or suggested, the overall progress of the Project as monitored against the PPMS indicators.
- (iv) Project Completion Report: detailed description of all the works by items of technical and non-technical matters, financial and disbursement data, analyses, difficulties and delays encountered or anticipated, and remedial actions taken or

suggested, the overall progress of the Project as monitored against the PPMS indicators, including recommendations to EA and ADB.

72. For Due Diligence, Consultant will submit the reports in hardcopy and softcopy as follows:

Type of Reports	Format and Contents	Recipient		Submission Date
		Road Fund (English & Russian)	ADB (English)	
Inception Report	<i>Acceptable by Client & ADB</i>	3+4	3	Within 4 weeks after commencement
Interim Report		3+4	3	8 weeks after commencement
Draft Final Report		3+4	3	15 weeks after commencement
Final Report		3+4	3	Within one month after submission of Draft Final Report

73. Minimum contents of the reports:

- (i) Inception Report: work plan, early working paper, review and data requirement for due diligent of tranche 3, and methodology and strategy to reach the project objective.
- (ii) Interim Report: detailed description of the achieved progress of works and preliminary findings.
- (iii) Draft Final Report: full due-diligence reports for tranche 3 including economic analysis, EIA, LARP, PSA, environment compliance and FFA compliance reports Detailed description of all the works by items of technical and non-technical matters, implementation schedule for tranche 3 and other related documents.
- (iv) Final Report: improvement of the draft final report incorporating the EA and ADB comments.

c. Facilities provided by the Client

74. The Client will provide:

- (i) Visa supporting letters and registrations in Uzbekistan Immigration Office;
- (ii) Relevant project data and reports.

b. ROAD SAFETY CONSULTANT

1. Background

75. Responsibilities for road safety are defined in the Law On Road Safety No.818-I of 19 August 1999. They are split between agencies: UARRT (Uzbek Agency for Road and River Transport) and SJC Uzavtoyul have joint responsibility for enhancing road safety, the former through its vehicle certification and regulatory activities and the latter through its road design policies. The Ministry of Internal Affairs is responsible through GAI (State Traffic Police) for the development of safety standards, rules and regulations and for their observance, for vehicle inspection, and the recording of road accidents and offences.

76. The main responsibilities of SJC Uzavtoyul are: installation and maintenance of road signs and signals, road rehabilitation and maintenance, activity planning and safety audit of road

design; coordination of road safety issues in connection with road construction and law enforcement by the road police; participation in the planning of road network development, collection of traffic volume data and road accident follow up/analyzing; quality control of road maintenance, rehabilitation and construction activities; development of design standards for junctions in cooperation with municipal authorities; annual activity plans are based on the recorded road surface conditions and completed road design.

77. The major problems, which the Uzavtoyul is facing, are related to:

- (i) institutional transition
- (ii) insufficient training and lack of specialists
- (iii) lack of know-how and means for addressing road safety issues in connection with design
- (iv) lack of up-to-date winter road maintenance and pavement rehabilitation/patching equipment
- (v) lack of communication equipment
- (vi) poor availability of road signs
- (vii) road safety and emergency response in the case of fuels or hazardous chemical spills

78. The responsibilities of the GAI (State Traffic Police) are: road safety enforcement in general covering all ministries, administrations, enterprises, cooperatives and private companies; enforcement of road safety regulations in connection with road-, street-, junction- or any other construction work; control of installation and utilization of road side furniture and equipment used for traffic regulation; control of vehicle utilization, design and manufacturing; control of road surface condition and condition of road side furniture in relation to road safety; traffic regulation; vehicle registration; driver training, testing and licensing; road accident registration and analyzing of data; road safety promotion through mass media; development and control of road sign manufacturing; traffic surveillance and law enforcement.

79. The main problems encountered by the Road Police are

- (i) poor availability of equipment needed for law enforcement on the road
- (ii) lack of facilities and equipment for performing case diagnosis (stationary/mobile)
- (iii) poor availability of other up-to-date technical equipment and materials needed for road safety purpose
- (iv) lack of rescue equipment in case of accidents
- (v) insufficient training of staff

2. Study Scope

80. Scope of this consulting study will include three components:

- (i) Development of a comprehensive national road safety strategy that will address all above mentioned problems with a comprehensive system of road infrastructure safety management, plus a long-term national strategy to curve down fatalities linked to the road infrastructure pillar.
- (ii) Development of safety impact assessment tool and manuals to be applied in design of road construction and reconstruction in designing and planning roads financed by Road Fund under Ministry of Finance of the Republic of Uzbekistan.

- (iii) Development phased safety program on all sections of investment program II starting A-373 Kamchik Pass section as top priority.

3. Inputs

81. In the component for developing ***comprehensive road safety strategy***, the consultants will carry out all necessary reviews and analyses, that should at least comprise:

- (i) a ranking of high-accident-concentration sections and a network safety ranking;
- (ii) the elaboration of national guidelines for the integration of road infrastructure safety into road planning, design, construction and operation;
- (iii) the design of training courses and their corresponding certificates for the benefit of road safety auditors;
- (iv) legal and institutional recommendations for the implementation of the above;
- (v) a detailed schedule of investment programs and budgets

82. In the component for developing safety impact assessment tool and manual, the consultants will carry out all necessary reviews and analyses, including the following to create ultimate manual:

a. Elements of a road safety impact assessment:

- (i) problem definition;
- (ii) current situation and "do nothing" scenario;
- (iii) road safety objectives;
- (iv) analysis of impacts on road safety of the proposed alternatives;
- (v) comparison of the alternatives, including cost-benefit analysis;
- (vi) presentation of the range of possible solutions; and
- (vii) emergency response and hazardous chemical clean-up capacities.

b. Elements to be taken into account:

- (i) fatalities and accidents, reduction targets against "do nothing" scenario;
- (ii) route choice and traffic patterns;
- (iii) possible effects on the existing networks (e.g. exits, intersections, level crossings);
- (iv) road users, including vulnerable users (e.g. pedestrians, cyclists, motorcyclists);
- (v) traffic (e.g. traffic volume, traffic categorization by type);
- (vi) seasonal and climatic conditions;
- (vii) presence of a sufficient number of safe parking areas;
- (viii) seismic activity.

83. In the component *developing phased safety program on investment program section and particularly on A373 Kamchik Pass section* Consultants shall define a program to improve traffic safety on *A373 Kamchik Pass* through signing, road markings and installation of appropriate traffic safety features to solve following safety issues on the Kamchik pass section of the A373:

- (i) brake failure on the long, steep descents is extremely dangerous. Although turnouts are provided at intervals, these need to be better signposting (with distance to next turnout indicated every 500m) and possibly need to be

- supplemented;
- (ii) excessive speeds by light vehicles on descent should be controlled (by speed cameras etc.);
 - (iii) avalanche and rock fall hazards should be further mitigated;
 - (iv) snow clearing and de-icing equipment should be continuously upgraded;
 - (v) sharp curves should be indicated and at some stage over-road gantries should be placed every 1-2km on the descents, camera equipped, indicating maximum speeds for each lane in the prevailing conditions, monitored by a control centre. All accidents should be logged by location, cause and severity to assist in designing preventive measures. Although accidents are unavoidable on the mountainous section, it needs to be made sufficiently safe for specially maintained buses to operate, at least for most of the year.

84. Estimate the costs of the proposed traffic safety program and suggest include the budget of subsequent Tranche of MFF:

4. Study Coordination

85. The consultants will be report to the Program Management Unit established by Road Fund. They will regularly coordinate their work with Road Design Institutes, GAI, Uzavtoyul, UAART, municipal agencies (especially Kamchik area) and other government or private organizations concerned with traffic safety. In this, the consultants should aim to (i) obtain all relevant information on the current traffic safety environment, and (ii) achieve agreement on the recommended safety action program with key decision-makers.

5. Staffing

86. The services will be carried out by international firms in association with national consultants, to be selected by the EA in accordance with ADB's Guidelines on the Use of Consultants (2007, as amended from time to time). A total of 40 person-months of international consultant inputs and 58 person-months of national consultants will be required.

87. Consulting services are expected to take place about 10 months. Members of the Consultancy team, is expected to provide inputs towards establishing road impact assessment tool and manual, training counterpart staff and in monitoring/fine tuning of the application of the Road Safety Impact Assessment manual to ensure that development objectives are met. The study will also take EA and involved road safety staff to other countries for exchange of experience

Proposed Key Staffing

Position	No.	Person-Month	Position	No.	Person-Month
Road Safety Management Specialist/Team Leader	1	8	Road Safety Management Specialist/Deputy Team Leader	2	20
Traffic Engineer	1	3	Traffic Engineer	2	8
Institutional Development Expert	1	6	Institutional Development Expert	2	10
IT specialist	1	6	IT specialist	1	10
Legal Expert	1	2	Legal Expert	1	4
Communication Specialist	1	3	Communication Specialists	1	9
Road Design Specialist	1	3	Road Design Specialist	1	4
International Consultants	7	31	National Consultants	10	65

6. Reports and Time Schedule

88. The consultant shall prepare an Inception, an Interim and a Final Reports, in addition to working papers to be listed in the Inception Report. The submission of the key reports would be as follows:

- (i) Inception Report: within 4 weeks of commencement of the study, the consultants should submit a report outlining the preliminary findings, proposed methodology and schedule for the remainder of the assignment. Formal government comments are to be provided to the consultants within 4 weeks from receipt of the report.
- (ii) Interim Report: within 13 weeks from the commencement of the study, the consultants should submit a report outlining the proposed table of content of the road safety impact assessment manual and its application program. Formal government comments are to be provided to the consultants within 6 weeks from receipt of the report.
- (iii) Draft Final Report: within 28 weeks from the commencement of the study, the consultants should submit their draft final report, documenting the findings of the entire study. It would include draft road safety impact assessment, taking account of the comments received from key decision makers on the content (TOC) of manual. Formal government comments are to be provided to the consultants within 6 weeks from receipt of the report.
- (iv) Final Report: within 4 weeks after receiving government comments on the Draft Final Report. Comments on the Draft Final Report will be submitted within 3 weeks. Along with the Final Report will be proposed terms of reference for technical assistance required to further implement the recommendations of the study.

c. FINANCIAL AUDITOR

89. This terms of reference is prepared in accordance with provisions of the Loan Agreement 2772-UZB between Republic of Uzbekistan and Asian Development Bank (ADB) dated 1 December 2011.

90. In the purpose of developing and improving highway networks by the Decree №1773 dated 12 June 2012 of the President of the Republic of Uzbekistan the attraction of ADB loan was approved for implementation of the Second CAREC Corridor 2 Road Investment Program as summarized below.

Loan 2772-UZB

Second CAREC Corridor 2 Road Investment Program – Project 1

Loan amount of USD 130 million for the period of 24 years including 4 years' grace period.

The Investment Program is to:

- Reconstruct and improve of about 58 km of the A373 highway (between Km 116 and Km 190). The investment will upgrade the existing four-lane section with an international design within the existing right-of-way. The cost includes civil works and specialized consulting services, including experts to help with construction supervision and due diligence for subsequent tranches.
 - improvement of road safety management through (i) development of a national road infrastructure safety strategy and road safety checklist, guidelines, and measures; (ii) development of a road safety action plan for all the road sections under the Investment Program and Investment Program
-

I and II; (iii) provision and installation of solar road signs for A373 Kamchik Pass section; and (iv) development and implementation of road safety capacity development program, and of public awareness programs.

- Support the Road Fund under the Ministry of Finance to further improve road sector sustainability in Uzbekistan.

Project implementation under Project 1 (Tranche 1) is as follows

- (i) Civil works comprising reconstruction of the A373 highway (between Km 116 and Km 190).
- (ii) Advisory services support for (a) Procurement and safeguard support. (b) Construction supervision, and (c) Road Safety.

91. According to the above mentioned decree:

- Republican Road Fund at the Ministry of Finance of Uzbekistan is determined as the Executing Agency of Second CAREC Corridor 2 Road Investment Program which is responsible for purpose of effective using of the loan funds and implementation of the project.
- Project Management Unit, incorporated at the Road Fund is determined as functioning body for this project.
- Inter Ministerial Tender Committee and Working Level Tender Committee are the monitoring committee for the project implementation.

92. The auditor must understand the “purpose for which the funds are intended” in the context of the broad project objectives as well as in terms of the specific project budget.

93. **Employment Authority.** The audit services will be contracted by the Program Management Unit (PMU) of the Second CAREC Corridor 2 Road Investment Program.

29, Istiklol Street, Tashkent, Uzbekistan
 Attn: Deputy Director of PMU
 Telephone: +998 71 239 1036 / 239 1976
 Facsimile: +998 71 239 1036
 E-mail: mff-pmu-uz@bk.ru

94. **Delivery of Opinions and Reports.** The auditor will use the “Model Auditor Opinion for a Non-Revenue Earning Project (Appendix 10, Handbook for Borrowers on the Financial Management and Analysis of Projects available at <http://www.adb.org/documents/handbook-borrowers-financial-management-and-analysis-projects>) and provide the following opinions and reports to management (with copies to ADB), in accordance with the following timeframes:

Reports	L2772-UZB for fiscal year 2012	L2772-UZB for fiscal year 2013
Draft Final Report (Audit Opinion on the Annual Project Financial Statements with Management Letter)	Not later than 3 weeks after issued “Notice of Contract Effectiveness”	not later than 1 June 2014
Final Report (Audit Opinion on the Annual Project Financial Statements with Management Letter)	Not later than 1 month after issued “Notice of Contract Effectiveness”	not later than 10 June 2014

95. All reports must be provided in three copies in the English and Russian languages.

96. **Objective.** The objective of the Audited Project Financial Statements (APFS) audit (see terms and definitions) is to enable the auditor to express an opinion on the financial position of

the project implementation (see terms and definitions), for the fiscal years ending 31 December 2012, and 31 December 2013 on the funds received and expenditures made within audit year.

97. Separate opinions on the eligibility of claims made in Statements of Expenditure (SOE) and on the Imprest Account Statement are also required.

98. **Description of Materials and Timing of Delivery.** The annual project accounts and supporting documentation will be provided to the auditor within 2 days after issued "Notice of Contract Effectiveness" for 2012 accounts; and 31 March 2014 for the 2013 accounts.

99. **Audit Scope.** The auditor's examination should include an evaluation of the systems and operating procedures for accounting, custody of assets, control of environment and internal financial control, financial reporting, and related systems. An analysis of explanations submitted to the auditor and all information necessary to support the auditor's opinion and to construct the report of the auditor, will be provided by the PMU, Road Fund, Ministry of Finance.

100. The auditor should obtain an understanding of the project and the PMU, RF MF, including the contents of the Report and Recommendation of the President to the Board of Directors (ADB) (RRP), legal agreements and the ADB's guidelines, i.e. Financial Management and Analysis of Project, 2005, Loan Disbursement Handbook, Procurement Handbook, etc.

101. **Auditing Standards and Program.** The audit will be carried out in accordance with the agreed international auditing standards as specified in the Loan Agreement, including professional or general standards, standards of fieldwork, and reporting standards.

102. The audit program will consider the risk of material misstatements resulting from fraud or error. It should include procedures that are designed to provide reasonable assurance that material misstatements (if any) are detected.

103. **Accounting Policies and Changes.** The auditor should comment on the project's accounting policies, and confirm the extent to which the agreed project accounting policies have been applied. In particular, the auditor should note the impact on the APFS arising from any material deviations from the agreed accounting standards. The auditor should also comment on any accounting policy changes, either during a financial year, or from one year to another.

104. **Imprest Account (or Special Account).** The Imprest Account reflects: (i) deposits and replenishment received from financiers, (ii) payments substantiated by withdrawal applications, and (iii) the remaining balance at financial year-end. The auditor will examine whether the Imprest Account has been maintained in accordance with the provisions of the relevant financing agreements.

105. The auditor must form an opinion on whether the Imprest Account was used in compliance with required procedures (e.g., those of ADB), and the fairness of the presentation of Imprest Account activity and the year-end balance. The auditor should examine the eligibility and correctness of financial transactions during the period under review, account balances at the end of the period, the operation and use of the Imprest Account in accordance with the financing agreement, and the adequacy of internal controls for this particular disbursement mechanism.

106. **Statements of Expenditures (SOE).** The auditor will audit all SOEs used as the basis for the submission of loan withdrawal applications to ADB. These expenditures should be

compared for project eligibility with the relevant financing agreements (and with reference to the RRP and other project documents for guidance when considered necessary). Where ineligible expenditures are identified as having been included in withdrawal applications and reimbursed against, these should be separately noted by the auditor. The annual audit report should include a separate paragraph commenting on the accuracy and propriety of expenditures withdrawn under SOE procedures, and the extent to which ADB can rely on those SOEs as a basis for loan disbursement. Annexed to the APFS should be a schedule listing individual SOE withdrawal applications by specific reference number and amount.

107. **Compliance with Financial Covenants.** The auditor will confirm compliance with each financial covenant contained in the project legal documents. Where present, the auditor should indicate the extent of any noncompliance by comparing required and actual performance measurements for each financial covenant with the financial year concerned.

108. **Compliance with Financial Assurances.** The auditor will confirm compliance with all financial assurances contained in the project legal documents (see terms and definitions). Where present, the auditor should indicate the extent of any non-compliance by comparing required and actual performance of the Recipient in respect of these ADB requirements for the financial year concerned.

109. **Use of Funds for the Purpose Intended.** The auditor will confirm, or otherwise, that:

- All external funds have been used in accordance with the relevant financing agreements covering each project, with due attention to economy and efficiency, and only for the purpose for which the financing was provided.
- Counterpart funds, i.e. Government and/or co-financiers have been provided and used in accordance with the relevant financing arrangements and only for the purpose for which the financing was provided and
- Goods and services financed have been procured in accordance with the relevant financing agreements.

110. **Record Keeping.** The auditor will pay particular attention to whether all necessary supporting documents, records, and accounts have been kept in respect of all project activities, with clear linkages between the accounting records and the APFS. This will include: (i) computation and recalculation, including checking the mathematical accuracy of estimates, accounts, or records; (ii) reconciliation, including reconciling related accounts to each other, subsidiary records to primary records and internal records to external documents; and (iii) tracing, including tracing journal postings, subsidiary ledger balances, and other details to corresponding general ledger accounts or trial balances.

111. **Internal Control Systems.** The auditor will assess the adequacy of the project financial management systems, including internal controls, including whether: (i) proper authorizations are obtained and documented before transactions are entered into; (ii) accuracy and consistency are achieved in recording, classifying, summarizing, and reporting transactions.

112. **Management Letters.** On conclusion of the audit, the auditor will prepare a management letter for the audited project, detailing:

- Any material weaknesses in the accounting and internal control systems that were identified during the audit, including those regarding SOEs and Imprest Accounts;

- Recommendations to rectify identified weaknesses;
- Status of significant matters raised in previous management letters;
- Practical recommendations on the steps that could be taken to become materially compliant with the agreed project accounting policies, together with a time frame for making these changes;
- The degree of compliance with each of the financial covenants in the Loan Agreement and recommendations for improvement;
- Matters that have come to the auditor's attention during the course of the audit which have a significant impact on project implementation;
- Any other matters that the auditor considers should be brought to the attention of the project's management; and
- Significant matters that the auditor considers should be brought to ADB's attention.

113. **Statement of Access.** The auditor will have full and complete access, at all reasonable times, to all records and documents including books of account, legal agreements, bank records, invoices, and any other information associated with the project and deemed necessary by the auditor.

114. The auditor will be provided with full cooperation by all employees of RF MF and the PIU, whose activities involve, or may be reflected in, the annual financial statements. The auditor will be assured rights of access to banks and depositories, consultants, contractors, and other persons or firms hired by the employer.

115. **Independence.** The auditor will be impartial and independent from any aspects of management or financial interest in the entity under audit. In particular, the auditor should be independent of the control of the entity. The auditor should not, during the period covered by the audit, be employed by, or serve as director for, or have any financial or close business relationship with the entity. The auditor should not have any close personal relationships with any senior participant in the management of the entity. The auditor must disclose any issues or relationships that might compromise their independence.

116. **Auditor and Audit Staff Competence.** The auditor must be authorized to practice in the country and be capable of applying the agreed auditing standards. The auditor should have adequate staff, with appropriate professional qualifications and suitable experience, including experience in auditing the accounts of entities comparable in nature, size, and complexity with the entity whose audit they are to undertake.

117. To this end, the auditor is required to provide curriculum vitae (CV) of the auditors who will provide the opinions and reports, together with the CVs of managers, supervisors, and key personnel likely to be involved in the audit work. These CVs should include details of audits carried out by these staff, including ongoing assignments.

118. **Submission of Proposal and Work Plan.** You are invited to submit a proposal and a work plan to provide the audit services described in this letter. Proposals should address, among other things:

- The extent (if any) that you would not conform to the agreed auditing standards and indicate any alternative standards to which you may (be required to) conform.

- Whether the audit would be conducted as a completed audit (i.e., will the auditors carry out their audit after financial year-end, when the books of account are, or are being, closed).
- Whether an audit carried out after financial year-end would be supplemented by one or more interim audits during a financial year. The principal purpose is to test ongoing systems and internal controls, and to relieve pressure on the staff of the entity and on the auditor at year-end.
- The manner in which the auditor proposes to address any statutory requirements relating to audit (e.g., certifications relating to shareholders' equity required under the companies' act) or to which they may be implicitly bound by contractual obligations of the employer (e.g., ADB auditing requirements, Statements of Expenditure, Imprest Accounts).
- Procedural requirements for certain verification procedures (e.g., checking of stocks, inventories, assets, etc.).
- Specific actions required on the part of the employer (e.g., access to computer systems and records, disclosures).
- Discussions before signing the opinion and report on any matters arising from the audit, and with whom these discussions would be held.
- The timetable for provision of opinions and reports.

119. **Terms and Definitions.** This section defines the terms used in these documents:

- Government: Government of the Republic of Uzbekistan;
- Management: Republican Road Fund under the Ministry of Finance, Republic of Uzbekistan;
- RRF MF: Republican Road Fund under the Ministry of Finance of the Republic of Uzbekistan;
- PMU: Project Management Unit;
- Project: ADB Loan 2772-UZB: Second CAREC Corridor 2 Road Investment Program – Project 1

120. **Audited Project Financial Statements (APFS).** The APFS comprise:

- Statement of Accounting Policies,
- Audit Opinion,
- Statement of Financial Performance,
- Statement of Financial Position (or balance sheet),
- Statement of Cash Flows,
- Notes to the Financial Statements and
- Other information including,
 - Statement of PMU
 - Statement of loan withdrawals
 - Statement of project resources
 - Statement of the implementation of investment per construction and construction work item
 - Compliance with the covenants contained in Loan Agreement
 - Report on Project's implementation progress
 - Report on Project's disbursement progress

TOTAL ACTUAL WITHDRAWN AMOUNTS FOR THE YEAR ENDED - ADB Loan 2772-UZB

Category	Loan	GOU	Total
Works			
Equipment			
Consulting Services – Construction Supervision and Road Safety Impact Assessment			
Recurrent Costs			
Interest and Commitment Charge			
Total			

121. The actual withdrawn amounts for year 2012 will be submitted to Auditor within 3-5 days after issued “Notice of Contract Effectiveness”. The actual withdrawn amounts for year 2013 will be submitted to Auditor on March 2014.

122. **Agreed Project Accounting Policies.** “Agreed project accounting policies” with regards to preparation of Annual Project Financial Statements, means the cash-based International Public Sector Accounting Standard (IPSAS) promulgated by the International Federation of Accountants (IFAC).

123. **Agreed Auditing Standards.** “Agreed auditing standards” means the International Standards on Auditing (ISA) promulgated by the International Auditing and Assurance Standards Board (IAASB).

E. Consultants’ Terms of Reference – Project 2

a. CONSTRUCTION SUPERVISION CONSULTANT

1. Background

124. The civil works under Project 2 will be carried out as one contract. The reconstruction includes clearing, sub base, base, asphalt concrete pavement, bridges, drainage, reinstallation of utilities, shoulder, guardrails, road marking and signage.

Contract	Km Length	Type of Pavement	Number of Lanes	Bridges	Flyover	Treatment
Civil works Reconstruction of A373/4P112 Pungan - Namangan Highway	75	Asphalt Concrete	4	16	3	Full work

125. Civil works will be carried out based on the International Federation of Consulting Engineers (FIDIC) contract MDB (Version 2010). A consultant team (the Consultant) will be engaged under Contract Construction Supervision to act as the Engineer. The Consultant will administer the construction contracts and ensure that the contractual clauses for both quality and specifications of work are complied with, and the works are constructed in accordance with the provisions of the construction contracts, The Engineer’s representative will be a full-time professional resident engineer for the contract package, in accordance with the provisions of the construction contracts.

126. The Consultant, while supervising construction works, will make all necessary arrangements for implementation of quality assurance and quality control plans following industry standards and best practices. The Consultant in consultation with the Road Fund will

make all engineering decisions required for the successful and timely completion of the construction contracts, and will have all the powers defined as those of the Engineer.

127. The Consultant will carry out a critical review of the detailed design prior to the commencement of works. This review will be carried out immediately after the services commence and will be completed within 4 weeks. Upon completion of the review, the Consultant will prepare a report, setting out all findings and recommendations for correcting any major defects, omissions, or any changes that may have been taken place.

128. The Consultant shall use a project scheduling software for administration of the construction contracts.

2. Scope of Services

129. The Consultant will be responsible for the construction supervision of the civil works Project 2 with the following scope of works:

- a. **Review design.** Review the geometry, pavement, bridge, and other structural designs, drawings specifications, construction method etc, prepared by the employer. Recommend to revise or update the design for achieving greater economy, safety, reliability, and/or durability.
- b. **Supervision and project administration actions**
 - (i) Supervise the contractor's work and certify the contractor's work in accordance with contract conditions. Ensure that the construction methods proposed by the contractor for carrying out the works are satisfactory.
 - (ii) Develop quality assurance system and quality control plan, especially concentrating on provisions of asphalt concrete pavement.
 - (iii) Inspect contractor's construction equipment, results of material and soil tests, safety of the works, property and personnel. Inspect and test all materials and works to ensure compliance with specifications and giving immediate notice to the contractor to remedy in the event that such materials and works fail to comply with the specifications.
 - (iv) Recommend the EA of the rates for any unscheduled items of work that may arise.
 - (v) Certify work volume and process interim and final payments of the contractors.
 - (vi) Establish efficient procedures for verifying the contractor's performance and reporting progress and problems in a timely manner, including quality control reports, quantity survey records, requests for variation or change orders, requests for time extension, and contractor's claims and invoices.
 - (vii) Ensure project financial management procedures are in place and are strictly followed, specifically relating to payments, financial accounting, financial reporting and record keeping.
 - (viii) Check "as built" drawing prepared by the contractor. Keep and record a complete set of as built drawings in paper and electronic formats for archiving in the Employers repository.
 - (ix) Ensure that road safety design requirements are implemented in accordance with the contract documents and specifications.

- (x) Assist the EA for provisional and final hand over by the contractor. Prepare a project completion report.
- (xi) Evaluate contractor financial capacity during project implementation and develop a set of related performance indicators, review payment policy under the contractor contract, and provide training on financial evaluation methodology to the Program Management Unit (PMU).

c. Safeguard compliance monitoring

- (i) Monitor contractor's conformity with environmental and social impact controls.
- (ii) If the project involved land acquisition and resettlement, prepare land acquisition and resettlement plan (LARP) and supervise the implementation of LARP.
- (iii) If the project design is changed, prepare update LARP, environmental impact assessment report and its EMP.
- (iv) In case contractor needs temporary land, ensure that the contractor will carry out temporary acquisition in accordance to the LARF.
- (v) Monitor contractor's conformity with traffic control and road safety action plan during construction.
- (vi) Monitor implementation EMP by contractor, and ensure its compliance with EMP by carrying out the following duties related to environmental mitigation: (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 management plan (EMP); and (c) in the event of occurrence of any unexpected environmental impacts, coordinate with the PMU to recommend necessary mitigation measures to the EA and ADB for implementation.
- (vii) Monitor contractor's compliance with and performance of required actions regarding HIV/AIDS, human trafficking, and labor core standards in accordance with the contract documents, such as awareness and education of laborers and workers.
- (viii) If required, collect baseline data to prepare a LARP (Land acquisition and resettlement plan) and the other impacts assessments carried out in accordance with ADB's Safeguard Policy Statement (2009) and relevant laws and regulations in Uzbekistan.
- (ix) Take role as the focal point for grievance mechanism in the PMU, and responsible to discuss and find resolution for any complaint related with social and environmental safeguard to avoid and minimize harm.
- (x) Carry out safeguard monitoring and prepare all require monitoring report related with the implementation of safeguard requirement.

d. Reporting

- (i) Monitor the record-keeping and instruct the contractor to keep further contemporary records including any statutory requirements concerning the contractor's reporting of dangerous occurrences or accidents to government or other public authorities.
- (ii) Reporting and updating the works implementation schedule, highlighting any foreseen delays, and timely proposing corrective measures. Ensure

that prior consultation with Road Fund is required for any adjustment of the works implementation schedule.

- (iii) Collect baseline data based on the indicators agreed in the project's design and monitoring framework; and measure the indicators over time during the assignment period. Undertake project performance monitoring and evaluation in accordance with the project framework and ADB's *Project Performance Management System Handbook (PPMS)*, including the baseline data survey and the following annual survey and reporting up to project completion. Design a simple MS Excel or similar system for recording the baseline and periodic data.
- (iv) Prepare all require monitoring report related with the implementation of safeguard requirement.
- (v) Prepare the following reports, in a format and content acceptable to the employer and as per the guidelines in the Facility Administration Manual.
- (vi) Maintain up to date financial and other records for review, if and when needed, by ADB.

130. If so required by the EA, the Consultant will provide any of the following as additional services: (i) prepare reports, including technical appraisals, additional contract documentation, and/or review and comment on the contractor's proposals, as may be required for the successful completion of the Project; and (ii) provide any other specialist services as may be required from time to time.

131. The EA will authorize any additional service, other than minor extras that do not materially affect the scope of the supervision work, at the rates established in the construction supervision Contract, or at the rates mutually agreed upon when the services require the use of specialists not listed in the contract.

3. Team Composition and Qualification Requirements for the Key Experts

132. The services will be carried out by international firms in association with national consultants, to be selected by the EA in accordance with ADB's Guidelines on the Use of Consultants (2013, as amended from time to time). A total of 84 person-months of international consultant inputs and 310 person-months of national consultants will be required.

133. Consulting services are expected to take place about 30 months (actual duration of service shall be in line with civil works schedule). The team leader will be a graduate civil engineer with sufficient experience in cement concrete pavement, road construction, and project management. The other experts should also have relevant qualifications and experience. All experts, international and national, must be proficient in both written and spoken English.

b. Proposed Key Staffing

International Consultants

Position	No.	Person-month
Chief Resident Engineer/Team Leader	1	28
Material Engineer	1	18
Highway Engineer	1	12
Bridge and Structure Engineer	1	18
Contract Specialist	1	4
Social/Resettlement Specialist	1	3
Financial Specialist	1	1
Total	7	84

National Consultants

Position	No.	Person-month
Deputy Resident Engineer/Highway Engineer	1	30
Design Engineer	1	15
Material Engineer	2	48
Site Inspector	4	96
Environmental Safeguard Specialist	1	12
Social Safeguard Specialist	1	15
Quantity Surveyor	2	48
Structure Engineer	1	15
Bridge Engineer	1	15
Drainage/Culvert Engineer	1	15
Financial Specialist	1	1
Total	16	310

c. Proposed Non-key Staffing

134. Hiring of administrative staff, office supporting and other personnel (bilingual interpreter) is the responsibility of the Consultant. The proposed administrative staff will not be evaluated.

135. The Consultant is requested to propose assignment of experts in accordance with the scope and expected deliverables.

136. The consultants will maintain a central office at a central location in the project area for the duration of the Project. Qualification descriptions of each expert are as follows:

- (i) **Chief Resident Engineer/Team Leader [International, 28 Person-months]:** He/she should be leading the team and be responsible for the overall tasks. He/she should hold a bachelor's degree in civil engineering and preferably a master's degree in road engineering in addition to being a permanent staff of the consulting firm. He/she will coordinate and supervise the road construction works in the field. The chief resident engineer, with preferably 15 year experience in major road construction, will (i) maintain records and advise the EA with the day-to-day coordination and supervision of Project 2 and its components, including the preparation of regular progress reports, (ii) coordinate and review updated designs and cost estimates prepared by the design consultants, (iii) coordinate and supervise the work of field teams in supervising and certifying construction in accordance with contract conditions. He/she should be familiar with various international standards for design and construction (FIDIC) including stage of works and method of construction such as temporary works, construction plans,

schedules, construction method, assignments of equipment and personnel, testing and trials, and drawings.

- (ii) **Material Engineer [International, 18 Person-months]:** The material engineer should hold with a bachelor degree in civil engineering and has preferably 12 years' experience in major road construction works especially in material testing and preferably permanent staff of the consulting firms, will (i) advise the chief resident engineer on the contractor's compliance to material specifications and testing, (ii) provide input to the design team, and (iii) coordinate and supervise the work of field teams in supervising and certifying construction in accordance with contract conditions including acceptance standards of materials, approval of source supply, and material testing methods.
- (iii) **Highway Engineer [International, 12 Person-months]:** The highway engineer should hold a bachelor degree in civil engineering and preferably 12 years' experience in highway design and supervision, especially in asphaltic concrete design and construction for roads. He/she will review the asphaltic concrete pavement design, advise the chief resident engineer on the material quality and specifications, asphalt mixing methodology, concrete and bitumen additives, safety protection, laboratory and-field material tests for quality control, field equipment, and asphalt concrete placing and calibration of equipment. He/she will also advise the field teams in the using of asphaltic concrete and certifying construction in accordance with contract conditions. He/she will also (i) maintain records and assist the EA with the day-to-day coordination and supervision of Project 2, (ii) coordinate and review updated designs and cost estimates prepared by the design consultants, and (iii) coordinate and supervise the work of field teams in supervising and certifying construction in accordance with contract conditions.
- (iv) **Bridge and Structure Engineer [International, 18 Person-months]:** The bridge and structure engineer should hold a bachelor degree in civil engineering preferably 12 years' experience in bridge design and supervision of bridge construction. He/she will review the bridge and structure design, advise the chief resident engineer on the material quality and specifications, asphaltic concrete mixing methodology, concrete and bitumen additives, safety protection, laboratory and-field material tests for quality control, field equipment, and asphalt concrete placing. He/she will also advise the field teams in the using of asphalt concrete and certifying construction in accordance with contract conditions. He/she will also (i) maintain records and assist the EA with the day-to-day coordination and supervision of Project 2, (ii) coordinate and review updated designs and cost estimates prepared by the design consultants, and (iii) coordinate and supervise the work of field teams in supervising and certifying construction in accordance with contract conditions.
- (v) **Contract Specialist [International, 4 Person-months]:** The contract specialist should hold a bachelor degree in economics/law preferably with 15 years' experience in road works contract administration including FIDIC contract administration will evaluate and settle variations and standard format of claims and (ii) asses contract amendments and updated particular conditions of contract.

- (vi) **Social/Resettlement Specialist [International, 3 Person-months]:** The consultant should have a bachelor degree and preferably a master degree holder in sociology or other social science including economics and preferably 12 years of experience in social safeguard (involuntary resettlement and indigenous/ethnic minority). The consultant will responsible (i) review and update, if necessary, the previously prepared RF (resettlement frameworks), EMPF (ethnic minority policy frameworks), (ii) conduct due diligence for any future and update LARP (land acquisition and resettlement plan) , overseeing activities in implementing LARP, or other LAR related pending issues in project areas, (iii) monitor the implementation LARP especially record all the compensation payment status (iv) monitor any complaint from affected people and work for resolving complaint with other PMU staff as well as with local authorities, and Mahalla, and (v) prepare correction action plan, if impacts related with land acquisition and impact to ethnic minority are unexpected occur to comply with ADB's Safeguard Policy Statement (SPS) 2009, and (vi) prepare all required monitoring reports and compliance reports related with implementation of social safeguard for the project. The consultant has to prepare detail work program, and operation procedure for the national social safeguard specialist to assist in carrying out the above responsibilities.
- (vii) **Financial Specialist [International, 1 Person-months]:** The Consultant should hold a bachelor degree in financial or economics and has preferably 10 years of relevant experience, will undertake an financial and economic evaluation of the project implementation by following related updated ADB guidelines on financial evaluation procedures, evaluating contractor financial capacity during project implementation and develop a set of related performance indicators, review payment policy under the contractor contract, and provide training on financial evaluation methodology for the Program Management Unit (PMU).
- (viii) **Deputy Resident Engineer / Highway Engineer [National, 30 Person-months]:** The deputy resident engineer should hold a bachelor degree in civil engineering preferably 12 years' experience in road construction and preferably permanent staff of the consulting firms. He/she will assist chief resident engineer on coordination and supervision the road construction works in the field including coordination and liaison with Employer. He/she will assist chief resident engineer in day-to-day construction supervision, monitoring schedule, preparing monthly certificates, reviewing and approving shop drawings and as- built-drawings.
- (ix) **Design Engineer [National, 15 Person-months]:** The road design engineer should hold a bachelor degree in civil engineering preferably 10 years' experience in road design and construction. He/she will assist chief resident engineer in ensuring that the design complies with technical and safety standards. He/she will update designs and cost estimates prepared by the design consultants.
- (x) **Material Engineer [National, 2 persons, 48 Person-months]:** The material engineer should hold a bachelor degree in civil engineering preferably 8 years' experience in major road construction works especially in material testing. Under the guidance of the international material engineer, he/she will undertake day-to-day supervision of compliance to material specifications and testing, supervise the contractor's work, and certify the construction in

accordance with contract conditions including acceptance standards of materials, approval of source supply, and material testing methods.

- (xi) **Site Inspector [National, 4 persons, 96 Person-months]:** The site inspectors should hold a bachelor degree in civil engineering preferably 8 years' experience in major road construction works especially in workmanship and construction method. Under the guidance of the international highway engineer, they will undertake day-to-day supervision for roads and small structures, monitor contractors' work and certify the construction in accordance with contract conditions.
- (xii) **Environmental Safeguard Specialist [National, 12 Person-months]:** The safeguard specialist should hold a bachelor degree in environment sciences preferably 8 years' experience in civil works. He/she will (i) review all documents and reports regarding the integration of environmental including contractor's environmental action plan especially to implement all mitigation measures as describe in the EMP, (ii) supervise the contractor's compliance to EMP, (iii) carried out environmental monitoring works, on behalf of PMU, as described in the IEE report (iii) prepare correction action plan, if unexpected impacts occur to comply with ADB's Safeguard Policy Statement (SPS) 2009, (iv) monitor any complaint from affected people and work for resolving complaints with other PMU staff as well as with local authorities, including Mahalla, and (iv) prepare monitoring reports related with implementation of environmental safeguard for the project.
- (xiii) **Social Safeguard Specialist [National, 15 Person-months]:** The social safeguard specialist should hold a social related university degree, preferable with 8 years' experience. He and she will work closely with the international social/resettlement specialist to carry out the above responsibilities. All her/his work assignment is to assist all the implementation social safeguard of the project. In addition, he/she will check the implementation and compliance of the contractors in its obligation in addressing communicable diseases/sexually transmitted infections (STI), compliance to core labor standards.
- (xiv) **Quantity Surveyor [National, 2 persons, 48 Person-months]:** The quantity surveyor should hold a bachelor degree in civil engineering preferable 10 years' experience in supervision of major road projects, will assist the highway engineer in daily supervision, check the quantity, variations, justification and verify the monthly certificates.
- (xv) **Structure Engineer [National, 15 Person-months]:** The structure engineer should hold a bachelor degree in civil engineering preferably 8 years' experience in major structure construction works under road project especially in workmanship and construction method. Under the guidance of the international bridge/structure engineer, He/she will undertake day-to-day supervision for roads and small structures, monitor contractor's work and certify the construction in accordance with contract conditions.
- (xvi) **Bridge Engineer [National, 15 Person-months]:** The structure engineer should hold a bachelor degree in civil engineering preferably 8 years' experience in major bridge construction works under road project especially in workmanship

and construction method. Under the guidance of the international bridge/structure engineer, He/she will undertake day-to-day supervision for roads and small structures, monitor contractor's work and certify the construction in accordance with contract conditions.

- (xvii) **Drainage/Culvert Engineer [National, 15 Person-months]:** The drainage/culvert engineer should hold a bachelor degree in civil engineering with preferably 8 years' experience in major road construction works especially in workmanship and construction method. Under the guidance of the international highway engineer, he/she will undertake day-to-day supervision for roads, drainage, and culvert structures, monitor contractor's work and certify the construction in accordance with contract conditions.
- (xviii) **Financial Specialist [National, 1 person-months]:** The Consultant should hold a bachelor degree in financial or economics and has 5 years of relevant experience, will undertake an financial and economic evaluation of the project implementation by following related updated ADB guidelines on financial evaluation procedures, and evaluate the contractor financial capacity during project implementation.

4. Reporting Requirements and Time Schedule for Deliverables

137. The Consultant will prepare reports including monthly reports on the project progress in a format and level of detail agreed with the EA and ADB. The Consultant will 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. The Consultant will assist PMU in preparing quarterly progress reports, safeguard compliance reports, a project completion report, and monitoring and evaluation reports as required under the Financing Framework Agreement and the Loan Agreement for Project 2.

138. The consultants will be required to report to both the Road Fund and ADB. The Consultant will submit the reports in hardcopy and softcopy as follows:

Type of Reports	Format	Recipient		Submission Date
		Road Fund (English & Russian)	ADB (English)	
Inception Report	<i>ADB's Standard Formats</i>	3+4	3	Within 2 (two) month after commencement 10th of each following month 14th of each following quarter Maximum one month after Contract completed
Monthly Progress Report		3+4	3	
Quarterly Progress Report		3+4	3	
Project Completion Report		3+4	3	

139. Minimum contents of the reports:

- (i) Inception Report: initial findings and the work program for the balance of the assignment.
- (ii) Monthly Progress Report: brief details of the works carried out during the previous month, the problems encountered or anticipated, together with the steps taken or recommendations for their correction, and financial and physical progress to date.

- (iii) Quarterly Report: detailed description of the achieved progress of works, difficulties and delays encountered or anticipated, and remedial actions taken or suggested, the overall progress of the Project as monitored against the PPMS indicators.
- (iv) Project Completion Report: detailed description of all the works by items of technical and non-technical matters, financial and disbursement data, analyses, difficulties and delays encountered or anticipated, and remedial actions taken or suggested, the overall progress of the Project as monitored against the PPMS indicators, including recommendations to EA and ADB.
- (v) Taking any action under a civil works contract designating the Consultant as 'Engineer', for which action, pursuant to such civil works contract, the written approval of the Client as 'Employer' is required.

5. Client's Input and Counterpart Personnel

140. The Client will provide the following inputs and facilities:

- (i) Visa supporting letters and registrations in Uzbekistan Immigration Office;
- (ii) Relevant project data and reports;
- (iii) Counterpart staff is the PMU staff.

141. Furnished air-conditioned office spaces with support facilities, as well as accommodation including maintenance in the construction site will be provided by the Contractor at Contractor's cost.

b. EXTERNAL MONITORING CONSULTANT

1. Background

142. Monitoring is an integral part of the resettlement process. The projects which are with significant impact where 200 or more person will experience major impacts, which are defined as (i) physically displaced from housing or (ii) 10% or more of their productive assets are affected, will need an external expert to monitor and verify EA performance. The main objectives of an external monitor is to review implementation and assess the achievement of resettlement objectives, the changes in living standards and livelihoods, restoration of the economic and social base of the affected people, the effectiveness, impact and sustainability of entitlements, the need for further mitigation measures if any, and to learn strategic lessons for future policy formulation and planning.

143. A total of 9 person-months of international consultant inputs will be required. Consulting services are expected to take place over the entire project implementation period of about 3 years months (actual duration of service shall be in line with civil works schedule).

2. Scope of Work

144. An external monitoring expert will be involved in ongoing monitoring of the resettlement efforts by the EA. The major tasks expected from the external monitor are:

- (i) To develop specific monitoring indicators for undertaking monitoring for Resettlement;

- (ii) To review and verify the progress in land acquisition/resettlement implementation of project.
- (iii) Identify the strengths and weaknesses of the land acquisition/resettlement objectives and approaches, implementation strategies
- (iv) Evaluate and assess the adequacy of compensation given to the APs and the livelihood opportunities and incomes as well as the quality of life of APs of project-induced changes.
- (v) Identification of the categories of impacts and evaluation of the quality and timeliness of delivering entitlements (compensation and rehabilitation measures) for each category and how the entitlements were used and their impact and adequacy to meet the specified objectives of the RAP. The quality and timeliness of delivering entitlements, and the sufficiency of entitlements vis a vis the RAP should be verified by an independent monitor. The independent monitor should be able to establish whether the resettlement entitlements were suited to RAP conditions.
- (vi) To analyze the pre-and post-project socio-economic conditions of the affected people. In the absence of baseline socio-economic data on income and living standards, and given the difficulty of APs having accurate recollection of their pre-project income and living standards, develop some quality checks on the information to be obtained from the APs. Such quality checks could include verification by neighbors and local village leaders. The methodology for assessment should be very explicit, noting any qualifications
- (vii) Review results of internal monitoring and verify claims through sampling check at the field level to assess whether land acquisition/resettlement objectives have been generally met. Involve the affected people and community groups in assessing the impact of land acquisition for monitoring and evaluation purposes.
- (viii) To monitor and assess the adequacy and effectiveness of the consultative process with affected APs, particularly those vulnerable, including the adequacy and effectiveness of grievance procedures and legal redress available to the affected parties, and dissemination of information about these.
- (ix) Identify, quantify, and qualify the types of conflicts and grievances reported and resolved and the consultation and participation procedures.
- (x) Provide a summation of whether involuntary resettlement was implemented (a) in accordance with the RAP, and (b) in accordance with the stated policy.
- (xi) Verify expenditure & adequacy of budget for resettlement activities
- (xii) Describe any outstanding actions that are required to bring the resettlement activities in line with the policy and the RAP. Describe further mitigation measures needed to meet the needs of any affected person or families judged and/or perceiving themselves to be worse off as a result of the Project. Provide a timetable and define budget requirements for these supplementary mitigation measures.
- (xiii) Describe any lessons learned that might be useful in developing the new national resettlement policy and legal/institutional framework for involuntary resettlement.

3. Methodology and Approach

145. The general approach to be used is to monitor activities and evaluate impacts ensuring participation of all stakeholders especially women and vulnerable groups. Monitoring tools should include both quantitative and qualitative methods. The external monitor should reach out to/ cover:

- (i) 50% APs who had property, assets, incomes and activities severely affected by Project works and had to relocate or whose source of income was severely affected;
- (ii) 20% of persons who had property, assets, incomes and activities marginally affected by Project works and did not have to relocate; and
- (iii) 20% of those affected by off-site project activities by contractors and sub-contractors, including employment, use of land for contractor's camps, pollution, public health etc.

146. Supplemented by Focused Group Discussions (FGD) which would allow the monitors to consult a range of stakeholders (local government, resettlement field staff, NGOs, community leaders, and, most importantly, APs), community public meetings: Open public meetings at resettlement sites to elicit information about performance of various resettlement activities.

4. Time Frame and Reporting

147. The external expert will be responsible for overall monitoring and will submit semiannual report to the executing agency and ADB. Each report will determine whether resettlement goals have been achieved, more importantly whether livelihoods and living standards have been restored/ enhanced and suggest suitable recommendations for improvement. The external Monitors will provide monitoring and evaluation report covering the following:

- (i) Whether the resettlement activities have been completed as planned and budgeted
- (ii) The extent to which the specific objectives and the expected outcomes/results have been achieved and the factors affecting their achievement or non-achievement
- (iii) The extent to which the overall objective of the Resettlement Action Plan and the desired impact of improving living standards, income earning capacity and production levels or at least restoring them to pre-project levels, have been achieved and the reasons for achievement / non-achievement.
- (iv) Major lessons learnt
- (v) Key risk factors
- (vi) Recommendations

5. Qualification for an External Monitor

148. The external expert needs to have significant experience in resettlement policy and RAP implementation. Further, work experience and familiarity with all aspects of resettlement operations would be desirable. The external experts with degrees in anthropology, sociology, and development studies will be preferred.

c. FINANCIAL AUDITOR

149. The terms of reference of financial auditor for Project 2 will follow that of the financial auditor for Project 1 with adjustments in schedule/delivery of reports.

G. Consultants' Terms of Reference – Project 3

a. CONSTRUCTION SUPERVISION CONSULTANT

1. Introduction

150. The Republican Road Fund (RRF), Government of Uzbekistan is implementing a number of highway projects funded by the Asian Development Bank (ADB) which involve design, rehabilitation and reconstruction of the sections of highways. For this purpose, Civil Works Contractors have been engaged who have been selected on the basis of International Competitive Bidding (ICB) basis. The civil works are carried out as per the technical specification as enshrined in the contracts with the civil works contractors. In order to supervise the rehabilitation and reconstruction of the highway projects, services of the international consultants (Supervision Consultants) have been hired. The main responsibilities of the supervision consultants include review of design prepared by the RRF, certification of all the works under the civil works contract for quality and quantity carried out the international contractors, civil works contract administration, and benefit monitoring and evaluation.

151. RRF now wishes to engage a firm of consultants to function as supervision consultants to supervise the construction of one of its road projects – A380 highway Km 228 to Km 315 in the Bukhara region of Uzbekistan including reinstallation of gas and water pipeline, telecommunications, and electricity facilities. This A380 highway forms part of the Central Asia Regional Economic Cooperation (CAREC) Corridor 2 linking Uzbekistan to Afghanistan, Kazakhstan, the Kyrgyz Republic, Tajikistan, and Turkmenistan. RRF will be the Executing Agency for the Project. The civil works will be carried out in accordance with the detailed engineering design got prepared by the Employer (RRF). An international contractor will be procured separately using ICB under ADB's Procurement Guidelines. The consulting services will involve review of the detailed design, certification of all the works under the civil works contract for quality and quantity by the international contractor, civil works contract administration, and benefit monitoring and evaluation.

2. Objective

152. The primary objectives of the consulting services are to:

- (i) Function as the Engineer in administering the civil works contract (the Contract) in accordance with the FIDIC conditions of Contract;
- (ii) Review and approve the detailed design for construction of project highway by the international civil works contractor (the Contractor);
- (iii) Ensure that the permanent and temporary works have been designed and are constructed in accordance with the provisions of the Contracts and in accordance with Uzbekistan's Road Standards; and
- (iv) Advise RRF on all matters concerning implementation of the Contracts including quality control, work progress, implementation issues, and arbitration or litigation etc.

4. Scope of Work

a. Civil works contract administration

153. Design review. RRF has got the detailed engineering designs prepared through a government agency. The design review includes, but is not limited to, the following:

- (i) Establish the schedule, methods and procedures for the review of detailed engineering design and typical construction drawings of the civil works provided by the Employer.
- (ii) Review the detailed design and typical construction drawings in accordance with the design standards, criteria and conceptual design provided in the Contract. The Consultant will complete the review report within 21 days after submission of the documents to enable finalization and commencement of construction.
- (iii) Ensure that the Technical Specifications in the Bid Documents and the provisions of Uzbekistan's Road Construction Standards have been duly accounted for in the detailed engineering design and typical construction drawings.

b. Contract administration

154. The construction works will be executed under the International Federation of Consulting Engineers (FIDIC) Conditions of Contract for Works of Civil Engineering Construction. Accordingly, RRF will be the Employer and the consultant will function as the Engineer. The consultant will administer the civil works contract and ensure that the project highway is constructed in accordance with the provision of the civil works contracts. The consultant will be required to nominate an engineer's representative who will be a full-time resident in the project area. The responsibility of the Engineer includes, but is not limited to, the following tasks:

- (i) Give the order to commence the works;
- (ii) Review and approve contracts proposed personnel for positions nominated in the Contract;
- (iii) Inspect and approve all material sources identified by the Contractor;
- (iv) Review and approve the Contractor's mobilization and implementation schedules, and supervise the progress of construction works. The Consultant will keep the Employer informed of any delay or potential delays in the work schedule of the Contract, and will take all necessary actions to prevent potential delays;
- (v) Review, approve and monitor the construction plan and traffic safety management plan to ensure the un-interrupted flow of traffic during construction, and to ensure that construction activities do not endanger safety of the public;
- (vi) Regularly monitor and inspect the contractor's quality control and assurance program to ensure that quality of the finished works meet the contract standards and specifications. This includes regular checking of the materials testing program;
- (vii) Review, approve and monitor the facilities reinstatement plan of gas and water pipeline, telecommunications system, and electricity services to ensure the public utility services supply during construction;
- (viii) Advise and assist the Employer with respect to arbitration or litigation relating to the works, whenever required;
- (ix) Monitor progress of the construction works through computer-aided project management techniques;

- (x) Convene regular site meetings with the Contractor to discuss issues and problems affecting the progress, and brief the Employer;
- (xi) Coordinate with the Hakimyat (relevant local government authorities/agencies) and GAI (police) so as to minimize disruption to the works program, as required by the Contractor;
- (xii) Review the contractor's insurance cover to ensure that the contractor has provided all the insurance required by the contract and such insurance are maintained throughout the contract period;
- (xiii) Prepare any required variation orders requested by the Employer and review any variation order proposed by the contractor and provide their advice to the Employer in accordance with the contract;
- (xiv) Review all claims submitted by the Contractor (such as interim payment applications (IPA)) and immediately provide advice to the Employer of the validity of the claim (including interim payment certificates with relevant evidence), the effect of such claim on the construction schedule and the cost of the project;
- (xv) Review and comment on the monthly progress reports submitted by the contractor detailing the work undertaken during the previous month, the progress of the work against the approved schedule, the problems and difficulties encountered by the contractor and other issues requested by the Employer;
- (xvi) Assist RRF preparing minutes of meeting for meeting with the contractor.
- (xvii) Issue completion certificate after satisfactory completion of the works in accordance with the contract provisions;
- (xviii) Prepare detailed social screening and mitigation plans, if necessary, and develop poverty monitoring impact monitoring systems;
- (xix) Ensure that the construction methods as proposed by the contractor for carrying out the works are satisfactory, with particular references to the technical requirements of sound environmental standards on the basis of ADB Environment Source Book and World Bank Group's *Environment, Health and Safety Guidelines*,¹⁴ as referenced in ADB Safeguards Policy Statement; inspection of contractor's construction equipment, safety of the works, property, personnel, and general public;
- (xx) Assess and check the laboratory and field tests carried out by the contractor, and carry out independent tests.
- (xxi) Issue orders to the Contractor to remove or improve any works that are not in accordance with the BoQ, drawings and/or specifications;
- (xxii) Maintain records of all testing work, including cross-referencing of items of work to which each test refers and location from which any samples were obtained for testing.
- (xxiii) At the completion of the contract, verify the contractor's "as-built drawings" as a true record of the works as constructed;
- (xxiv) Measure the completed works and keep detailed records, including the measurement books;
- (xxv) Prepare quarterly cash flow projections for the Employer in an acceptable format, in which cash flow should identify budget estimates for all outstanding works;
- (xxvi) Maintain records of all plant, labor and materials used in the construction of the works;
- (xxvii) Process interim and final payments to the Contractor (interim monthly payment shall be based on interim payment certificate processed by the Consultant following claims filed by the Contractor such as interim payment application);

¹⁴ World Bank Group, 2007. *Environmental, Health, and Safety General Guidelines*. Washington, DC.

- (xxviii) The Consultant will be responsible for checking and monitoring the performance requirements in the Contract and ensuring the criteria and limits are met;
- (xxix) Maintain a day-to-day diary, which shall record all events pertaining to the administration of the contract, request forms, and order given to the contractor, and any other information which may at a later date be of assistance in resolving queries which may arise connecting execution of the works. The day-to-day diary shall be reported by email to RRF's Program Management Unit (PMU) in daily basis;
- (xxx) Develop and implement training programs for RRF staff at the site on project management including quality assurance and contract administration;
- (xxxi) Prepare a project completion report at the end of the project which is also consist of a lesson learned and recommendations for future road construction project in Uzbekistan;
- (xxxii) The Consultant will report to ADB in English and RRF in English with Russian translation, in parallel. In effect, the Consultant will provide all regular reports to both ADB and RRF.

155. In addition, or as an expansion of the activities and responsibilities required of the engineer under the civil works contracts, the consultant will:

- (i) Ensure that the construction methods proposed by the contractor for carrying out the works are satisfactory, with particular references to the technical requirements of sound environmental standards on the basis of the Asian Development Bank (ADB) Environment Source Book and World Bank Group's *Environment, Health and Safety Guidelines*,¹⁵ as referenced in ADB Safeguards Policy Statement; inspection of contractor's construction equipment; safety of the works, property, personnel, and general public; and the recommendations of the initial environmental examination (IEE) and summary IEE;
- (ii) Prepare environmental monitoring plan and annual report of implementing this plan as part of project implementation report
- (iii) Carry out environmental management seminars for contractors, RRF and State Committee for Natural Protection staff at project site;
- (iv) In case resettlements impacts are found during implementation, prepare resettlement plans as per *ADB Policy on Involuntary Resettlement*;
- (v) Ensure minimum disruption to the local settlements by approving contractors' work program, including monitoring of the impacts of construction work on local settlements, and by reporting impact monitoring to the employer;
- (vi) Ensure that no child labor is used for the execution of the civil works contracts as required by the civil works contracts;
- (vii) Monitor the implementation of the health and safety program at camp site including the information and education campaign on sexually-transmitted diseases and HIV/AIDS (human immunodeficiency virus/acquired immunodeficiency syndrome) as required by the civil works contracts;
- (viii) Under road and traffic safety audits including ensure that road safety design requirements are incorporated in the design of the project road, and implemented during the execution of the civil works contracts in accordance with the requirement in the civil works contracts; and

¹⁵ World Bank Group, 2007. *Environmental, Health, and Safety General Guidelines*. Washington, DC.

- (ix) Develop and implement training programs for RRF staff at project site on project management including quality assurance, contract administration, and road maintenance plan and implementation.

c. Actions requiring specific approval of the Employer

156. The consultant will be required to obtain prior approval of the employer in the following matters as specified in the civil works contracts:

- (i) approving subletting of any part of the works;
- (ii) certifying additional cost;
- (iii) determining an extension of time;
- (iv) issuing a variation having financial implications;
- (v) major changes of road design; and
- (vi) fixing rates or prices.

d. Project performance monitoring/benefit monitoring and evaluation

157. The consultant will help RRF establish a system for project performance monitoring in accordance with the project framework. The consultant will:

- (i) identify, on the basis of the project framework developed during project processing, performance indicators to be monitored during the implementation of the Project;
- (ii) establish systems for collecting data and statistics for such monitoring;
- (iii) carry out a baseline survey on performance indicators including on poverty, socioeconomic survey, gender development, employment–generation amongst others to refugees and ex-combatants, and other social and economic development activities;
- (iv) collect required data and undertake other relevant surveys before construction and immediately after completion of the Project; and
- (v) incorporate findings and supporting data in the project completion report, in accordance with a schedule and terms of reference to be mutually agreed by RRF and ADB.

5. Schedule and Resources

158. The consulting services will require the following input for totally 18 months (mobilization schedule of each position will be in line with the civil works implementation plan):

Sr.	Expertise	Input (PM)
A.	International Consultants	
1.	Chief Resident Engineer/Team Leader/Highway Engineer	30
3.	Bridge/Structural Engineer	9
4.	Contracts Specialist	8
5.	Design Engineer	10
6.	Material Engineer	22
8.	Cement Concrete Pavement Expert	18
9.	Environmental Specialist	5
10.	Resettlement Specialist	5
11.	Financial Specialist	1
	Subtotal (A)	108
B	National Consultants	
1.	Deputy Resident Engineer/Highway Engineer	30
2.	Bridge/Structure Engineer	18
3.	Design Engineer	16
4.	Material Engineer	46
5.	Site Inspector (4 persons)	96
6.	Quantity Surveyor (2 persons)	48
7.	Cement Concrete Specialist/Laboratory Engineer	20
8.	Environmental Safeguard Specialist	10
9.	Social Safeguard Specialist	10
10.	Drainage/Culvert Engineer	12
11.	Road Safety Expert	12
12.	Law Expert	12
13.	Electric Specialist	12
14.	Telecommunications Specialist	12
15.	Gas Pipeline Specialist	12
	Subtotal (B)	366
	Total (A+B)	474
C	Out-of-Pocket Expenses	
1.	Travel expenses	
2.	Interpretation expenses	
3.	Report preparation	
4.	Communications	
D	Provisional Sum	
1.	Survey costs for social surveys, environmental surveys, baseline surveys and independent laboratory test (if required)	
2.	Contingency	

Consultant furnished-office including office equipment in project site will be provided by the contractor

6. Reporting Requirements

159. The consultant will prepare and submit the following reports, three copies in English and three copies in Russian to RRF and two copies to ADB. All reports will also be submitted electronically by email.

- (i) Inception report including the report on the performance indicators to be monitored during and at the end of the implementation of the Project, to be submitted within 1 month of mobilization. This report will also include a review of the detailed design.

- (ii) Report on the data-collection system and the baseline survey for the Project Performance Monitoring/Benefit Monitoring and Evaluation, to be submitted within 3 months of mobilization.
- (iii) A weekly one-page report on the progress of works and any issues related to works;
- (iv) A daily one-page report on the progress of works (submitted by email to RRF's Program Management Unit (PMU) in daily basis);
- (v) Monthly reports, to be submitted within 7 days of the end of each month, to include schedules of contract payments and variation orders, graphical representations of progress against program based on the approved contract schedules, charts of physical progress on major items, relevant photographs, and details of impediments to the works and proposals for overcoming them. Further details of the monthly report are provided in subsequent section.
- (vi) Quarterly progress report covering all aspects such as progress monitoring, quality assurance/quality control, status of any delays, contractual claims, and details of all financial projections, to be submitted within 14 days of the end of each quarter.
- (vii) Project completion report, within 3 months of substantial completion of the civil works contracts (not included the period of defect liability).
- (viii) Maintenance Manual detailing routine and periodic maintenance tasks that will be required to maintain the completed Project, to be submitted within 12 months of commencing services.

7. Performance of Duties of Engineer

160. The Consultant shall perform the duties and authority of the Engineer as specified in or necessarily implied from the Contract as well as administer the Contract, dealing with situations in accordance with the contract, taking due regard of all relevant circumstances; the Engineer shall perform his duties or act:

- (i) proactively, where the initiative lies with the Engineer in administering the Contract;
- (ii) reactively, in response to the Contractor's or the Employer's requests; and
- (iii) passively, in observing the requirements of the Contract

161. Wherever appropriate and not in conflict with the Contract, the Consultant shall exercise every reasonable care to protect the interests of the Employer.

162. The Engineer shall have the following reporting obligations during supervision of the Works.

8. Engineer's Work Programme Report

163. Within 28 days of issuance of the Engineer's consent to the Contractor's Work Programme, the Engineer shall submit a report to the Employer (Engineer's Work Programme Report), which shall include:

- (i) copy of the Contractor's detailed cash flow estimate, in monthly periods, of all payments to which the Contractor will be entitled under the Contract;
- (ii) copy of the Contractor's detailed time programme showing the order in which the Contractor intends to carry out the Works, including general description of the

methods which the Contractor intends to adopt, and of the major stages, in the execution of the Works and other information as may be deemed necessary and appropriate by the Engineer;

(iii) a supporting report which shall include:

- a list of critical path items and the related Contractor's estimate of delivery periods, accompanied with the Engineer's estimate of the latest delivery periods for each critical path item to warrant the completion in accordance with the Contract;
- for the manufacture of each main item of Plant and Materials, the name of the manufacturer, manufacture location and the expected dates of:
 - commencement of manufacture;
 - Contractor's and/or the Engineer's inspections and tests; and
 - shipment and arrival at the Site;
- the materials and plant selected by the Engineer for inspections and tests including an appropriate specification of the tests to be carried out and the associated arrangements;
- the names and particulars of the Contractor's representative and other superintendence personnel approved by the Engineer in accordance with the Contract;
- the names of Subcontractors consented by the Engineer in accordance with the Contract and for each Subcontractor the cost and quantity of the subcontracted Works; this section shall include a brief justification for the Engineer's consent;
- Copies of all notices, consents, approvals, certificates or determinations given or issued by the Engineer within the reported period; and
- other information as may be required by the Employer.

9. Monthly Progress Reports

164. The Engineer shall prepare and submit to the Employer monthly progress reports. The first report shall cover the period up to the end of the first calendar month following the Engineer's Work Programme Report. Each monthly progress report shall include:

- (i) brief summary information about any events or circumstances which, in the Engineer's opinion, may create sufficient grounds for any time and/or cost overrun under the Contract and the Engineer's recommendation of the measures being (or to be) adopted to overcome such events or circumstances and the contractual basis therefore;
- (ii) comparison in the form of a chart showing the Contractor's original cumulative cash flow estimate, in monthly periods, of all payments to which the Contractor will be entitled under the Contract and the actual payments certified by the Engineer up to the end of the reporting period. In the event of the cumulative amount of the actual monthly payment certificates being lower than the Contractor's estimate, the Engineer shall accompany the chart with a supporting report and provide:
 - details of any events or circumstances that have caused the discrepancy;
 - an assessment of the significance of such events or circumstances, including the Engineer's opinion, on whether these may jeopardize the completion in accordance with the Contract;

- a report on the measures being (or to be) adopted to overcome delays in respect of each event or circumstances and the contractual basis therefore
- (iii) comparison of the actual percentage completion of delivery compared with the planned for each critical path item identified in the Engineer's Work Programme Report; where any delivery is behind the programme, the Engineer shall give comments on the likely consequences and state the remedial action being (or to be) taken;
- (iv) comparison of the actual percentage completion of delivery compared with the planned for each main item of Plant and Materials, if not included in the list of critical path items;
- (v) information about the use of provisional sums and an appropriate justification therefore;
- (vi) photographs showing the status of manufacture and of progress on the Site;
- (vii) copies of quality assurance documents, test results and certificates of materials;
- (viii) safety statistics., including details of any hazardous incidents and activities relating to environmental aspects and public relations;
- (ix) copies of all notices, consents, approvals, certificates or determinations given or issued by the Engineer within the reported period; and
- (x) other information, as may be required by the Employer.

10. Variations

165. The Engineer shall note that the Employer is under obligation to seek ADB concurrence before agreeing to or implementing any material modification to the terms and conditions of the Contract. The term "material modification to the terms and conditions" shall cover any variations other than variations of the quantities of any item of the Works in the Bill of Quantities, within 25% of the original, using the rates and prices set out in the Contract, provided that such variation or variations in aggregate shall not increase or decrease the Contract Price by more than 15 per cent of the original price.

166. The Engineer shall ensure that the Employer shall comply with the procedures agreed with ADB. Unless, in the opinion of the Engineer, an emergency occurs affecting the safety of life or of the Works or of adjoining property, the Engineer shall provide a preliminary report to the Employer on any prospective variation which shall outline the basis for the Engineer's valuation of the variation including but not limited to the following:

- (i) The Engineer's opinion on the extent, if any, of applicability to the varied Works of the rates and prices set out in the Contract; when expressing his opinion, the Engineer shall take into account the actual or expected currencies of cost (and the proportions thereof) of the inputs of the varied work without regard to the proportions of various currencies set out in the Contract;
- (ii) The quantity and the value of the varied Works that can be determined using the rates and prices set out in the contract;
- (iii) The quantity and the Engineer's estimate of the value of the varied Works, which can be determined using the rates and prices set out in the contract as the basis for valuation: the Engineer shall provide a detailed breakdown of the rates and prices set out in the contract and identify the price components that the Engineer used or intends to use for the valuation of the varied works;
- (iv) The quantity and the Engineer's estimate of the value of the varied Works, which can only be determined using the rates and prices agreed to be agreed upon

between the Engineer and the Contractor: The Engineer shall provide to the Employer an appropriate justification of the basis for the agreement.

11. Contractor's Claims

167. In the event of receipt of a notice of claim from the contractor, immediately thereafter, the Engineer shall notify and provide copy the notice to the Employer.

168. Promptly after the Engineer's inspection, the Engineer shall provide the Employer with an assessment of the Contractor's contemporary records, which shall be supported with the Engineer's preliminary conclusions with regard to the potential outcome of the claim. The Engineer shall also consult with the Employer any instruction, which have been (or to be issued) to the Contractor with regard to any further contemporary records.

169. The Engineer shall require the Contractor to copy to the Employer all accounts sent to the Engineer with regard to the Contractor's claim.

170. Prior to certification of any payment to the Contractor in relation to the Contractor's claim, the Engineer will have consulted with the Employer the grounds on which the Engineer intends to certify the payment. The Engineer shall provide the Employer with any particulars to enable the Employer to establish his position with regard to the Engineer's certificate.

12. Qualification Requirements and Responsibilities of Key Personnel

a. International Consultants

1. Chief Resident Engineer/Team Leader/Highway Engineer

Qualification Requirements

Education:

Bachelor in civil Engineering with a post-graduate in highways/construction management or related fields.

Experience

No less than 20 years road project related experience with 10 years latest experience on similar projects involving reviewing of designs and supervision in cement concrete pavement construction as Resident Engineer/Project Manager. Minimum 5 years of international experience on similar projects and should have 5 years in administration of contracts with ADB/World Bank assistance. The Team Leader should familiar with various international construction standards, and preferably be a permanent staff of the consulting firm implementing this consultancy package. Fluency of Russian language will be an advantage.

Age limit: Not more than 65 Years

Responsibilities

- a. Function as Engineer in administering the civil works contract in accordance with the conditions of Contract;
- b. Review and approve the detailed design prepared by RRF for construction of the road in accordance with the technical specifications and Uzbekistan's Road Construction Standards;
- c. Ensure that the permanent and temporary works are constructed in accordance with the provisions of the Contracts; and
- d. The duties of the Consultant shall include, but not be limited to:
 - (i) ensuring that the Notices to commence have been issued;
 - (ii) reviewing and agreeing with the Employer, the Contractors' work programs and subsequently monitoring the construction progress in accordance with contract requirement;
 - (iii) ensuring with the assistance of Resident Engineers that the contractors are granted Possession of site in accordance with the agreed programs or otherwise providing advance notice to the Employer of possible delays due to lack of possession;
 - (iv) reviewing with the assistance of Resident Engineer all surveys, field investigations, designs, drawings and specifications, recommending any changes needed to provide more cost-effective solutions, and approving the design, drawings and changes in the specification;
 - (v) throughout the services, consulting and maintaining close liaison with the RRF, Hakimyat other relevant agencies, including the GAI (State Traffic Police) State Committee for Natural Protection, Uzbekneftgaz, Uzbekenergo, Uzbek Telecom, Bhukara Irrigation System Authority, and other Government and regional authorities, and local stakeholders;
 - (vi) measuring the works with the assistance of Resident Engineers, agreeing and certifying interim and final payment certificates for submission to the employer, and assisting the Employer in preparing withdrawal documentation to ADB;
 - (vii) administrating, assessing and, where appropriate, making recommendations on applications for extension of time, claims for additional payment and other contractual disputes;
 - (viii) issuing site introductions, technical instructions, variation orders, provisional sum order and day works orders, as appropriate;
 - (ix) monitoring with the assistance of Resident Engineers the Contractors' laboratory testing and carrying out Independent testing as required;
 - (x) checking the Contractors' working and "as built" drawings;
 - (xi) preparing a final report, which will be a compilation and condensation of data presented in regular monthly progress reports, together with copies of as built- drawings;
 - (xii) develop training programs for RRF staff and providing on-the-job training for the RRF's staff in carrying out construction supervision, including contract administration, quality control, monitoring and evaluation, and other relevant activities. The on-the-job training will also cover the operation of the environmental monitoring system and the project performance monitoring system;
 - (xiii) assist with the help of Resident engineer land acquisition and resettlement activities being undertaken by the Government and the

- provincial authorities, and include reports on these activities in the monthly progress reports, assist RRF and other authorities in the administration of any resettlement activities, including arranging consultation with local people, as well as affected people, preparation and serving of notices to affected people, liaising with affected people and ensuring that any communications and grievances raised by affected people are promptly passed onto the relevant authorities;
- (xiv) developing and operating a quantitative and qualitative project performance monitoring system (PPMS) in consultation with ADB and RRF to monitor and evaluate the performance of the project in relation to its goals, purposes and outputs, Base line value shall be established for (a) traffic Volumes and journey times;(b) freight tariffs and bus fares, (c) environmental impact indicators,(d) socio-economic indicators and (e) social and poverty reduction impact indicators, Where relevant , and evaluation monitoring indicators would be measured at the necessary agreed frequency during the project. Measurements of these indicators, together with relevant comments would be included in the quarterly progress reports as well as the final completion report;
 - (xv) updating detailed social screening and mitigation plans prepared by RRF with the help of Social sector Specialist, if necessary, and develop poverty monitoring impact monitoring systems;
 - (xvi) ensure with the help of Environmental Specialist that the construction methods as proposed by the contractor for carrying out the works are satisfactory, with particular references to the technical requirements of sound environmental standards on the basis of ADB Environment Source Book and World Bank Group's *Environment, Health and Safety Guidelines*,¹⁶ as referenced in ADB's Safeguards Policy Statement inspection of contractors' contraction equipment, safety of the works, property, personal and general public and the recommendations of the initial environmental examination (IEE) and summary IEE;
 - (xvii) updating with the assistance of Environmental Specialist, environmental monitoring plan and implementing this plan as part of project implementation project implementation report, and carry out environmental management seminars for contractors and RRF staff;
 - (xviii) in case resettlements impacts are found during implementation, prepare resettlement plans with the assistance of Resettlement Specialist as per ADB's Safeguards Policy Statement;
 - (xix) monitor the implementation of the health and safety program at camp site with the including the information and education campaign on assistance of Resident Engineer sexually-transmitted diseases and HIV/AIDS (human immunodeficiency virus/acquired immunodeficiency syndrome) as required by the civil works contracts;
 - (xx) preparing monthly progress reports, in a form agreed with the Employer and ADB and submit these within 10 days of the end of the month to which they refer;
 - (xxi) preparing quarterly progress reports, in form agreed with the Employer and ADB and submit these within 1 month of the end of the reporting periods, these report are to cover physical progress, financial progress, loan withdrawal, compliance with the environmental mitigation

¹⁶ World Bank Group, 2007. *Environmental, Health, and Safety General Guidelines*. Washington, DC.

requirements, results of the project performance monitoring system and result of other environmental monitoring;

- e. Advise RRF on all matters concerning implementation of the Contracts including quality control, work progress, implementation issues, and arbitration or litigation etc.

2. International Bridge/Structural Engineer

Qualification Requirements

Education

Civil Engineering Degree with post graduation in structural engineering.

Experience

No less than 10 years' latest experience in design and construction of bridges and other structures of road projects. Experience of design and construction of bridges in road projects. Knowledge of Gosudarstvennyy Standart (GOST) and ShNK standards will be advantageous. Has experience in CIS countries and experience of design of 4 bridges on pile/well foundation and design of bridges in earthquake zones and in developing countries. Experience of construction of bridges involving RCC/Pre stressed concrete, design standards, technical specifications, establishing QA/QC procedures. Minimum 3 years international experience on design and construction in road projects. Has similar experience in CIS countries.

Responsibilities

The duties of the Consultant shall include, but not limited to:

Design review (with the help of National Structures/Bridge Engineer). The design review includes but not limited to the following:

- (i) establish the schedule, methods and procedures for the review of detailed engineering design and construction drawings of the bridges, culverts and other structures for the project;
- (ii) consider available data on topography (topographic maps, stereoscopic aerial photography), storm duration, rainfall statistics, top soil characteristics, vegetation cover etc. so as to assess the catchments areas and hydraulic parameters for all existing and proposed drainage provisions;
- (iii) obtain information on high flood level (HFL), low water levels (LWL), discharge velocity etc. from available past records, local inquiries and visible signs, if any, on the structural components and embankments to check the design of the bridges and structures;
- (iv) ensure that the assessment of the load carrying capacity or rating of existing bridges have been carried out to ensure they are safe for the design axle load;
- (v) review the General Arrangement Drawing (GAD) and Alignment Plan showing the salient features of the bridges and structures proposed to be constructed / reconstructed along the road sections, such as alignment, overall length, span arrangement, cross section, deck level, founding level, type of bridge

- components (superstructure, substructure, foundations, bearings, expansion joint, return walls etc.);
- (vi) ensure that the design finalized is based upon hydraulic and geo-technical studies, cost effectiveness and ease of construction and design of protective works, erosion control measures, snow drift control/snow clearance measures have been included;
 - (vii) review the submitted documents in accordance with the design standards, criteria and conceptual design provided in the Contract. The Consultant will complete the review within 21 days after submission of the documents to enable finalization and commencement of construction of bridges, culvert to ensure completion of the project in time;
 - (viii) ensure that the Technical Specifications in the Bid Documents and Uzbekistan's Road Construction Standards have been duly taken into account in preparation of the design documents provided by RRF; and
 - (ix) provide periodic status reports of the design and review activities as measured against the approved schedule, identify any problems and difficulties encountered and propose solutions.

During construction (with the help of National Structures/Bridge Engineer):

- (i) Review and approval of the detail construction schedule of bridges, culverts in consultation with Team Leader;
- (ii) Establish schedule, methods and procedures for review of the construction of bridges, culverts and other structures by the contractor;
- (iii) Review and approve the mix design of concrete of RCC structures submitted by the contractor, and ensure it meet the requirement of the contract specifications;
- (iv) Review geotechnical investigation requirements of the bridges and other structures in the project;
- (v) Review the design of shuttering and scaffolding for its safety during construction of bridges by contractor;
- (vi) Prepare a suitable organization structure for quality control in consultation with Quality Control Engineer;
- (vii) Preparation of quality control management manual for supervision of construction works;
- (viii) Assist Resident Engineer with the certification of the due quantity and quality of all works, based on cross-checking of on-site approvals by the Field assistant Resident Engineers;

3. International Contracts Specialist

Qualification Requirements

Education

Degree in Civil Engineering.

Experience

No less than 15 years' latest experience as contract specialist on road projects; international experience as contract specialist on various road projects executed under FIDIC conditions of contract, should have handled arbitration cases, issuance of variation orders, grant of extension of time, claims and their disposal, etc.

Responsibilities

The duties of the Consultant shall include, but not be limited to:

- (i) Identify the responsibility of the employer, contractor and consultant in terms of the conditions of contract for compliance by each;
- (ii) ensuring submission of the Contractor's insurance policies and providing general advise on these policies, in relation to the Contract requirements;
- (iii) assist team leader in administration of the contract agreement under the Conditions of Contract, subject to certain requirements for the Engineer to seek the approval of the Employer, prior to taking action under specified clauses of the Conditions of Contract;
- (iv) assist the Team Leader in assessing and, where appropriate, making recommendations on applications for extension of time claims for additional payment and other contractual disputes;
- (v) assist in issuing variation orders as appropriate; and
- (vi) advise and assist the Employer in arbitration and litigation cases.

4. International Design Engineer

Education

Civil Engineering Degree with post-graduation in design engineering.

Experience

No less than 10 years' latest experience in design of road pavements and associated facilities. Experience of design and construction of highways. Knowledge of Gosudarstvennyy Standart (GOST) standards will be advantageous. Experience of design of at least 4 highways in developing countries. Experience of construction of cement concrete pavements. Minimum 3 years international experience of cement concrete road projects. Fluency of Russian language will be an advantage.

Responsibilities

The duties of the Consultant shall include, but not limited to:

Design review. The design review includes but not limited to the following:

- (i) establish the schedule, methods and procedures for the review of detailed engineering design and construction drawings of road pavement and associated facilities;
- (ii) consider available data on topography (topographic maps, stereoscopic aerial photography), storm duration, rainfall statistics, top soil characteristics,

- vegetation cover etc. so as to assess the catchments areas and hydraulic parameters for all existing and proposed drainage provisions;
- (iii) ensure that the design finalized is based upon hydraulic and geo-technical studies, cost effectiveness and ease of construction and design of protective works, erosion control measures, snow drift control/snow clearance measures, if required, have been included;
 - (iv) taking into account the current traffic conditions, the consultant will review the design from the road safety point of view to ensure that the design complies with international road safety standards;
 - (v) if any errors are noticed in the detailed design, the consultant will provide a detailed report to the RRF to rectify these errors and supervise the necessary change in the detailed design;
 - (vi) review the submitted documents in accordance with the design standards, criteria and conceptual design provided in the Contract. The Consultant will complete the review within 21 days after submission of the documents to enable finalization and commencement of construction of bridges, culvert to ensure completion of the project in time;
 - (vii) ensure that the Technical Specifications in the Bid Documents and Uzbekistan's Road Construction Standards have been duly taken into account in preparation of the design documents; and
 - (viii) provide periodic status reports of the design and review activities as measured against the approved schedule, identify any problems and difficulties encountered and propose solutions.

During construction:

- (i) Review and approve the detailed construction schedule of road with Team Leader;
- (ii) Establish schedule, methods and procedures for review of the construction of all the items of the bills of quantity (BOQ) by the contractor;
- (iii) Review and approve the concrete mix designs for various sources of cement and aggregate submitted by the contractor, and ensure they meet the requirement of the contract specifications;
- (iv) Review the contractor's road safety plans and provide recommendations for improvement, if any; and
- (v) Assess any value engineering or other changes in design suggested by the contractor.

5. International Material Engineer

Qualification Requirements

Education

Civil Engineering Degree, preferably with post-graduation in geotechnical engineering.

Experience

At least 10 years' latest international experience in construction of roads, quality control for road/bridges/building working in similar capacity large size road construction projects. Experience in review of cement concrete pavement designs, establishing QA/QC procedures, setting up laboratories, mix designs and testing procedures.

Responsibilities

The duties of the Consultant shall include, but not limited to:

- (i) Finalize specifications of various construction materials for pavement construction and standard tests on construction materials as well as on completed works;
- (ii) Assist the Team Leader in establishing effective implementation procedures;
- (iii) Provide certification of the due quantity and quality of all works, based on cross-checking of on-site approvals by the Site Engineers;
- (iv) Supervise the standardization of tests and quality requirement for all geotechnical and material exploration (both soil and rock) for bridges and drainage crossings, high embankment, cut slope susceptible to erosion/ land slide; various laboratory testing of soil samples;
- (v) Review and approve the mix design of asphalt binder and wearing courses submitted by the contractor, and it meet the requirement of the contract specifications.
- (vi) Review geotechnical investigation requirements of the project;
- (vii) Liaise with the Bridge/Structural Engineer on the geotechnical requirements for bridge design
- (viii) Advise in geotechnical matter during construction supervision.

6. International Cement Concrete Pavement Expert

Qualification Requirements

Education

Civil Engineering Degree with post-graduation in pavement engineering.

Experience

At least 12 years' latest international experience in construction of roads, especially cement concrete pavements.

Responsibilities

During construction, the duties of the Consultant shall include, but not limited to:

- (i) Review the contractors' quality assurance systems - supervision and internal control system;
- (ii) Carry out periodic checks of the pavement quality and report to the Employer and ADB;

- (iii) Based on the final detailed design, ensure that the contractor's concrete mix and concrete tensile strengths fulfill the technical specifications of the contract;
- (iv) Suggest international best practices for improving the quality of the pavement including associated facilities such as the pavement joints;
- (v) Conduct seminars and training sessions for RRF staff to create knowledge about cement concrete maintenance procedures

7. International Environmental Specialist

Qualification Requirements

Education

Degree in environmental science or equivalent, with post graduate degree in environmental studies

Experience

No less than 12 years latest experience in management of environment mitigation plan / in establishing procedure for Environmental mitigation Management system in similar size road projects funded by Asian Development Bank/World Bank. International experience as Environmental specialist on road projects. Familiarity with ADB's Safeguards Policy Statement will be advantageous.

Responsibilities

The duties of the Consultant shall include, but not be limited to:

- (i) ensure that the construction methods as proposed by the contractor for carrying out the works are satisfactory, with particular references to the technical requirements of sound environmental standards on the basis of ADB Environment Source Book and World Bank Group's *Environment, Health and Safety Guidelines*,¹⁷ as referenced in ADB Safeguards Policy Statement; inspection of contractors' contraction equipment , safety of the works, property, personal and general public and the recommendations of the initial environmental examination (IEE) and summary IEE;
- (ii) Supervise field work including collection of samples for environment assessment, assess environmental impacts directly caused by construction activities, and indirectly caused by the change in the traffic conditions;
- (iii) Prepare and run a standardized model for monitoring greenhouse gas emissions. Such a model will be prepared in consultation with the Employer and ADB;
- (iv) updating initial environmental examination (IEE) report, if necessary, of implementing this plan as part of project implementation project, and carry out environmental management seminars for contractors and RRF staff;
- (v) at the end of the project, the consultant will carry out a detailed impact assessment, which will contribute to the preparation of the project completion report.

¹⁷ World Bank Group, 2007. *Environmental, Health, and Safety General Guidelines*. Washington, DC.

8. International Resettlement Specialist

Qualification Requirements

Education

Degree in social sciences or equivalent, with post graduate degree in anthropology, sociology, and development studies will be preferred. Familiarity with ADB's Safeguards Policy Statement will be advantageous.

Experience

No less than 15 years' latest experience in resettlement programs for road/infrastructure projects in developing countries. International experience in preparing land acquisition and involuntary resettlement plans, and monitoring the implementation of such plans covering all aspects of potential social impacts.

Responsibilities

The duties of the Consultant shall include, but not be limited to:

- (i) Assess the land acquisition and resettlement plan prepared by the Employer;
- (ii) Reviewing the implementation of the plan in terms of payment of compensation and handling of any grievances. Assist land acquisition and resettlement activities being undertaken by the Government and the local authorities, and include reports on these activities in the monthly progress reports;
- (iii) In consultation with the local government authorities, complete the remaining implementation of the resettlement plan, before the start of construction work;
- (iv) assist RRF and other authorities in the administration of any resettlement activities, including arranging consultation with local people, as well as affected people, preparation and serving of notices to affected people, liaising with affected people and ensuring that any communications and grievances raised by affected people are promptly passed onto the relevant authorities;
- (v) Review detailed social screening and mitigation plan of the employer for implementation;
- (vi) Ensure minimum disruption of local settlement, monitoring impact and reporting to the employer;
- (vii) Ensure no child labor used in the construction contract
- (viii) Identify performance indicators to be monitored during implementation
- (ix) Identify performance indicators to be monitored during implementation, carry out baseline survey on poverty, socio-economic survey, gender development and employment generation
- (x) Collect required data and undertake other relevant surveys
- (xi) Supervise the construction activities such that unintended impacts are minimized;
- (xii) Ensure that the contractor is familiar with the resettlement plan and no deviation from the plan takes place;
- (xiii) In case land is acquired outside the resettlement plan, the consultant will immediately call for halt of construction work, report to the Employer and ADB, and put in place mitigation plan for resolving any potential conflicts or complaints;

- (xiv) Ensure the grievance redressal mechanism is operational and provide regular updates to the RRF and ADB. Any new grievances or complaints will be brought to the attention of the Employer and ADB.
- (xv) Maintain close liaison with the RRF, other relevant agencies, regional authorities, and local stakeholders during the implementation of the resettlement plan;
- (xvi) Prepare detailed social screening and mitigation plans, if necessary, and develop poverty monitoring impact monitoring systems; in case new resettlements impacts are found during implementation, prepare resettlement plans as per ADB Policy on Involuntary Resettlement;
- (xvii) At the end of the project, the consultant will provide a detailed impact assessment of the resettlement activities, which will contribute to the project completion report.

9. International Financial Specialist [International, 1 Person-month]:

Qualification Requirements

Education

Degree in financial/economics or equivalent, preferably with post graduate degree in project financing.

Experience

No less than 15 years' latest experience in project financing for road/infrastructure projects in developing countries.

Responsibilities

The duties of the Consultant shall include, but not be limited to:

- (i) Undertake an financial and economic evaluation of the project implementation by following related updated ADB guidelines on financial evaluation procedures;
- (ii) Evaluate contractor financial capacity during project implementation; and
- (iii) Develop a set of related performance indicators, review payment policy under the contractor contract, and provide training on financial evaluation methodology for the Program Management Unit (PMU).

b. National Consultants

1. Deputy Resident Engineer/National Highway Engineer

Qualifications requirements:

Education:

Degree in Civil engineering post graduate in highways

Experience:

No less than 10 years' experience on road construction projects, with a minimum of 10 years latest experience on similar projects involving reviewing of designs and supervision in pavement rehabilitation road projects, as Resident Engineer/Assistant Resident Engineer/Project Manager. Experience of at least one project funded by ADB/WB or international organizations. Knowledge of GOST standards.

Responsibilities:

The duties of the Consultant shall include, but not be limited to:

- (i) Ensuring that the contractors are granted Possession of site in accordance with the agreed programs;
- (ii) Establish the schedule, methods and procedures in consultation with the Team Leader for the review of detailed engineering design and construction drawings of the civil works, submitted by the contractor.
- (iii) Review the submitted documents in accordance with the design standards, criteria and conceptual design provided in the Contract. Ensure the hydrological and hydraulic studies are carried out in accordance with GOST, and other related standards using in Uzbekistan, and these investigations are carried out for all drainage structures along the road sections
- (iv) Ensure the contractor carry out detailed analysis and design for all embankments of height greater that 6 m, the design of embankments should include the requirements for protection works and traffic safety features.
- (v) Ensure that the sections with geometric deficiencies, if any, are identified and suitable measures for improvement have been suggested for implementation;
- (vi) Ensure that the contractor while designing pavement, specific aspects relevant to hill regions like terrain & topographic conditions, weather conditions, altitude effects etc.
- (vii) Have been considered and suitably incorporated in design so that pavement is able to perform well for the design traffic and service life.
- (viii) Ensure that the contractor while designing pavement has considered the effects of factors like heavy rainfall, frost action, intensive snow and avalanche activity, thermal stresses due to temperature difference in day and night, damage by tracked vehicles during snow clearance operations etc. have been considered along with traffic intensity, its growth, axle loads and design life;
- (ix) Ensure that the Technical Specifications in the Bid Documents have been duly accounted for in the documents submitted by the Contractor.
- (x) Provide periodic status reports of the design and review activities as measured against the approved schedule, identify any problems and difficulties encountered and propose solutions.
- (xi) Liaising with the appropriate authorities to ensure that all affected utility services are promptly relocated;
- (xii) Carrying out checks on the Contractors' setting out and ensuring that the Works are carried out in accordance with the drawings and other design details;
- (xiii) Monitoring the Contractors' laboratory testing and carrying out Independent testing as required;

- (xiv) Ensuring that Works are executed in accordance with all provisions of the Contracts, including those relating to standards of workmanship, other safety requirements and environmental protection requirements;
- (xv) Measuring the works, agreeing and certifying interim and final payment certificates for submission to the employer in consultation with the Team Leader, and assisting the Employer in preparing loan withdrawal documentation to ADB;
- (xvi) Assist Team leader in administrating , assessing and, where appropriate, making recommendations on applications for extension of time, claims for additional payment and other contractual disputes in consultation with the Team Leader;
- (xvii) Maintaining regular estimates of the cost to completion and time to completion for the Contracts;
- (xviii) Maintaining full and detailed permanent site records, which include site correspondence, survey data, quality acceptance data, site diaries, measurement and certification, minutes of meetings and records of all other contractually relevant matters;
- (xix) Reviewing the Contractors' proposed program and technical recourses for routine, emergency and winter maintenance and provide training to RRF staff who will take over quality control and administration of the maintenance;
- (xx) Assist land acquisition and resettlement activities being undertaken by the Government and the provincial authorities, and include reports on these activities in the monthly progress reports, assist RRF and other authorities in the administration of any resettlement activities, including arranging consultation with local people, as well as affected people, preparation and serving of notices to affected people, liaising with affected people and ensuring that any communications and grievances raised by affected people are promptly passed onto the relevant authorities;
- (xxi) Ensure with the assistance of Environmental Specialist that the construction methods as proposed by the contractor for carrying out the works are satisfactory, with particular references to the technical requirements of sound environmental standards on the basis of ADB environmental guidelines for selected infrastructure Development project (Highway & Roads) inspection of contractors' contraction equipment , safety of the works, property, personal and general public and the recommendations of the initial environmental examination (IEE) and summary IEE;
- (xxii) Prepare with the assistance of Environmental Specialist environmental monitoring and annual report of implementing this plan as part of project implementation project implementation report, and carry out environmental management seminars for contractors and RRF staff;
- (xxiii) Monitor the implementation of the health and safety program at camp site including the information and education campaign on sexually-transmitted diseases and HIV/AIDS (human immunodeficiency virus/acquired immunodeficiency syndrome) as required by the civil works contracts.

2. National Bridge/Structure Engineer

Qualification Requirements

Education

Civil Engineering Degree with post-graduation in structural engineering.

Experience

No less than 10 years' latest experience in design and construction of bridges and other structures of road projects. Experience of design of bridges on pile / well foundation and experience of construction of bridges involving RCC/Pre stressed concrete, design standards, technical specifications, establishing QA/QC procedures. Knowledge of GOST standards.

Responsibilities

The duties of the Consultant shall include assisting the Team Leader, International Structural Engineer/Bridge Specialist and Resident Engineer in the following areas, but not be limited to:

Design review. The design review includes but not limited to the following:

- (i) establish the schedule, methods and procedures for the review of detailed engineering design and construction drawings of the bridges, culverts and other structures for the project,
- (ii) consider available data on topography (topographic maps, stereoscopic aerial photography), storm duration, rainfall statistics, top soil characteristics, vegetation cover etc. so as to assess the catchments areas and hydraulic parameters for all existing and proposed drainage provisions.
- (iii) obtain information on high flood level (HFL), low water levels (LWL), discharge velocity etc. from available past records, local inquiries and visible signs, if any, on the structural components and embankments to check the design of the bridges and structures.
- (iv) ensure that the assessment of the load carrying capacity or rating of existing bridges have been carried out to ensure they are safe for the design axle load;
- (v) review the General Arrangement Drawing (GAD) and Alignment Plan showing the salient features of the bridges and structures proposed to be constructed / reconstructed along the road sections, such as alignment, overall length, span arrangement, cross section, deck level, founding level, type of bridge components (superstructure, substructure, foundations, bearings, expansion joint, return walls etc.)
- (vi) ensure that the design finalized is based upon hydraulic and geo-technical studies, cost effectiveness and ease of construction and design of protective works, erosion control measures, snow drift control/snow clearance measures, if required, have been included;
- (vii) review the submitted documents in accordance with the design standards, criteria and conceptual design provided in the Contract. The Consultant will complete the review within 21 days after submission of the documents to enable finalization and commencement of construction of bridges, culvert to ensure completion of the project in time.
- (viii) ensure that the Technical Specifications in the Bid Documents and Uzbekistan road construction standards have been duly taken into account in preparation of the design documents provided by RRF.
- (ix) provide periodic status reports of the design and review activities as measured against the approved schedule, identify any problems and difficulties encountered and propose solutions.

During construction:

- (i) Review and approval of the detail construction schedule of bridges, culverts in consultation with Team Leader;
- (ii) Establish schedule, methods and procedures for review of the construction of bridges, culverts and other structures by the contractor; Review and approve the mix design of concrete of RCC structures submitted by the contractor, and ensure it meet the requirement of the contract specifications;
- (iii) Review geotechnical investigation requirements of the bridges and other structures in the project.
- (iv) Review the design of shuttering and scaffolding for its safety during construction of bridges by contractor;
- (v) Prepare a suitable organization structure for quality control in consultation with Quality engineer expert;
- (vi) Preparation of quality control management manual for supervision of construction works; and
- (vii) Assist Resident Engineer with the certification of the due quantity and quality of all works, based on cross-checking of on-site approvals by the Field assistant Resident Engineers;

3. National Design Engineer**Qualification Requirements****Education**

Civil Engineering Degree with preferable post-graduation in design engineering.

Experience

No less than 10 years' latest experience in design and construction of road projects. Knowledge of GOST standards.

Responsibilities

The duties of the Consultant shall include assisting the Team Leader, International Road Design Engineer/Road Safety Expert and Resident Engineer in the following areas, but not be limited to:

Design review. The design review includes but not limited to the following:

- (i) establish the schedule, methods and procedures for the review of detailed engineering design and construction drawings of road pavement and associated facilities;
- (ii) consider available data on topography (topographic maps, stereoscopic aerial photography), storm duration, rainfall statistics, top soil characteristics, vegetation cover etc. so as to assess the catchments areas and hydraulic parameters for all existing and proposed drainage provisions;
- (iii) ensure that the design finalized is based upon hydraulic and geo-technical studies, cost effectiveness and ease of construction and design of protective

- works, erosion control measures, snow drift control/snow clearance measures, if required, have been included;
- (iv) taking into account the current traffic conditions, the consultant will review the design from the road safety point of view to ensure that the design complies with international road safety standards;
 - (v) if any errors are noticed in the detailed design, the consultant will provide a detailed report to the RRF to rectify these errors and supervise the necessary change in the detailed design;
 - (vi) review the submitted documents in accordance with the design standards, criteria and conceptual design provided in the Contract. The Consultant will complete the review within 21 days after submission of the documents to enable finalization and commencement of construction of bridges, culvert to ensure completion of the project in time;
 - (vii) ensure that the Technical Specifications in the Bid Documents and Uzbekistan's Road Standards have been duly taken into account in preparation of the design documents; and
 - (viii) provide periodic status reports of the design and review activities as measured against the approved schedule, identify any problems and difficulties encountered and propose solutions.

During construction:

- (i) Review and approve the detailed construction schedule of road with Team Leader;
- (ii) Establish schedule, methods and procedures for review of the construction of all the items of the bills of quantity (BOQ) by the contractor;
- (iii) Review and approve the concrete mix designs for various sources of cement and aggregate submitted by the contractor, and ensure they meet the requirement of the contract specifications;
- (iv) Review the contractor's road safety plans and provide recommendations for improvement, if any; and
- (v) Assess any value engineering or other changes in design suggested by the contractor.

4. National Material Engineer (2 persons)

Qualification Requirements

Education

Civil Engineering Degree, preferably with post graduation in geotechnical engineering.

Experience

At Least 7 years' latest experience in construction of roads, quality control for road/bridges/building working in similar road construction projects. Experience in review of pavement designs, establishing QA/QC procedures, setting up laboratories, mix designs and testing procedures. Knowledge of GOST standards.

Responsibilities

The duties of the Consultant shall include assisting the Team Leader, International Materials Engineer and Resident Engineer in the following areas, but not be limited to:

- (i) Finalize specifications of various construction materials for pavement construction and standard tests on construction materials as well as on completed works;
- (ii) Assist the Team Leader in establishing effective implementation procedures;
- (iii) Assist Team Leader/Resident Engineer with the certification of the due quantity and quality of all works, based on cross-checking of on-site approvals by the Field assistant Resident Engineers;
- (iv) Standardization of tests and quality requirement for all geo-technical and material exploration (both soil and rock) for bridges and drainage crossings, high embankment, cut slope susceptible to erosion/ land slide; various laboratory testing of soil samples;
- (v) Review and ensure that the pavement design meets the contract specifications;
- (vi) Review and approve the mix design of asphalt binder and wearing courses submitted by the contractor, and it meet the requirement of the contract specifications;
- (vii) Review geotechnical investigation requirements of the project;
- (viii) Liaise with the Bridge/Structural Engineer on the geotechnical requirements for bridge design; and
- (ix) Advise in geotechnical matter during construction supervision.

5. National Site Inspector (4 persons)

Qualification Requirements

Education

Degree in Civil engineering

Experience

No less than 5 Years' latest experience in construction of roads including site inspection and monitoring; experience of working with international organization involved in construction of infrastructure works. Knowledge of GOST standards.

Responsibilities

The duties of the Consultant shall include, but not be limited to:

- (i) checking Contractor's traffic management and safety plans and ensure these are in compliant with the approved plans;
- (ii) assist the Team Leader (TL) in handing over of the possession of the project area to the contractor;
- (iii) assist the TL in ensuring that the de-mining works have been satisfactory completed;
- (iv) assist the TL in preconstruction activities;
- (v) liaising with the appropriate authorities to ensure that all affected utility services are promptly relocated;

- (vi) monitoring the deployment of equipment and manpower of the contractor;
- (vii) carrying out checks on the Contractors' setting out and ensuring that the Works are carried out in accordance with the drawings and other design details;
- (viii) checking the sources of aggregate and other materials and ensuring that they remain consistent with the concrete mix design;
- (ix) carrying out all site inspections and supervision activities on daily basis;
- (x) monitoring the Contractors' laboratory testing and carrying out Independent testing as required;
- (xi) assist TL / RE in measuring the works, agreeing and certifying interim and final payment certificates for submission to the employer;
- (xii) assist TL / RE in certification of the due quantity and quality of all works, based on cross-checking of on-site approvals; and
- (xiii) assist the TL / RE for compliance of the instructions to the contractor for removal of improper works;

6. National Quantity Surveyor (2 persons)

Qualification Requirements

Education

Civil Engineering Degree with post graduation in geotechnical/materials engineering.

Experience

No less than 5 years' experience in Quality control & assurance for road/bridges/building works. Preferably 3 years experience of working as quality control engineer on road construction projects with assistance from international organizations. Practical background and substantive experience in all phases of quality assurance process, supervision of construction works, laboratory and field testing for pavement materials as per GOST. Sound judgment in applying technical expertise to resolve a range of issues/problems. Knowledge of GOST standards.

2. Responsibilities

The duties of the Consultant shall include assisting the Team Leader, International Cement Concrete Pavement Expert and Resident Engineer in the following areas, but not be limited to:

- (i) study the present process of functioning of quality assurance plan of the contractor;
- (ii) Prepare a suitable organization structure for quality control;
- (iii) Preparation of quality control management manual for supervision of construction works, cost control, laboratory and field testing of materials as per GOST, or related standards applied in Uzbekistan, will be an added advantage;
- (iv) Prepare quality check process for quality control;
- (v) Prepare laboratory set up for quality control;
- (vi) Standardize testing facilities and approval of different materials, inspection of works, conducting quality check tests;
- (vii) Advice on any modifications or additions required to existing standards on testing of materials used by contractor in order to meet project requirements, and prepare quality standards for innovative activities;

- (viii) Standardize compliance of Test procedures as per GOST and Uzbekistan road standards and methods, and conduct authenticity check of all test results;
- (ix) Prepare formats for quality of completed works, maintaining record of tests and project diary, formats of Monthly and Quarterly Quality Control Test Results;
- (x) Advise on the establishment of sample on-site checks of the execution of civil works, and of quality and quantity control, and provide advice on remedial actions as required; and
- (xi) Undertake regular on and off the job training to various level of engineers on quality control.

7. National Cement Concrete Specialist/ Laboratory Engineer

Qualification Requirements

Education

Civil Engineering Degree.

Experience

No less than 5 years' experience in quality checking and measurement. Preferably 3 experiences of working as laboratory engineer on road/bridges/building works. Experience of Uzbekistan's testing procedures and requirements. Knowledge of GOST standards.

Responsibilities

The duties of the Consultant shall include assisting the Team Leader, International Materials Engineer and Resident Engineer in the following areas, but not be limited to:

- (i) Managing the testing laboratory and supervising all tests;
- (ii) Reporting test results efficiently to the Team Leader and to the Employer;
- (iii) Comparing the test results from the contractor's laboratory to check any deficiencies; and
- (iv) Maintaining data base of all test results.

8. National Environmental Safeguard Specialist

Qualification Requirements

Education

Degree in environmental studies.

Experience

No less than 7 years experience in preparation and management of environment mitigation plans Familiarity with ADB's Safeguards Policy Statement will be advantageous.

Responsibilities

The duties of the Consultant shall include assisting the Team Leader, International Environment Specialist and Resident Engineer in the following areas, but not be limited to:

- (i) Assist the international consultant in ensuring that the construction methods as proposed by the contractor for carrying out the works are satisfactory, with particular references to the technical requirements of sound environmental standards on the basis of ADB environmental guidelines for selected infrastructure Development project (Highway & Roads) inspection of contractors' contraction equipment, safety of the works, property, personal and general public and the recommendations of the initial environmental examination (IEE) and summary IEE;
- (ii) Carry out field work including collection of samples for environment assessment, assess environmental impacts directly caused by construction activities, and indirectly caused by the change in the traffic conditions;
- (iii) Collect data for monitoring the greenhouse gas emissions using a standardized model prepared in consultation with the Employer and ADB;
- (iv) Updating initial environmental examination (IEE) report, if necessary, of implementing this plan as part of project implementation project, and carry out environmental management seminars for contractors and RRF staff; and
- (v) At the end of the project, the consultant will carry out a detailed impact assessment, which will contribute to the preparation of the project completion report.

9. National Social Safeguard Specialist

Qualification Requirements

Education

Degree in social sciences including anthropology, sociology, and development studies.

Experience

No less than 7 years' experience in preparing land acquisition and involuntary resettlement plans, and monitoring the implementation of such plans.

Responsibilities

The duties of the Consultant shall include assisting the Team Leader, International Resettlement Specialist and Resident Engineer in the following areas, but not be limited to:

- (i) Assess the land acquisition and resettlement plan prepared by the Employer;
- (ii) Reviewing the implementation of the plan in terms of payment of compensation and handling of any grievances. Assist land acquisition and resettlement activities being undertaken by the Government and the local authorities, and include reports on these activities in the monthly progress reports;
- (iii) In consultation with the local government authorities, complete the remaining implementation of the resettlement plan, before the start of construction work;
- (iv) Assist RRF and other authorities in the administration of any resettlement activities, including arranging consultation with local people, as well as affected

- people, preparation and serving of notices to affected people, liaising with affected people and ensuring that any communications and grievances raised by affected people are promptly passed onto the relevant authorities;
- (v) Review detailed social screening and mitigation plan of the employer for implementation;
 - (vi) Ensure minimum disruption of local settlement, monitoring impact and reporting to the employer;
 - (vii) Ensure no child labor used in the construction contract;
 - (viii) Identify performance indicators to be monitored during implementation;
 - (ix) Identify performance indicators to be monitored during implementation, carry out baseline survey on poverty, socio-economic survey, gender development and employment generation;
 - (x) Collect required data and undertake other relevant surveys;
 - (xi) Supervise the construction activities such that unintended impacts are minimized;
 - (xii) Ensure that the contractor is familiar with the resettlement plan and no deviation from the plan takes place;
 - (xiii) In case land is acquired outside the resettlement plan, the consultant will immediately call for halt of construction work, report to the Employer and ADB, and put in place mitigation plan for resolving any potential conflicts or complaints;
 - (xiv) Ensure the grievance redressal mechanism is operational and provide regular updates to the RRF and ADB. Any new grievances or complaints will be brought to the attention of the Employer and ADB;
 - (xv) Maintain close liaison with the RRF, other relevant agencies, regional authorities, and local stakeholders during the implementation of the resettlement plan;
 - (xvi) Prepare detailed social screening and mitigation plans, if necessary, and develop poverty monitoring impact monitoring systems; in case new resettlements impacts are found during implementation, prepare resettlement plans as per ADB Policy on Involuntary Resettlement; and
 - (xvii) At the end of the project, the consultant will provide a detailed impact assessment of the resettlement activities, which will contribute to the project completion report.

10. National Drainage/Culvert Engineer

Education

Civil Engineering Degree

Experience

At least 6 years' latest national experience in construction of roads, especially in drainage construction supervision. Knowledge of GOST standards.

Responsibilities

The duties of the Consultant shall include, but not limited to:

- (i) before the start of the construction, the consultant will review the detailed design and check the adequacy of the drainage facilities provided;

- (ii) during construction, the consultant will supervise the construction of all drainage facilities ensuring that they meet the technical specifications and requirements of the local geology;
- (iii) changes in the design suggested by the contractor related to the drainage facilities will be reviewed by the consultant and specific advice provided to the Employer;
- (iv) since the project road passes through agriculture areas, the consultant will ensure that the construction of the drainage is carried out without affecting the existing agriculture land; and
- (v) innovative ideas for drainage construction should be discussed with the Employer and the contractor, and then implemented.

11. National Road Safety Expert

Education

Civil Engineering Degree.

Experience

At least 6 years' latest national experience in road construction projects including traffic engineering. Knowledge of GOST standards.

Responsibilities

The duties of the Consultant shall include, but not limited to:

- (i) taking into account the current traffic conditions, the consultant will review the design from the road safety point of view to ensure that the design complies with international road safety standards;
- (ii) if any errors are noticed in the detailed design, the consultant will provide a detailed report to the RRF to rectify these errors and supervise the necessary change in the detailed design;
- (iii) ensure that the Technical Specifications in the Bid Documents and Uzbekistan's Road Construction Standards have been duly taken into account in preparation of the design documents; and
- (iv) provide periodic status reports of the design and review activities as measured against the approved schedule, identify any problems and difficulties encountered and propose solutions.

12. National Law Expert

Education

Law Degree or Construction Law Degree

Experience

At least 6 years' latest national experience in related construction projects including road construction project. Knowledge of national legislation documents.

Responsibilities

The duties of the Consultant shall include, but not limited to:

- (i) prepare and collect current applicable national legislation documents such as national law, regulations, Presidential Decree, Cabinet of Ministries Resolutions etc., which are related to the project;
- (ii) assist the team on understanding any procedures required as per contract and in line with the national legislation documents;
- (iii) supervise contractor during implementation corresponding to the civil works contract;
- (iv) assist RRF's in preparing minutes of meeting related to project implementation; and
- (v) advise on customs clearance procedures and check the contractor's mobilization schedule on importing of equipment and material for the project.

13. National Electric Specialist

Education

Electricity Degree.

Experience

At least 6 years' latest national experience in construction projects, especially in construction or reinstallation of low/high-voltage power cable lines. Knowledge of GOST standards.

Responsibilities

The duties of the Consultant shall include, but not limited to:

- (i) review the technical specifications, national standards, drawings and bill of quantities (BoQ) related to reinstallation of low/high-voltage power cable lines including underground duck cable line, such as works on installation and electric welding are carried out according to requirements KMK 3.06.08-97 and VSN 006-89;
- (ii) check the contractor safety plan on reinstallation of low/high-voltage power cable lines;
- (iii) check contractor's work plan on reinstallation of low/high-voltage power cable lines;
- (iv) provide field supervision, ensuring good working order, trouble-free and reliable operation of devices and equipment in installation of new electricity equipment and switchboards. The works shall be carried out within the existing right of way unless otherwise specified in the contractor's contract;
- (v) in the areas close to high voltage electric lines the Contractor must take into account any restrictions related to the use of electric detonators;
- (vi) check material of the works and calculate volume of works; and
- (vii) check criteria on final test and acceptance of works as per contract.

14. National Telecommunications Specialist

Education

Electricity Degree.

Experience

At least 6 years' latest national experience in construction projects, especially in construction or reinstallation of Uzbekistan magisterial phone-cable and fiber optic cable line. Knowledge of GOST standards.

Responsibilities

The duties of the Consultant shall include, but not limited to:

- (i) review general standards such as GOST 21.603-80 (Communication and signaling), KMK 3.06.08-97 and VSN 006-89 (Works of optical fiber welding on disassembling);
- (ii) review procedure of reinstallation based on OST standards (reinstallations of communications facilities);
- (iii) review the technical specifications, related national standards, drawings and bill of quantities (BoQ) related to reinstallation of Uzbekistan magisterial phone-cable and fiber optic cable line;
- (iv) check the contractor safety plan on reinstallation of Uzbekistan magisterial phone-cable and fiber optic cable line;
- (v) provide field supervision of installation works, ensuring good working order, trouble-free and reliable operation of devices and equipment, The works shall be carried out within the existing right of way unless otherwise specified in the contractor's contract;
- (vi) check contractor's work plan on reinstallation of Uzbekistan magisterial phone-cable and fiber optic cable line;
- (vii) check material of the works and calculate volume of works; and
- (viii) check criteria on final test and acceptance of works as per contract.

15. National Gas Pipeline Specialist

Education

Mechanical Degree or related studies.

Experience

At least 6 years' latest national experience in construction projects, especially in construction or reinstallation of high pressure gas, middle pressure gas and gas pipe line for distribution. Knowledge of GOST standards.

Responsibilities

The duties of the Consultant shall include, but not limited to:

- (i) review standard for re-installation such as GOST, RST Uz (such as RST Uz 735-96: Gas supply. Outdoor Gas Pipelines), and KMK, (such as KMK 3.05.02-96-Gas supply. Management, production and taking over of works);
- (ii) review the technical specifications, national standards, drawings and bill of quantities (BoQ) related to reinstallation of high pressure gas, middle pressure gas and gas pipe line for distribution in Uzbekistan;
- (iii) check the contractor safety plan on reinstallation of high pressure gas, middle pressure gas and gas pipe line for distribution;
- (iv) check schedule of the affected services;
- (v) check contractor's work plan on reinstallation of high pressure gas, middle pressure gas and gas pipe line for distribution;
- (vi) provide field supervision of installation works, ensuring good working order, trouble-free and reliable operation of devices and equipment, The works shall be carried out within the existing right of way unless otherwise specified in the contractor's contract;
- (vii) check anticorrosive protection of the pipelines (KMK 2.05.06-97, KMK 3.06.08-97, VSN 008-88);
- (viii) check material of the installation and calculate volume of works including reinforced concrete products; and
- (ix) check criteria on final test and acceptance of works, devices, and equipment as per contract and in line with KMK 3.05.02-96 (Gas supply and taking over of works).

c. International Procurement Specialist

171. **Objective and Purpose of the Assignment.** The Republic of Uzbekistan has received a loan from the Asian Development Bank (ADB) in the amount of \$150 million for the Second CAREC Corridor 2 Road Investment Program – Project 3. Part of the loan proceeds will be applied for supporting the program management unit (PMU) and advising the Republican Road Fund—the executing agency (EA)—on procurement and recruitment matters. For this purpose, one international (individual) Procurement Specialist is required to ensure that all documents, such as bidding documents, request for proposals documents, and bid evaluation reports; and activities such as public opening of bids and bid evaluations are conducted in compliance with the project's Loan Agreement, ADB's Procurement Guidelines, ADB's Guidelines on the Use of Consultants, and applicable Uzbekistan Law.

172. **Scope of Work.** The International Procurement Specialist will help ensure that all procurement (civil works and goods) and recruitment of consultants are carried out in accordance with the project's loan agreement, ADB's Procurement Guidelines, ADB's Guidelines on the Use of Consultants, and applicable Uzbekistan law/regulations including presidential resolutions.

173. **Detailed Tasks and/or Expected Output.** The tasks of International Procurement Specialist will include but not be limited to the following:

- (i) Update procurement plan as required and agreed by the Uzbekistan government and ADB;
- (ii) Prepare bidding documents and request for proposals documents;
- (iii) Propose qualification criteria and evaluation method for contractors and suppliers, and shortlisting and evaluation criteria of consultants' selection in line with the documents/guidelines mentioned above;

- (iv) Prepare invitation for bid and request for proposals;
- (v) Prepare draft letters concerning procurement required to be signed by the EA;
- (vi) Assist during opening and evaluation of bids and proposals and finalizing contracts;
- (vii) Prepare bid evaluation report, technical and combined evaluation for consultants' report, draft contract, and publication of award in acceptable format;
- (i) Participate in the pre-bid meeting, explain bidding documents and draft responses to inquiries submitted by potential bidders;
- (ii) Prepare additional particular technical specifications and terms of reference for consultants, if needed;
- (iii) Coordinate with other experts and engineers to review Bill of Quantities;
- (iv) Record and archive complaints on procurement, and advise the EA for debriefing;
- (v) Keep all procurement records in proper order, acceptable to the EA and the ADB;
- (vi) Assist ADB staff during mission and or procurement post-review missions; and
- (vii) Provide training on procurement documentation to the EA and PMU staff.

174. **Qualification Requirements.** The International Procurement Specialist should have a degree in civil engineering or related studies, preferably with a post-graduate degree. S/he should have 12 years latest international experience on procurement (e.g., preparation of bidding documents, evaluation reports, contracts, etc.) in various road projects executed under FIDIC conditions of contract. Regional/country experience is desired.

175. **Deliverables.** The International Procurement Specialist will submit to EA and ADB a list of reports prepared during procurement period such as an updated procurement plan, draft bidding document, technical specifications, bill of quantity, improved terms of reference, minutes of meeting, bid evaluation report, letters, proposal evaluation report, each document addressed to ADB concerning tendering and request for no-objection and other related documents. All reports concerning procurement should also be available in word file and submitted/copied to PMU computer or data base.

176. **Schedule.** The consulting services will require a total of 12 person-month inputs within 15 calendar months.

Schedule Type	Intermittent
Person-month Inputs	Home Office: 2
	Field: 10

177. **Facilities/Support Provided by the EA.** The PMU will provide the following services and facilities for the International Procurement Specialist: (i) furnished air-conditioned office space with international telephone, fax and email facilities in Tashkent office, and (ii) support to arrange meetings with related design institute and governmental agencies if required.

d. International Contract Management Specialist

178. **Objective and Purpose of the Assignment.** The Republic of Uzbekistan has received a loan from the Asian Development Bank (ADB) in the amount of \$150 million for the Second CAREC Corridor 2 Road Investment Program – Project 3. Part of the loan proceeds will be applied for supporting the program management unit (PMU) and advising the Republican Road Fund—the executing agency (EA)—on contract administration matters. For this purpose, one international (individual) Contract Management Specialist is required to ensure that all contracts

under the project are implemented in accordance with the signed Contract Agreement and Minutes, applicable Laws, and FIDIC Conditions of Contract.

179. **Scope of Work.** The International Contract Management Specialist will help ensure that all contracts under the project are carried out in accordance with the signed Contract Agreement and Minutes, applicable Laws, and FIDIC Conditions of Contract.

180. **Detailed Tasks and/or Expected Output.** The tasks of International Contract Management Specialist will include but not be limited to the following:

- (i) Collect current applicable national legislation documents such as national law, regulations (such as Uzbekistan labor laws, rates of wages and conditions of labor, and working hours), Presidential Decree, Cabinet of Ministries Resolutions, including customs clearance procedures which are related to the project;
- (ii) Review all contract documents under the project;
- (iii) Monitor contract implementation schedules;
- (iv) Check the contractor’s mobilization schedule on importing of equipment, spare-parts, and construction materials for the project;
- (v) Provide recommendations to ensure timely completion of all contracts;
- (vi) Review contractors’ and consultants’ billings/claims and variation orders;
- (vii) Facilitate resolution of disputes and arbitration case, if any;
- (viii) Assist the EA in preparing minutes of meeting related to contract implementation in line with Contract Agreement, applicable Laws, and FIDIC Conditions of Contract;
- (ix) Prepare guidelines and manuals;
- (x) Provide training on contract management and documentation systems to the EA’s and PMU’s staff; and
- (xi) Assist in developing modern computerized technology for project management and contract management systems.

181. **Qualification Requirements.** The International Contract Management Specialist should have a degree in civil engineering or construction law. S/he should have 15 years latest international experience as contract management specialist on road projects executed under FIDIC conditions of contract (e.g. handling arbitration cases, issuance of variation orders, grant of extension of time, claims and their disposal, etc.). Regional/country experience is desired.

182. **Deliverables.** The International Contract Management Specialist will prepare and submit regular progress reports and a final report, two copies in English and three copies in Russian to the EA and two copies in English to ADB. All reports should also be submitted by email.

183. **Schedule.** The consulting services will require a total of 18 person-month inputs (mobilization schedule will be in line with the civil works implementation plan).

Schedule Type	Intermittent
Person-month Inputs	Home Office: 3
	Field: 15

184. **Facilities/Support Provided by the EA.** The PMU will provide the following services and facilities for the International Contract Management Specialist: (i) furnished air-conditioned office space with international telephone, fax and email facilities in Tashkent office, and

(ii) support to arrange meetings with related design institute and governmental agencies if required.

185. Furnished-office including office equipment in project site will be provided by the civil works contractor.

e. National Environment Specialist

186. **Objective and Purpose of the Assignment.** The Republic of Uzbekistan has received a loan from the Asian Development Bank (ADB) in the amount of \$150 million for the Second CAREC Corridor 2 Road Investment Program – Project 3. Part of the loan proceeds will be applied for supporting the program management unit (PMU) and advising the Republican Road Fund—the executing agency (EA)—on implementation and monitoring of environment safeguard actions. For this purpose, one national (individual) Environment Specialist is required to ensure that the environment safeguard actions are carried out in compliance with the procedures agreed with ADB.

187. **Scope of Work.** The National Environment Specialist will help the PMU address the environmental issues during project implementation on a timely basis, advise the EA on implementation and monitoring of environmental mitigation actions under all ongoing projects of the Second CAREC Corridor 2 Road Investment Program, and ensure that the environmental safeguard actions are carried out in compliance with the procedures agreed with ADB as well as in compliance with the Government’s environmental requirement. The consultant will also prepare environmental monitoring report in biannual basis.

188. **Detailed Tasks and/or Expected Output.** The tasks of National Environment Specialist will include but not be limited to the following:

- (i) Manage and coordinate the preparation, updating, implementation and monitoring of the initial environmental examination (IEE)/environmental impact assessment (EIA) as required by the framework financing agreement (FFA) and loan agreement;
- (ii) Ensure that all environmental requirement are incorporated in the bidding document for contractor and engineer (supervision consultant), and also ensure that the contract for contractor and engineer include the environmental requirement as stated in the IEE/EIA and its EMP;
- (iii) Set up internal monitoring system on the project’s environmental issues and requirements;
- (iv) Manage project information, particularly those related to environment safeguards;
- (v) Assess and prepare capacity building program on environmental issues;
- (vi) Conduct internal and external coordination with relevant parties in environment requirements of the project;
- (vii) Provide advice/recommendation to the EA on environment problems and/or requirements;
- (viii) Work closely with Engineer (Supervision consultant) to approve Contractor’s Environmental Site Management Plan;
- (ix) Provide independent monitoring and evaluation on the contractors’ compliance to environmental management plan;
- (x) Prepare biannual environmental monitoring report for submission to ADB as required by the FFA and loan agreement;

- (xi) Take a role as part of safeguard grievance redress mechanism team for resolving complaints received by the contractor, supervision consultant and also RRF;
- (xii) Engage with relevant civil society organizations interested in the project implementation;
- (xiii) Ensure that the construction methods as proposed by the contractor for carrying out the works are satisfactory, with particular references to the technical requirements of sound environmental standards on the basis of ADB Environmental Guidelines for Selected Infrastructure Development Project (Highway & Roads);
- (xiv) Ensure that required permits from local and state Committee for Nature Protection are obtain on the required time;
- (xv) Review environmental monitoring implementing EMP through Environmental Site Management Plan as part of project implementation report issued by the Engineering (Construction Supervision Consultant);
- (xvi) Assist in finding mitigation measures if unexpected impacts occur during the project implementation;
- (xvii) Assist the Engineering and Construction Supervision Consultant in carrying out environmental management seminars for contractors, RRF and State Committee for Natural Protection staff at project site;
- (xviii) Identify, on the basis of the project framework developed during project processing, performance indicators to be monitored during the implementation of the Project which are related to environmental issues;
- (xix) Provide valuable recommendations in case there will be a major changes of road design; and
- (xx) Prepare and submit the required reports both in English and Russian.

189. **Qualification Requirements.** The National Environment Specialist should have a degree in environmental studies and/or related fields. S/he should have 7 years experience in preparing and managing environmental mitigation plans. Familiarity with ADB’s Safeguards Policy Statement will be advantageous.

190. **Deliverables.** The National Environment Specialist will prepare and submit biannual (semi annual) environmental monitoring report on behalf of PMU, two copies in English and three copies in Russian to the EA and two copies in English to ADB. All reports should also be submitted electronically by email.

191. **Schedule.** The consulting services will require a total of 12 person-month inputs (mobilization schedule will be in line with the civil works implementation plan).

Schedule Type	Intermittent
Person-month Inputs	Home Office: 6
	Field: 6

192. **Facilities/Support Provided by the EA.** The PMU will provide the following services and facilities for the International Contract Management Specialist: (i) furnished air-conditioned office space with international telephone, fax and email facilities in Tashkent office, and (ii) support to arrange meetings with related design institute and governmental agencies if required.

193. Furnished-office including office equipment in project site will be provided by the civil works contractor.

g. National Social Development and Resettlement Specialist

194. **Objective and Purpose of the Assignment.** The Republic of Uzbekistan has received a loan from the Asian Development Bank (ADB) in the amount of \$150 million for the Second CAREC Corridor 2 Road Investment Program – Project 3. Part of the loan proceeds will be applied for supporting the program management unit (PMU) and advising the Republican Road Fund—the executing agency (EA)—on implementation and monitoring of social development and resettlement safeguard actions. For this purpose, one national (individual) Social Development and Resettlement Specialist is required to ensure that the social development and resettlement safeguard actions are carried out in compliance with the procedures agreed with ADB.

195. **Scope of Work.** The National Social Development and Resettlement Specialist will help the PMU conduct actions on social development/resettlement issues on a timely basis, advise the EA on implementation and monitoring of social safeguard actions under all ongoing projects of the Second CAREC Corridor 2 Road Investment Program, and ensure that the social safeguard actions are carried out in compliance with the procedures agreed with ADB.

196. **Detailed Tasks and/or Expected Output.** The tasks of National Social Development and Resettlement Specialist will include but not be limited to the following:

- (i) Manage and coordinate the preparation, updating, implementation and monitoring of the approved Land Acquisition and Resettlement Plan/s (LARP/s) and/or Ethnic Minority Development Plan (EMDP/s), if any, as required by the framework financing agreement (FFA) and loan agreement;
- (ii) Set up internal monitoring system on the project's social and resettlement issues and requirements;
- (iii) Select and review an External Monitoring Agency (EMA) if required by EA;
- (iv) Manage project information, particularly those related to social safeguards;
- (v) Assess and prepare capacity building program on social issues;
- (vi) Conduct internal and external coordination with relevant parties in social/resettlement activities/ requirements of the project;
- (vii) Set up redress and grievance mechanism for project activities;
- (viii) Provide advice/recommendation to the EA on social safeguard/ resettlement problems/requirements;
- (ix) Redress or follow up actions based on findings and requirements of EMA reports;
- (x) Provide independent monitoring on the contractors' compliance to (a) core labor standards, labor laws and incorporate applicable workplace occupational safety norms; (b) no differentiation of payment between men and women for work of equal value; (c) no child labor in the construction and maintenance activities; (d) no forced or compulsory labor; (e) discrimination in respect of employment; (f) freedom of association; (g) to the extent possible, maximize employment of local poor and disadvantaged persons for project construction purposes, provided that the requirements for job and efficiency are adequately met; and (h) land acquisition and resettlement framework and plans;
- (xi) Engage with relevant civil society organizations interested in the project implementation;
- (xii) Review detailed social screening and mitigation plans, and poverty monitoring impact monitoring systems, if it is issued by the Engineering and Construction Supervision Consultant;

- (xiii) Where a project requires the preparation of a social safeguards compliance review/audit (including corrective action, as needed), the same shall be prepared as part of the project due diligence;
- (xiv) In case resettlements impacts are found during implementation, review the resettlement plans issued by the Engineering and Construction Supervision Consultant as per *ADB Policy on Involuntary Resettlement*;
- (xv) Ensure minimum disruption to the local settlements by monitoring contractors' work program, including monitoring of the impacts of construction work on local settlements, and by reporting impact monitoring to the EA;
- (xvi) Ensure that no child labor is used for the execution of the civil works contracts as required by the civil works contracts;
- (xvii) Monitor the implementation of the health and safety program at camp site including the information and education campaign on sexually-transmitted diseases and HIV/AIDS (human immunodeficiency virus/acquired immunodeficiency syndrome) as required by the civil works contracts;
- (xviii) Make sure that the Engineering and Construction Supervision Consultant carry out a baseline survey on performance indicators including on poverty, socioeconomic survey, gender development, employment–generation amongst others to refugees and ex-combatants, and other social and economic development activities;
- (xix) Provide valuable recommendations in case there will be a major changes of road design; and
- (xx) Prepare and submit required reports in both English and Russian.

197. **Qualification Requirements.** National Social Development and Resettlement Specialist should have a degree in in social sciences including anthropology, sociology, development studies, and other related fields. S/he should have 7 years experience in preparing land acquisition and resettlement plans, and monitoring the implementation of such plans. Familiarity with ADB’s Safeguards Policy Statement will be advantageous.

198. **Deliverables.** The National Social Development and Resettlement Specialist will prepare and submit regular progress reports and a final report, two copies in English and three copies in Russian to the EA and two copies in English to ADB. All reports should also be submitted electronically by email.

199. **Schedule.** The consulting services will require a total of 12 person-month inputs (mobilization schedule will be in line with the civil works implementation plan).

Schedule Type	Intermittent
Person-month Inputs	Home Office: 6
	Field: 6

200. **Facilities/Support Provided by the EA.** The The PMU will provide the following services and facilities for the International Contract Management Specialist: (i) furnished air-conditioned office space with international telephone, fax and email facilities in Tashkent office, and (ii) support to arrange meetings with related design institute and governmental agencies if required.

201. Furnished-office including office equipment in project site will be provided by the civil works contractor.

h. Road Asset Management System (RAMS) Capacity Development SPECIALIST

202. The Republican Road Fund of Uzbekistan (Road Fund) has received a loan from the Asian Development Bank (ADB) in the amount of \$150 million for Second CAREC Corridor 2 Road Investment Program – Project 3. Part of the loan proceeds will be applied for continuing the capacity development within Uzavtoyul and related agencies in the Road Asset Management Systems (RAMS) implementation. The consulting project includes payments for consultant's services and good procurement.

203. The RAMS Capacity Development Project includes the following components:

- Component 1: Procurement of Equipment. Provision of goods and consultant's services for the development and implementation of a road asset management system.
- Component 2: Project Management and Implementation. (i) Provision of consulting services, training, and audit to support project coordination, implementation and management; and (ii) provision of consultants' services for the development and implementation of a communication strategy for the Project activities.

204. Uzavtoyul is responsible for the administration and management of public roads in Uzbekistan. In 2010, under Loan 2403 – CAREC Regional Road Project, ADB provided technical assistance to prepare a framework for RAMS in the country. This framework was implemented in 2014 under a subsequent Loan 2635 – CAREC Corridor 2 Road Investment Program-Project 1. As part of this implementation, a RAMS system was developed for the international corridors network of the country covering a length of 2729km. Various surveys were carried out in 2013-2014 including roughness using roughometer, manual visual condition surveys, sample spring and autumn inspections, bridge inspections, deflection surveys, axle load surveys, origin-destination surveys, and traffic counts. In 2014, the RAMS system developed covers Bridge Management Systems (BMS), Pavement Management Systems (PMS) and Routine Maintenance Management (RMMS).

205. The proposed consulting project for RAMS Capacity Development will continue the implementation of the RAMS system and mainstream it by 2016. The road network system in Uzbekistan is summarized in Table 1.

Table 1: Summary Road Network

Road Classification	Length (kilometer)	Proportion (%)
Common use roads	42,654	23.2
- <i>International roads</i>	3,979	
- <i>State roads</i>	14,069	
- <i>local roads</i>	24,606	
Rural and urban roads	141,031	76.8
- <i>streets of cities and other populated localities</i>	61,664	
- <i>rural roads</i>	79,367	
Total	183,685	

206. Uzavtoyul and the Road Fund realize that the needed expertise for supervising road inventory data collection in the field, the development of specification for road network databank software, evaluating the network data, and other services is not available within Uzavtoyul. In

addition, Uzavtoyul does not have the required specialists to manage and carry out visual bridge condition rating inspections, non-destructive testing, reversed structural analysis and other Bridge Management tasks. The Road Fund seeks to engage the services of an individual internationally-recruited consultant to fulfill this role. Specifically, the consultant is expected to provide the technical expertise as described below.

207. **Objectives.** The objectives of the consultants' services are to:

- (i) Review the current road network referencing system to determine if improvements are needed;
- (ii) Supervise the collection and update of road inventory data and development of options to ensure sustainability for the collection and evaluation of road network data;
- (iii) Use road network databank software developed under the previous technical assistance and assist Uzavtoyul in running it;
- (iv) Develop a standardized template for the preparation of annual and multi-annual reports on road network monitoring, planning and investment requirements;
- (v) Evaluate the maintenance and rehabilitation needs of the road network;
- (vi) Provide training on road asset management issues; and
- (vii) Review road maintenance planning and financing for international road corridors in Uzbekistan over a period of 5 years (2006-2010), estimate financing needs and identify financing options of road maintenance programs based on international good practices.

208. **Description of Services**

Component 1: Procurement of equipment. Provision of goods and consultant's services for the development and implementation of a road asset management system.

Task 1 – Equipment Procurement

- The consultant shall assist the Road Fund in procuring:
 - (i) Vehicle mounted road survey equipment, which includes automatic road condition monitoring equipment;
 - (ii) Falling Weight Deflectometers (FWD) used to obtain deflection data; and
 - (iii) Non-destructive bridge investigation equipment for Bridge Management Systems.
- The consultant shall be responsible for the development of the technical specifications of the equipment and advice on procurement and installation options. The consultant will also advise the Uzavtoyul about the level of support and maintenance required for the equipment. The Consultant will assist Uzavtoyul on the entire cycle of the procurement process, e.g., request for expression of interest, preparation of bidding documents, bid evaluation, etc.

Task 2 – Road Inventory

- The consultant should agree with Uzavtoyul the road referencing system to be used for data collection. To this end, the consultant shall review the current referencing system being used in the Uzbekistan and propose improvements if needed.

- The consultant should define the form to be used for the collection of road inventory data. The portions of the core road network that will be included in this data collection include all international road corridors (4979 km).
- The consultant should supervise the collection of road inventory data undertaken by local engineers of Uzavtoyul. To this end, the consultant will travel with the data collection team to the field during data collection (3979 kms).
- The consultant should put in place a system for implementing network level surveys, covering the whole network at regular intervals (every 2-3 years), at moderate cost with higher speed. Such surveys could be carried out by multifunction automatic survey vehicles type.
- The consultant shall support Uzavtoyul staff in the calibration of the equipment as well as validation before it can be approved for data collection. The consultant will monitor all equipment validation and calibration and review the calibration and validation reports. The collection and processing procedures should be consistent with the systems currently in use or under development by Uzavtoyul.
- The Consultant shall work actively to integrate the data collected with existing road network inventory data and develop options and determine the budget needed to ensure sustainability for the collection and evaluation of road network data in the future.
- The Consultant shall evaluate the data collected and disseminate the findings as widely as possible within the Uzavtoyul. The evaluation shall determine the rehabilitation and maintenance needs of the network and the consequences of different budget scenarios. The evaluation shall at least include a detailed analysis of the findings and present recommendations (investment and policy) for future action by Uzavtoyul. The evaluation could be based on the Road Network Evaluation tool (RONET) tool to assess the performance of road maintenance and rehabilitation policies and the importance of the road sector for the economy.
- The Consultant shall develop formal data collection procedures for the collection of the road network data for future collection by the Uzavtoyul. These procedures shall cover budget, survey planning, scheduling, staffing, liaison, equipment, data definition, network referencing, field collection, measurement techniques, safety, and data management. The Consultant shall also develop formal Data Quality Assurance Procedures for validation of all road data to be used by the Uzavtoyul. These procedures will be used by the Client to Quality Assure future road network data.
- The consultant shall provide training in road asset management concepts and procedures. Training will be provided at least on data collection procedures, economic evaluation of road investments principles, network evaluation options, and use of network evaluation models, e.g., RONET and Highway Development and Management Model (HDM-4).

Task 3: Development of specifications for road network databank software and advice for the procurement of road network databank software

- The Consultant should undertake a capacity assessment of Uzavtoyul (including central, regional and district level units) for further development of a Road Asset Management System based on the existing Road Passport and prior experience of the Uzavtoyul in the development of a Road Management System.
- Based on the assessment, the consultant should propose preferably commercial off-the-shelf Road Asset Management System (RAMS) software, together with appropriate hardware in form of a server and terminals, suitable for the needs of

the Uzavtoyul. The Consultant should give full details of any licensing options, including per user, per seat, or site licenses. The language of the interface (all menus, screens, reports, and documentation) shall be Russian. If a suitable commercial off-the-shelf system is not available, the Consultant will define an action plan and write the terms of reference for the development of customized software.

- The consultant should review options for the optimal database management system proposed. The Database Server is expected to use a Windows Server operating system, however other Database Management Systems will be considered if they can be shown to have clear technical or cost advantages over the preferred system. The consultant may want review several options, including the support of hand-held field data collection devices, connection to the Client's Wide Area Network, or via the Internet, integration with Geographic Information System (GIS). The consultant shall review if there is a need to provide an interface to allow information from the RAMS to be made available to other applications, including presentation on Client websites and other institutions (Ministry of Finance, etc.). Access should be discussed and agreed with Uzavtoyul.
- The consultant should review options for possible interfaces with other evaluation tools. At the outset, it is proposed that the RAMS will have an interface with HDM-4 and RONET but could be possibly linked with other evaluation tools. The interface would serve the following functions:
 - Perform analytical and reporting functions of a traditional pavement management system;
 - Perform needs analysis;
 - Prepare multi-year programs of periodic maintenance, rehabilitation, betterment and upgrading works on paved roads (both district and commune);
 - Identify types, timings and estimates of works for specific road sections on the entire network;
 - Select and prioritize the works through the life-cycle analysis of road deterioration, maintenance interventions and costs; and
 - Prioritize by benefit to cost ratio, economic internal rate of return, net present value (NPV) and/or additional criteria for commune roads.
- The consultant shall be responsible for the development of the technical specifications of the software and advice on procurement and installation options. The consultant will also advise the Uzavtoyul about the level of support and maintenance required for the application. The Consultant will assist Uzavtoyul on the entire cycle of the procurement process, e.g., request for expression of interest, preparation of bidding documents, bid evaluation, etc.

Task 4: Development of standardized templates on the preparation of annual and multi-annual reports on road network monitoring, planning and investment requirements

- The consultant shall develop a standardized approach/template on the preparation of annual and multi-annual reports on road network monitoring, planning and investment requirements and required maintenance spending, and the effect of under spending on increased transport costs. The consultant shall agree with Uzavtoyul the structure and contents of the annual report that will be prepared by Uzavtoyul in future years.

Task 4: Assessment of financing needs and options for road maintenance activities

- The consultant shall review road maintenance planning and financing over a period of 5 years (2006-2010) for the international road corridors in the country, estimate financing needs and identify financing options of road maintenance programs based on international good practice.

209. **Qualification Requirements.** It is expected that the consultant has one of the following expertise:

- A higher degree in engineer or transport economics with 15 years of work experience in RAMS, maintenance planning and execution of works.
- It would be beneficial if the Consultant can demonstrate good knowledge of the road sector in the Former Soviet Union, and Central Asia in particular. It would be a benefit if the consultant can communicate effectively in Russian language and has some knowledge of Uzbekistan.
- It is anticipated that local staff from the Uzavtoyul will play a significant role in working with the consultant.

210. **Reporting Requirements and Implementation Arrangements.** The executing agency for this assignment will be Uzavtoyul. The Consultant will receive access to all relevant reports, records and data held by the Uzavtoyul, which are required to undertake the assignment.

211. **Translation/interpretation services:** The Consultant is required to provide all necessary support personnel, including interpreters and translators as necessary. The Consultant shall engage a full-time translator (English-Russian) during the entire time of his stay who will be accompanying the consultant during meetings, field trips and provide translation services as needed. The cost of the full-time translator/interpreter is included in the contract.

212. **Office space/computer:** The Consultant will be required to bring his/her personal computer. The consultant will be provided with office space by Uzavtoyul to work with the Uzavtoyul staff. Incremental costs related to telephone link, internet connection, and other office supplies is included as a lump sum (miscellaneous) as presented below.

213. **Logistical arrangements and reporting:** Uzavtoyul will be responsible to support and assist the consultant in the arrangement of travel within Uzbekistan related to the data collection and analysis. The consultant will report directly to the Deputy Chairman of Uzavtoyul. As requested, the consultant will report to the Head of the Road Maintenance Department.

214. **Deliverables and Schedule.** The duration of the assignment is 15 months, assuming 22 working days per month, requiring the Consultant to work on a full-time basis. The Consultant will be required to provide a brief Inception Report two weeks following mobilization and also monthly summary progress reports. Monthly summary progress reports (of not more than 5 pages each) should be submitted no later than 5 working days after the end of the month. In addition, the Consultant shall provide the following deliverables:

Deliverables	At the end of the Month
Final Data form for the collection of road network data	1
Note detailing formal data collection procedures for the collection of road network data for future collection by the Uzavtoyul (see Task 2)	2
Note on results of the network data collection undertaken by Uzavtoyul’s Road Asset Management Team and the Consultant	6
Note on capacity assessment of Uzavtoyul and development of technical specifications for road network databank software (see Task 3)	7
Standardized templates for the preparation of annual and multi-annual reports on road network monitoring, planning and investment requirements (see Task 4)	9
Report on the assessment of financing needs and option for road maintenance activities for the international road corridors	12
Completion report with recommendation for continued use of RAMS	15

215. The timing in the table refer to the submission of draft reports, all reports should be finalized and re-submitted within two weeks of receiving written comments from the Uzavtoyul and from the ADB (or within such other time as may be agreed). Reports should be delivered in hard copy as follows: 4 copies in English (1 for ADB, 1 for Road Fund and 2 for Uzavtoyul) and 4 copies in Russian language (1 for ADB, 1 for Road Fund and 2 for Uzavtoyul). All reports shall also be provided in electronic format using Microsoft Office software.

216. The ADB transport team will monitor the progress of the services. Any significant issues encountered by the Consultant, which may appear to compromise the achievement of the assignment’s objectives shall be reported promptly to Uzavtoyul and the ADB transport team in Manila.

i. Financial Auditor

217. The terms of reference of financial auditor for Project 3 will follow that of the financial auditor for Project 1 with adjustments in schedule/delivery of reports.

VII. SAFEGUARDS

218. Uzbekistan will ensure that all the requirements prescribed in this Schedule, and the following frameworks, assessments and plans that have been prepared with respect to the Facility and the first tranche and of which ADB has been provided full copies, and which are deemed incorporated herein by reference, are complied with during the processing and implementation of the projects under the Facility:

- (i) environmental assessment and review framework ("EARF") dated April 2011;
- (ii) land acquisition and resettlement framework ("LARF") dated April 2011;
- (iii) ethnic minority planning framework ("EMPF") May 2011;
- (iv) initial environmental examination ("IEE") and environmental management plan ("EMP") dated April 2011 for the first tranche; and/or
- (v) gender action plan ("GAP") for the first tranche dated 30 June 2011.

219. The safeguard frameworks cover the Facility specific information and requirements in accordance with ADB's Safeguard Policies (2009) (SPS): (i) the general anticipated impacts of the projects likely to be financed under the Facility on the environment, involuntary resettlement, and indigenous peoples; (ii) the safeguard criteria that are to be used in selecting projects; (iii) the requirements and procedure that will be followed for screening and categorization, impact assessments, development of management plans, public consultation and information disclosure (including the 120-day disclosure rule, if required), and monitoring and reporting; (iv) the institutional arrangements (including budget and capacity requirements) and Uzbekistan's and ADB's responsibilities and authorities for the preparation, review and clearance of safeguard documents.

220. Prior to the preparation of each PFR, the applicability and relevance of each safeguard framework for environmental assessment, involuntary resettlement, and ethnic minority will be reviewed and updated by the Road Fund to ensure relevance and consistency with applicable laws and regulations in Uzbekistan and ADB's safeguard policies, as amended from time to time. In the event that there is a discrepancy between the laws and regulations of Uzbekistan and ADB safeguard policies, the ADB safeguard policies will prevail. The entitlement standards set in the original LARF as well as standards stipulated in other frameworks cannot be lowered during updates.

221. In all cases, for each new PFR preparation, Uzbekistan will review ongoing projects to check on the status of compliance with the safeguards plans and frameworks, and submit the review reports to ADB, together with other required safeguard documents relevant to the project included in the tranche being processed. In any case, if major noncompliance is discovered in the course of the review of ongoing projects, a corrective action plan will be prepared and submitted to ADB.

222. The following safeguards assurances will be applicable for projects under individual tranches of the Facility.

A. Environment

223. Uzbekistan through the Road Fund will ensure that the preparation, design, construction, implementation, operation and decommissioning of the facilities under Investment Program and each project under the Facility are carried out in accordance with (a) applicable laws and regulations in Uzbekistan relating to environment, health, and safety; (b) the environmental

safeguards under ADB's Safeguard Policy Statement (SPS) (2009); (c) the EARF, and respective IEEs or EIAs; and (d) all measures and requirements set forth in the respective [IEE/EIA] and EMP, and any corrective or preventative actions set forth in safeguards monitoring reports. Uzbekistan through the Road Fund will ensure that potential adverse environmental impacts arising from the Investment Program are minimized by implementing all mitigation and monitoring measures as presented in the environment management plan (EMP) included in the IEEs or EIAs.

B. Land Acquisition and Resettlement and Ethnic Minority

224. Uzbekistan through the Road Fund will ensure that all land and all rights-of-way required by the projects under the Facility are made available to the Works contractors in accordance with the schedule agreed under the related Works contract and all land acquisition and resettlement activities are implemented in compliance with (a) all applicable laws and regulations of Uzbekistan relating to land acquisition and involuntary resettlement; (b) the involuntary resettlement safeguards under the SPS (2009); (c) the LARF; and (d) all measures and requirements set forth in the respective LARP, and any corrective or preventative actions set forth in safeguards monitoring reports.

225. Without limiting the application of the involuntary resettlement safeguards under the SPS (2009), the LARF or LARPs, Uzbekistan through the Road Fund will ensure that no physical or economic displacement takes place in connection with any project under the Facility until:

- (i) compensation and other entitlements have been provided to affected people in accordance with the respective LARP; and
- (ii) a comprehensive income and livelihood restoration program has been established in accordance with the respective LARP.

226. Uzbekistan through the Road Fund will ensure that the preparation, design, construction, implementation and operation of the projects under the Facility comply with (a) all applicable laws and regulations of Uzbekistan relating to ethnic minorities; (b) the indigenous peoples safeguards under the SPS (2009); (c) the EMPF; and (d) all measures and requirements set forth in the respective EMDP, and any corrective or preventative actions set forth in safeguards monitoring reports.

227. Uzbekistan through the Road Fund will ensure that Project 1 will neither involve land acquisition involuntary resettlement or impact on ethnic minority within the meaning of the SPS (2009). However, if based on detailed design additional land is required triggering any land acquisition, resettlement (LAR) and/or impact on ethnic minority, the Road Fund will prepare, disclose, and implement a land acquisition and resettlement plan (LARP) and/or an ethnic minority development plan (EMDP) in accordance with SPS (2009), the LARF, and the EMPF. For project 2 and subsequent projects, Uzbekistan will ensure that any unanticipated involuntary resettlement impacts shall be mitigated following the updated LARF.

228. Project 2 is classified as Category A for involuntary resettlement impacts. A total of 230.5 ha land is estimated to be acquired with 320 affected households. The land acquisition is also likely to affect crop farms, orchards and trees. A total of 16,117 trees would be affected along the road section. The land acquisition and resettlement plan (LARP) was disclosed on 20 November 2012. Implementation of LARP is currently ongoing. An external monitor has been appointed. Actions identified by the external monitor are included in the ongoing LARP implementation exercise. For Project 2, the following conditions will apply:

- (i) **Condition for contract award.** The Road Fund will prepare a resettlement plan for A373/4R112 highway section of Project 2 and will submit the same to ADB for review and approval. The approved resettlement plan will be disclosed by Road Fund to all affected households, giving details of their entitlements and relocation options. All these processes will be completed before award of civil work contract.
- (ii) **Condition for commencement of construction work.** No civil work shall start for the reconstruction of the A373/4R112 highway section, which involves resettlement, until (i) the Government has made the full and final payments to all affected households, and (ii) agreement has to be reached on the relocation options with each and every household getting physically displaced as a result of the Project and (ii) the land and rights-of-way required for the A373/4R112 highway section are free and clear from the rights or claims of third parties and any other encumbrances.

229. For the subsequent projects of the Investment Program that will involve LAR and/or ethnic minorities, Uzbekistan through the Road Fund will ensure that no civil works contract is awarded until a respective LARP and EMDP (as required), has been prepared and agreed with ADB.

C. Human and Financial Resources to Implement Safeguards Requirements

230. Uzbekistan will make available or cause the Road Fund to make available necessary budgetary and human resources to fully implement the EMPs, the LARPs and the EMDPs, as applicable. In addition, the Road Fund will make available social and environmental safeguards consultants to assist in the finalization of the safeguards documents, implementing the safeguards plans and conducting consultations during project implementation. Consultants appointed for this purpose as part of the first investment program (CAREC Corridor 2 Road Investment Program) will continue to work on the second investment program.

D. Safeguards – Related Provisions in Bidding Documents and Works Contracts

231. Uzbekistan through the Road Fund will ensure that all bidding documents and contracts for Works contain provisions that require contractors to:

- (i) comply with the measures and requirements relevant to the contractor set forth in the respective IEE/EIA, the EMP, the LARP and the EMDP (to the extent they concern impacts on affected people during construction), and any corrective or preventative actions set out in safeguards monitoring reports;
- (ii) make available a budget for all such environmental and social measures;
- (iii) provide the Road Fund with a written notice of any unanticipated risks or impacts related to environment, resettlement or ethnic minorities that arise during construction, implementation or operation of the Project that were not considered in the respective IEE/EIAs, the EMPs, the LARPs or the EMDPs;
- (iv) adequately record the condition of roads, agricultural land and other infrastructure prior to starting to transport materials and construction; and
- (v) fully reinstate pathways, other local infrastructure, and agricultural land to at least their pre-project condition upon the completion of construction.

E. Safeguards Monitoring and Reporting

232. Uzbekistan through the Road Fund will do the following:

- (i) submit to ADB safeguards monitoring reports at time intervals specified in the respective EMPs, LARPs and EMDPs and disclose relevant information from such reports to affected persons promptly upon submission;
- (ii) if any unanticipated environmental and/or social risks and impacts arise during construction, implementation or operation of the projects that were not considered in the respective EIA/IEE, the EMP, the LARP or the EMDP, promptly inform ADB of the occurrence of such risks or impacts, with detailed description of the event and proposed corrective action plan; and
- (iii) report any actual or potential breach of compliance with the measures and requirements set forth in the respective EMPs, LARPs or EMDPs promptly after becoming aware of the breach.

F. Prohibited List of Investments

233. Uzbekistan will ensure that no proceeds of loans under the Facility are used to finance any activity included in the list of prohibited investment activities provided in Appendix 5 of the SPS (2009).¹⁸ Pursuant to SPS (2009), ADB funds may not be applied to the activities described on the ADB Prohibited Investment Activities List set forth in Appendix 5 of the SPS. ADB will ensure that the investment program is in compliance with applicable national laws and regulations and will apply the prohibited investment activities list to projects/subprojects financed by ADB.

G. Labor, Gender, Health, and Social Protection

234. Uzbekistan will include a specific provision in the bidding documents to ensure that civil works contractors: (i) comply with core labor standards, applicable laws and regulations in Uzbekistan and incorporate applicable workplace occupational safety norms; (ii) do not differentiate payment between men and women for work of equal value; (iii) do not employ child labor in the construction and maintenance activities; (iv) eliminate forced or compulsory labor; (v) eliminate employment discrimination; (vi) allow for freedom of association; and (vii) to the extent possible, maximize employment of local people for project construction purposes, provided that the requirements for job and efficiency are adequately met. Uzbekistan will ensure that appropriate entities (such as nongovernment organizations) disseminate information on the risks of sexually transmitted infections, including HIV/AIDS, to the employees of civil works contractors engaged under the Investment Program and to members of the local communities surrounding the sections of the A380 and A373 highways under the Investment Program, particularly females.

235. Uzbekistan will implement the GAPs for individual projects.

VIII. GENDER AND SOCIAL DIMENSIONS

236. Poverty and social analysis undertaken as part of the due diligence process demonstrate the women-men unemployment ratio as 6.5:2.5. Poverty rate of women-headed households is 1.5 times higher than those headed by men. Highway construction and the development of long-

¹⁸ Available at: <http://www.adb.org/documents/safeguard-policy-statement>

term transit routes may increase the risk of sexually transmitted infections. The government takes this risk seriously and has agreed to a mitigation plan with ADB.

237. To enhance a positive gender impact and minimize project-related risks for women and children a Gender Action Plan (GAP) has been prepared for PFR1. The GAP serves as an initiative for gender activities to provide the following:

- (i) Improved market and sanitary facilities (commercially operated by women) for women traders and travelers along the road sites
- (ii) Improve road safety, road crossing points and lightening
- (iii) Improved gender awareness in the Road Fund
- (iv) Improved women's entrepreneurial skills and access to finance and training
- (v) Improved women's awareness about HIV/AIDs/STD risks and prevention methods and traffic safety.

238. The GAP will be implemented in close coordination with the women committees and Road Fund. Regular monitoring of activities will be undertaken during the implementation phase in order to ensure that GAP is successfully executed and the initiative taken under PFR1 could be replicated in subsequent tranches and other road projects in Uzbekistan.

239. The government, through the Road Fund, will ensure that appropriate entities, e.g., PMU gender specialist and/or NGOs disseminate information on the risks of sexually transmitted infections, including HIV, to the employees of civil works contractors engaged under the investment program and to members of the local communities surrounding the project road, particularly females.

GENDER ACTION PLAN FOR PROJECT 1

Objective	Activity	Indicator	Target group	Responsibility
Output 1: Selected sections of CAREC Corridor 2 Road reconstructed by the Road Fund				
Improved market and sanitary facilities for women traders and travelers in two selected locations in Akhangaran and Pop districts	Coordinate parallel construction of road side development of local khokimiyat with Highway construction	Two facilities for road side market places constructed/maintained	Women entrepreneurs and travelers along the highway	Local khokimiyat, Road Fund
	Maintain basic sanitary facilities for men and women on commercial basis	Two sanitary facilities for women and men (2 for each) maintained and operated on commercial basis		Local communities' women
Output 2: Road sector sustainability plans implemented by the Road Fund				
1. Women are aware of training opportunities to scale up their basic entrepreneurial skills	Conduct outreach/information dissemination activities on training opportunities Conduct training to upgrade women entrepreneurs' business development skills and improved access to finance	Four outreach activities conducted by NGO for at least 100 women by PMU gender specialist 100 women trained in business development and access to finance	Women entrepreneurs (at least 100 women) along the highway	Road Fund
2. Women in project area are informed about project benefits	Conduct outreach/information dissemination activities in women committees of mahallas	Four outreach activities conducted in the rural communities	Women in project area	Women Committees, Akhangaran and Pop districts, Road Fund
3. Improve implementation of EGM activities for the project and increase gender analysis skills of Road Fund staff and relevant agencies	Conduct gender awareness training for the Road Fund and for the project staff of the hokimiyats	Two gender and development awareness training conducted	Road Fund	Road Fund in close coordination with URM Gender Specialist
4. Women and men in project area are informed about HIV/AIDS risks and prevention methods and traffic safety	Conduct training on traffic safety and HIV/AIDS prevention	Four outreach activities and four HIV/AIDS prevention and traffic safety trainings conducted	Women and men in project area	Women Committees, Akhangaran and Pop districts, and Road Fund

EGM = effective gender mainstreaming; PMU = Program management unit; URM = Uzbekistan Resident Mission of the Asian Development Bank.

Source: Asian Development Bank estimates.

A. Gender Strategy for Project 1

240. The social and gender analysis has identified the following issues, related to the investment program.

- (i) The education level of women, especially in higher and vocational education is lower compare is that of men
- (ii) Low representation of women in formal employment;
- (iii) High proportion of women entrepreneurs in informal labor market
- (iv) Unsafe road, lack of lightening especially in winter and lack of road crossing points impacts on girl's school attendance.
- (v) Lack of sanitary facilities, bus stops, road side market places impact on communities benefits of the road, in particular women travelers

241. Women in the communities in the project area of tranche 1 (Tashkent, Namangan region) have lower educational attainments than men. 23.5% of male household heads and only 9.1% of female headed households have higher education. This creates considerable disadvantage in the labor market perspectives and level of income. The poverty rate for women headed households is 1.5 times higher than for households headed by men. At the same time the number of entrepreneurs is twice higher among women (16.84%) than among men (8.95%).

242. Women entrepreneurs in the region are mostly involved in trading agricultural products, thus improving their access to markets, decreasing travel time will improve their productivity. Women use the road mostly in micro-vans as passenger and most women don't drive themselves. Thus women depend more on public transportation, public facilities along the road such as bus stops, toilets, road crossing points and road side markets places than men. The gender analysis surfaced that the lack of road crossing points, adequate lightening and road safety signs impact on girl's school attendance in winter. Thus including adequate road safety measures in the project are essential to improve benefits for local communities, especially women and girls.

243. The gender action plan will facilitate coordination of the road construction with road side infrastructure development of the Khokimiyats.¹⁹ The GAP will assure that road side sanitary facilities for men and women will be restored, and commercially maintained by women of the road side communities. This will create small incomes and will allow women travelers to use adequate facilities. The GAP will also assure the construction of road crossing points in villages which are divided by the road and in front of colleges. Bus stops and small market places will be constructed by the Khokimiyats based on communities' needs. The GAP will include a pilot project on capacity development for women entrepreneurs along the road. This pilot will be implemented by the National Women Committee and financed under RETA 7563.²⁰ 100 women will receive training (in business development, accessing to finance etc.) under this pilot project. The trainings will be provided by the NGO "Women's Business Association". This NGO has long-standing experience in training women in entrepreneurship and creating a network for women entrepreneurs, which will support them to access information, receive support and learn how to apply for micro-credits.

¹⁹ Cabinet of Ministries Degree for Measure on Development of Road Site Infrastructure and Services of Uzbek National Highway No. 277, 22, Oct 2009

²⁰ RETA 7563 "Promoting Women Entrepreneurship in Central and West Asia DMCs" financed pilot projects which are geographically or thematically related to ADB investments.

244. A national gender specialist (8 person months, intermittently) will be recruited to help implementing and monitoring the GAP. The consultant will be financed under the consultant supervision package.

**IX. PERFORMANCE MONITORING, EVALUATION, REPORTING AND
COMMUNICATION**

A. Project Design and Monitoring Framework

245. Design and Monitoring Framework (DMF) for the investment program, and projects 1, 2, and 3 are in Tables 9.1, 9.2, 9.3, and 9.4, respectively.

Table 9.1: Design and Monitoring Framework for the Investment Program

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
<p>Impact Increased domestic and international trade</p>	<p>By 2020: Annual domestic trade with Fergana valley increased to \$3.360 billion (2010 baseline: \$2.285 billion), and with Bukhara province to \$1.134 billion (2010 baseline: \$0.772 billion)</p> <p>Annual external trade with the Kyrgyz Republic increased to \$300 million (2010 baseline: \$177 million), with Tajikistan to \$50 million (2010 baseline: \$12.6 million), and with Kazakhstan to \$1,600 million (2010 baseline: \$956 million)</p>	<p>Statistical Review of Uzbekistan (annual publication by the Central Statistics Office)</p> <p>Statistical data of the Ministry for Foreign Economic Relations, Investment and Trade</p>	<p>Assumption The government sustains policies conducive to economic growth and remains committed to enhanced policy reforms and regional integration.</p> <p>Risk Internal slow decision making delays impetus for policy reforms.</p>
<p>Outcome Improved road connectivity, safety, and effective RRF management of the Uzbekistan sections of CAREC Corridor 2</p>	<p>By 2017: Increased average total long-haul traffic volume on the A373 and A373/4R112 highways in Fergana province to 20,000 vpd (2011 baseline: 10,000 vpd), and on the A380 in Bukhara region to 2,500 vpd (2011 baseline: 1,200 vpd)</p> <p>Travel time from Dautata to Bukhara reduced to 8 hours (2011 baseline: 12 hours), and from Tashkent to Osh border reduced to 5 hours (2011 baseline: 7 hours)</p> <p>Accidents on the A373 and A373/4R112 reduced to 120 per year (2009 baseline: 250 accidents/year), and on the A380 to 75 accidents/year. (2009 baseline: 150 accidents/year)</p> <p>Road asset management system and road safety plans approved by the government and implemented in accordance with international standards</p>	<p>Periodic classified traffic reports of Uzavtoyul</p> <p>Periodic classified traffic reports of Uzavtoyul</p> <p>Periodic classified traffic reports of Uzavtoyul</p> <p>RRF biannual asset management reports and Road Safety Commission's periodic reports</p>	<p>Assumptions Increased availability and quality of road transport services (freight and passengers) follows improvement of the investment program roads.</p> <p>RRF continues construction of the remaining sections of the A380 and A373 as scheduled at the same quality as the investment program.</p> <p>Risk Inadequate financial resources are available for road maintenance.</p>
<p>Outputs 1. Selected road sections of CAREC Corridor 2 reconstructed by RRF</p>	<p>By 2017: With pavement international roughness index of less than 4 meters per km: (i) 74 km of the A373 (between Km 116 and Km 190) reconstructed under project 1; (ii) 87 km of the A380 (between Km 228 and Km 315) reconstructed under project 2; and (iii) 75 km of the A373/4R112 (between Km 0 and Km 75) reconstructed under project 3</p> <p>Roads with cracks more than 10% and 10 potholes per km reduced to 50% (2009 baseline: 60%)</p>	<p>RRF website and periodic road condition reports by RRF and Uzavtoyul</p> <p>Periodic road condition reports by</p>	<p>Assumption Provision of counterpart resources is timely and support for the investment program continues.</p> <p>Risks High turnover of program management unit mid-level staff disrupts program implementation</p>

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
		RRF and Uzavtoyul	<p>progress.</p> <p>Internal delays are experienced in the approval of contracts for works, goods, and consultants</p>
2. Road subsector sustainability plans implemented by RRF	<p>Sector The independent quality control unit reporting to MOF biannually on road construction and maintenance works</p> <p>Public-private partnership framework in place</p> <p>National road infrastructure safety strategy approved by the government by March 2013</p> <p>Routine annual road maintenance budget is increased by an amount equal to or greater than the annual inflation rate</p> <p>Investment program Road safety action plan for the investment program approved by the government by May 2013 and implemented under projects 2 and 3</p> <p>150 staff of RRF and Uzavtoyul trained under the road safety capacity development program under projects 2 and 3</p> <p>Road asset management system updated quarterly by RRF and reported to MOF</p> <p>Road user charges piloted on reconstructed Kamchik road section in 2014 under project 2</p> <p>Specific gender action plan implemented under each project</p>	<p>Biannual road condition reports by the independent quality control unit and periodic Uzavtoyul reports</p> <p>Periodic reports of "Norma" (a private company maintaining a government legislation database)</p> <p>Road Safety Commission's periodic reports</p> <p>Annual budget reports of RRF and Uzavtoyul</p> <p>Road Safety Commission's periodic reports</p> <p>Periodic Road Safety Commission's periodic reports</p> <p>RRF quarterly road asset management reports</p> <p>Periodic reports of "Norma"</p> <p>RRF website and quarterly communication reports</p>	<p>Assumptions The government is committed to further reform the road subsector.</p> <p>RRF and Uzavtoyul are committed to continue improving their institutional structures and capacity.</p> <p>Risk Delays are experienced in the approval of the national road infrastructure safety strategy</p>

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
3. Projects completed as targeted and budgeted	Project 1 completed by 30 September 2013 with no cost overrun Projects 2 and 3 completed as targeted and budgeted	Annual statistical review of Uzbekistan Annual statistical review of Uzbekistan	
<p>Activities with Key Milestones</p> <p>1. Selected sections of CAREC Corridor 2 reconstructed by RRF</p> <p>1.1. 74 km of the A373 reconstructed under project 1 by 31 December 2014</p> <p>1.2. 87 km of the A380 reconstructed under project 2 by 31 December 2015</p> <p>1.3. 75 km of the A373/4R112 reconstructed under project 3 by 30 September 2017</p> <p>2. Road subsector sustainability plans implemented by RRF</p> <p>2.1. National road infrastructure safety strategy, road safety checklist, guidelines, and measures that will improve road safety management, developed by September 2012 under project 1 and approved by March 2013</p> <p>2.2. Specific road safety program for the road sections of the investment program developed by December 2012 under project 1, approved by March 2013, and implemented under projects 2 and 3</p> <p>2.3. Road safety awareness campaign to selected communities and training for 150 staff of RRF and Uzavtoyul conducted under project 2 as part of the overall road safety and capacity development program</p> <p>2.4. Road asset management system updated quarterly by RRF effective January 2012</p> <p>2.5. Under each project, outreach training of entrepreneurial skills development conducted for selected number of women, and HIV/AIDS prevention and traffic safety training conducted for both men and women</p> <p>3. Projects completed as targeted and budgeted</p> <p>3.1. For project 1, construction supervision consultants recruited by 30 September 2011, civil works contract awarded by 15 October 2011 and completed by 31 December 2014 with no cost overrun</p> <p>3.2. Due diligence for projects 2 and 3 completed by December 2012, focusing on effective road management and road safety in planning, design, construction, and operation</p>			<p>Inputs</p> <p>ADB MFF not exceeding \$500 million, comprising up to \$180 million ADF, and balance OCR</p> <p>Government counterpart budget: \$100 million</p>

ADB = Asian Development Bank, CAREC = Central Asia Regional Economic Cooperation, km = kilometer, OCR = ordinary capital resources, MFF = multitranché financing facility, MOF = Ministry of Finance, RRF = Republican Road Fund, vpd = vehicles per day.

Source: Asian Development Bank.

Table 9.2: Design and Monitoring Framework for Project 1

Design Summary	Performance Targets / Indicators	Data Sources / Reporting Mechanisms	Assumptions and Risks
<p>Impact</p> <p>Improved road connectivity, safety, and effective Road Fund management for the Uzbekistan sections of CAREC Corridor 2 Road</p>	<p>Increased average total long-haul traffic volume on A373 highway in Ferghana province to 20,000 vpd by 2018 (2011 baseline: 10,000 vpd)</p> <p>Travel time from Tashkent to Osh border reduced to 5 hours by 2018 (2011 baseline: 7 hours)</p> <p>Accidents on A373 highway reduced to 120 per year by 2018 (2009 baseline: 250 accidents per year)</p> <p>Road asset management system (RAMS) and road safety plans (RSPs) implemented by 2018 in accordance with international standards (2011 baseline: RAMS and RSPs do not exist)</p>	<p>Periodic classified traffic reports of Uzavtoyul</p> <p>Periodic classified traffic reports of Uzavtoyul</p> <p>Periodic classified traffic reports of Uzavtoyul</p> <p>Road Funds biannual asset management reports and Road Safety Commission's periodic reports</p>	<p>Assumptions</p> <ul style="list-style-type: none"> Increased availability and quality of road transportation services (freight and passengers) following improvement of the investment program roads The Road Fund continues constructing the remaining sections of the A373 as scheduled at the same quality as the investment program <p>Risks</p> <ul style="list-style-type: none"> Inadequate financial resources for road maintenance
<p>Outcome</p> <p>Reconstructed A373 highway section with increased traffic volume is safe and effectively operated and maintained</p>	<p>By 2016, the national road infrastructure safety strategy and specific road safety program for the road sections of the investment program approved by the government</p> <p>By 2016, capacity of Road Fund and Uzavtoyul for sustained implementation of road sector safety program developed to the level of 10 on 0-10 scale (2011 baseline, 3)</p> <p>Routine annual roads maintenance budget continues to increase by no less than the annual inflation rate from 2011 to onwards in future</p>	<p>Statistical Review of Uzbekistan (annual publication by Central Statistics Office, Center for Economic Research)</p> <p>Periodic Road Safety Commission's reports</p> <p>Annual budget reports of the Road Fund and Uzavtoyul</p>	<p>Assumptions</p> <ul style="list-style-type: none"> Government is committed to timely completion of the Tranche 1 project with focused road safety interventions <p>Risks</p> <ul style="list-style-type: none"> Inadequate asset management and road maintenance

Output			
Road sector sustainability plans implemented by the Road Fund	<p>The independent quality control unit (IQCUC) established at Road Fund by March 2012 that reports to the MOF biannually on the road construction and maintenance works</p> <p>National road infrastructure safety strategy approved by the government by March 2013</p> <p>Specific safety program for the road sections of the investment program I and II approved by the government by June 2016 for implementation under Tranche 3 with capacity development program</p> <p>Road safety training provided to 150 staff of the Road Fund and Uzavtoyul by June 2016</p> <p>Road Asset Management System updated quarterly by the Road Fund and reported to MOF starting June 2016</p>	<p>Biannual road condition reports by IQCUC and periodic Uzavtoyul reports</p> <p>Road Safety Commission's reports</p> <p>Periodic Road Safety Commission's reports</p> <p>Periodic Road Safety Commission's reports</p> <p>Road Fund quarterly road asset management reports</p>	<p>Assumptions</p> <ul style="list-style-type: none"> • Government is committed to further reform the road sector • Road Fund and Uzavtoyul are committed to continue improving their institutional structures and capacities <p>Risks</p> <ul style="list-style-type: none"> • Internal slow decision making delays impetus for policy reforms and approval of the national road infrastructure safety strategy
Selected section of A373 highway reconstructed by the Road Fund	<p>By 2016, 58 km of A373 highway (between Km116 and Km190) reconstructed with pavement international roughness index of less than 4m/km, (2011 baseline, 0 km)</p> <p>By 2016, roads with cracks more than 10% and 10 potholes per kilometer reduced to 50% (2009 baseline: 60%)</p> <p>2 road side market places for women and 2 sanitary facilities for men and women constructed and maintained by 2016 (2011 baseline, none)</p>	<p>Road Fund website and periodic road condition reports by Road Fund and Uzavtoyul</p> <p>Periodic road condition reports by Road Fund and Uzavtoyul</p> <p>Road Fund website and quarterly communication reports</p>	<p>Assumptions</p> <ul style="list-style-type: none"> • Timely provision of counterpart resources and support for the MFF <p>Risks</p> <ul style="list-style-type: none"> • High turnover of PMU middle level staff disrupts program implementation progress • Internal delays in the approval of contracts for works, goods, and consultants
Tranche 1 Project completed as targeted and budgeted	Gender action plan implemented under Tranche 1	Road Fund website and quarterly communication reports	<p>Assumptions</p> <ul style="list-style-type: none"> • Same as above <p>Risks</p>

	Tranche 1 Project completed by 30 June 2016 with no cost overrun	Tranche project completion report by Road Fund and ADB	• Same as above
	Due diligence for Tranches 2 and 3 completed by Tranche 1 consultants	Quarterly implementation progress report of Project 1	
Activities with Milestones			Inputs
Road sector sustainability plans implemented by the Road Fund			OCR - US\$ 129,500,000
Govt - US\$ 30,000,000			
Activity	Scheduled Start	Scheduled Finish	
National road infrastructure safety strategy, road safety checklist, guidelines, and measures that will improve road safety management, developed	Oct 01, 2015	Jun 30, 2016	
Specific road safety program developed for the road sections of the investment programs	Oct 01, 2015	Jun 30, 2016	
Road asset management system updated quarterly by the Road Fund	Oct 01, 2015	Jun 30, 2016	
4 outreach trainings of entrepreneurial skills development conducted for at least 100 women	Oct 01, 2015	Jun 30, 2016	
4 HIV/AIDS prevention and traffic safety trainings conducted for both men and women in the project area	Oct 01, 2015	Jun 30, 2016	
Selected section of A373 highway reconstructed by the Road Fund			
Activity	Scheduled Start	Scheduled Finish	
58 km of A373 highway reconstructed	Dec 28, 2012	Jun 30, 2016	
Tranche 1 Project completed as targeted and budgeted			
Activity	Scheduled Start	Scheduled Finish	
Construction supervision activities implemented	Aug 09, 2012	Jun 30, 2016	
Civil works contract implemented	Dec 28, 2012	Jun 30, 2016	

Table 9.3: Design and Monitoring Framework for Project 2

Design Summary	Performance Targets / Indicators	Data Sources / Reporting Mechanisms	Assumptions and Risks
<p>Impact</p> <p>Improved road connectivity, safety, and effective management for the Uzbekistan sections of CAREC Corridor 2 Road</p>	<p>By 2017: Increased average total long-haul traffic volume on A373 highway in Fergana province to 20,000 vpd (2011 baseline: 10,000 vpd)</p> <p>By 2017: Increased average annual traffic volume on A373/4P112 road section increased to 31,421 vpd (2012 baseline: 28,512 vpd) calculated using passenger car units (PCU)</p> <p>By 2017: Accidents on A373/4P112 highway reduced to 120 per year (2009 baseline: 250 accidents per year)</p>	<p>Periodic classified traffic reports of Uzavtoyul</p> <p>Periodic classified traffic reports of Uzavtoyul</p> <p>Road Safety Commission's periodic reports</p>	<p>Assumptions</p> <ul style="list-style-type: none"> Increased availability and quality of road transportation services (freight and passengers) following improvement of the investment program roads The Road Fund continues constructing the remaining sections of the A373 as scheduled at the same quality as the investment program <p>Risks</p> <ul style="list-style-type: none"> Inadequate financial resources for road maintenance
<p>Outcome</p> <p>Increased travel efficiency on the reconstructed A373/4R112 highway section</p>	<p>By 2017: Travel time from Tashkent to Osh border point reduced to 5 hours (2011 baseline: 7 hours)</p> <p>By 2017: Annual roads maintenance budget is increased by no less than the annual inflation rate.</p>	<p>Periodic classified traffic reports of Uzavtoyul</p> <p>Annual budget reports of the Road Fund and Uzavtoyul</p>	<p>Assumptions</p> <ul style="list-style-type: none"> Government is committed to timely completion of the Project 1 and Project 2 <p>Risks</p> <ul style="list-style-type: none"> Inadequate asset management and road maintenance

<p>Output</p> <p>Remaining sections of Project 1 completed</p> <p>Selected section of A373/4R112 highway reconstructed by the Road Fund</p>	<p>58 km of A373 highway (between km 116 - km 123 [7 km]; km 136 - km 173 [37 km]; km 176 - km 190 [14 km]) reconstructed with pavement international roughness index of less than 4m/km (2012 baseline – 8m/km) by 31 December 2014</p> <p>By 2016: 75 km of A373/4R112 highway (between KM 0 and Km 75) reconstructed with pavement international roughness index of less than 4m/km (2012 baseline - 8m/km)</p> <p>Roads with cracks more than 10% and 10 potholes per kilometer reduced to 50% (2009 baseline: 60%)</p>	<p>Periodic road condition reports by Road Fund and Uzavtoyul</p> <p>Road Fund website and periodic road condition reports by Road Fund and Uzavtoyul</p> <p>Road Fund website and periodic road condition reports by Road Fund and Uzavtoyul</p>	<p>Assumptions</p> <ul style="list-style-type: none"> • Timely provision of counterpart resources and support for the MFF <p>Risks</p> <ul style="list-style-type: none"> • High turnover of PMU staff disrupts program implementation progress • Internal delays in the approval of contracts for works, goods, and consultants 																																													
<p>Activities with Milestones</p>			<p>Inputs</p>																																													
<p>Remaining sections of Project 1 completed</p>			<p>OCR - US\$ 220,000,000</p>																																													
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Table 9.4: Design and Monitoring Framework for Project 3

Impact the Project is aligned with Better connectivity, efficient transport system, and effective management of the Uzbekistan sections of CAREC Corridor 2 Road (Program-defined [approved MFF Facility Outcome statement, 21 April 2010])			
Results Chain	Performance Indicators with Targets and Baseline	Data Sources and Reporting	Risks
Outcome Improved travel efficiency on the reconstructed A380 highway section	By 2018 a. Reduced travel time along Daut-Ata-Bukhara highway section to 8.5 hours from 10 hours in 2009 b. Increased routine annual road maintenance budget every year by no less than the annual inflation rate	a. Periodic traffic reports of Uzavtoyul b. Annual budget reports of the Road Fund and Uzavtoyul	Inadequate financial resources allocated by the government for road maintenance
Outputs 1. Km 228–Km 315 road section in A380 highway reconstructed 2. Capacity for road asset management improved	By 2017: 1a. 87km of A380 highway (between Km 228 and Km 315) reconstructed with pavement international roughness index of less than 3m/km (2012 baseline: 8m/km) 2a. On the job training provided to at least 50 persons of Road Fund and Uzavtoyul for implementing and updating road asset management system	1a–2a. Road Fund website and periodic road condition reports by Road Fund and Uzavtoyul	Delayed provision of counterpart resources and support for the MFF High turnover of PMU staff disrupts program implementation progress
Activities with Key Milestones			
<p>1. Km 228–Km 315 road section in A380 highway reconstructed</p> <p>1.1 Advertise procurement of civil works contract and construction supervision consultant contract by 30 December 2015.</p> <p>1.2 Supervision consultant contract signed by 30 June 2016.</p> <p>1.3 Award civil work contract by 31 July 2016.</p> <p>1.4 Complete construction activities by 30 November 2017.</p> <p>2. Capacity for road asset management improved</p> <p>2.1 Recruit consultant by 31 March 2016.</p> <p>2.2 Complete consultant contract by 31 July 2017.</p>			
Inputs			
Asian Development Bank: \$150 million (OCR) Government of Uzbekistan: \$80 million			
Assumptions for Partner Financing			
Not Applicable			

ADB = Asian Development Bank; CAREC = Central Asia Regional Economic Cooperation; km = kilometer; m = meter; MFF = multitranchise financing facility; OCR = ordinary capital resources; PMU = program management unit; vpd = vehicles per day.

C. Monitoring

1. Project Performance Monitoring

246. The PMU through the project performance monitoring system (PPMS), and ADB through the project performance reporting (PPR) system will rigorously monitor the overall performance of each project under the investment program. The PMU will establish a 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 Investment Program's design and monitoring framework together with all the covenants monitoring will be the primary data required for analysis. For this purpose, ADB inception mission will provide to Road Fund a checklist of the above data in a word file, which will be updated in track changes and reported quarterly through the Road Fund's quarterly progress reports and after each ADB review mission. These quarterly reports will provide information to regularly update ADB's project performance reporting system.²¹

247. Road Fund will involve the beneficiaries in the collection of data on impacts and outcomes. During review missions, the updated project performance will be shared with the interested representatives of project beneficiaries, when appropriate.

2. Accelerating and Monitoring Contract Awards and Disbursement

248. Road Fund will continue taking advance detailed design and tendering during the future PFRs processing. However, to further accelerate the process, rigorous monitoring will be exercised for timely contract awards and disbursement. In this respect, actions will include:

- (i) To avoid the usual delays in bid evaluation as a result of contractors' submission of incomplete bids, a checklist of all the supporting documents, forms, and guarantees (Table 9.4) will be attached with the bids for future tendering. This will be further discussed during pre-bid meetings;
- (ii) Monitoring of agreed time-bound activities from preparation of bid evaluation report (BER) to the contract award will be carried out using a checklist (Table 9.5) for each action with the given timeframe;
- (iii) ADB's implementation of eStar uploading of withdrawal application at URM will save about 2-3 weeks of processing time; and
- (iv) For ADB monitoring, consultants shall copy to ADB project officer the interim payment certificates (IPCs), which will help intensify ADB's monitoring, expedite WA processing and payments to contractors, and consequently improve the project implementation progress.

²¹ ADB's project performance reporting system is available at:
<http://www.adb.org/Documents/Slideshows/PPMS/default.asp?p=evaltool>.

Table 9.4: Checklist of Documents for Bidders at Purchase of Tender Documents

ITB Sub-clause 11.1 Requirements	Specific Instructions and Supporting Documents
(a) Letter of Bid	<ul style="list-style-type: none"> • Total bid price (excluding discount); • Discount (if any); • Bid validity of 150 days • Signed by an authorized person (see. Item e, below)
(b) Completed schedules as required, including priced Bill of Quantities, in accordance with ITB 12 and 14	<ul style="list-style-type: none"> • Accomplished Schedule of Payment Currencies , if wished to be paid in foreign currency according to ITB sub-clause 15.2; • Accomplished Tables of Adjustment Data; • Accomplished Bill of Quantities
(c) Bid Security, in accordance with ITB 19	<p>Bidders may utilize their existing bid security, with no revision to the expiry date, provided it meets the following:</p> <ul style="list-style-type: none"> • Format in accordance with the Form of Bid Security, or any format acceptable to the Employer; other forms like cashier's or manager's check is also acceptable; • Each lot (if in lots) is covered by a bid security (either one bid security per lot or one bid security covering multiple lots - <i>EA should check if these are the same amounts indicated in the Bidding Documents</i>); • Validity of bid security is 28 days beyond the validity of the bid; • For Joint Ventures (JV), the bid security is in the name of the <u>JV or names of all future partners</u> of the JV, if not yet constituted.
(d) Alternative bids, if permissible, in accordance with ITB 13	Alternative bid is not permitted. Any alternative bid will not be considered.
(e) Written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB 20.2	<ul style="list-style-type: none"> • Notarized Power of Attorney demonstrating the authority of the signatory of the bid.
(f) Documentary evidence in accordance with ITB 17 establishing the Bidder's qualifications to perform the contract if its Bid is accepted	<ul style="list-style-type: none"> • Accomplished Current Contract Commitments / Works in Progress form; • Accomplished Financial Resources form with supporting documents; • Accomplished Bidder Information Sheet (Form ELI-1), JV Information Sheet (Form ELI-2), Pending Litigation (Form LIT-1) • Accomplished Financial Situation (Form FIN-1) with supporting documents, and Average Annual Construction Turnover (Form FIN-2)
(g) Technical Proposal in accordance with ITB 16	<ul style="list-style-type: none"> • Accomplished Personnel Forms • Accomplished Equipment form • Site Organization • Method Statement • Mobilization Schedule • Construction Schedule (work program or overall implementation schedule under ITB 11.1(h))
ITB Sub-clause 11.2 Requirement	<ul style="list-style-type: none"> • In case of JV, a copy of the Joint Venture Agreement, or a Letter of Intent to execute a JV in the event of a successful bid together with a copy of the proposed JV agreement

Table 9.5: Time-bound Action Plan for Preparation and approval of Bid Evaluation Reports

Activity	No. of Days	Responsible Agency/Department
Evaluation of Bids and preparation of bid evaluation report (BER)	10–15 days	EA
CWTC's receipt and review of BER and preparation of PC paper	4 days	CWTC
'EA's incorporation of ADB comments in BER, if any	2 days	EA
CWTC's receipt of revised BER and finalization of PC paper	2 days	CWTC
OSFMD and OGC review of final PC paper and approval by Procurement Committee	5 days	OSFMD and OGC and PC
Transmittal of ADB's no-objection of recommendation of award	1 day	CWTC
Notification of award to winning bidder(s)	2 days	EA
Contract signing	30 days	EA and Contractor

3. FFA Undertakings and Loan Covenants Compliance Monitoring

249. Compliance for all the FFA undertakings and loan covenants—road sector reforms, social and environmental safeguards, financial, economic, and others—will be jointly monitored by Road Fund and ADB through monthly updates provided by the PMU. In this respect, the PMU will submit to ADB a status report on the covenants summary with the explanation and time-bound actions on partly or non-complied covenants. As part of the joint venture efforts, ADB's resident mission will hold quarterly review meetings with the Road Fund to ensure the full compliance of all the loan covenants. Table 9.6 provides the status of compliance with Schedule 6 undertakings of the FFA. Table 9.7 provides the status of compliance with loan covenants for Project 1 (Loan 2772). Table 9.8 provides the status of compliance with loan covenants for Project 2 (Loan 2965).

Table 9.6: Compliance with Schedule 6 Undertakings of Framework Financing Agreement

	Summary of Undertaking	Status
1	<p>Uzbekistan will, through the Road Fund, ensure:</p> <ul style="list-style-type: none"> (i) timely implementation of the Investment Program, including executing the implementation arrangement set out in Schedule 3 to this FFA and monitoring and evaluating implementation based on the Design and Monitoring Framework set out in Schedule 2 to this FFA; (ii) that all projects financed under the Facility are selected and approved in accordance with the criteria and procedure set out in Schedule 4 to this FFA; (iii) that all projects financed under the Facility are developed, implemented and maintained in accordance with the safeguards requirements set out in Schedule 5 to this FFA 	Being complied.
	Counterpart Funds and Budget Allocations	
2	<p>Uzbekistan, through the Road Fund, will make available all counterpart funds required for timely and effective implementation of the Investment Program through providing annual budget allocations to the Road Fund and releasing applicable funds in a timely manner. Uzbekistan will, through the Road Fund, include the updated funding requirements for implementation of the Investment Program in its annual development program.</p>	Being complied.
3	<p>Uzbekistan will, through the Road Fund, allocate routine maintenance budget in accordance with the Accelerated Development Program for all existing roads and new road sections to be constructed following the expiry of their defects liability period. For each fiscal year thereafter, such budget will be increased by no less than the annual inflation rate. For implementation of the Accelerated Development Program, the Road Fund will allocate and make available, on a timely basis, sufficient funds and ensure that the road sections covered by the Accelerated Development Program are maintained in accordance with applicable standards and best international practices.</p>	Being complied. Allocation of road maintenance budget has been consistently increasing every year at a rate higher than the annual inflation rate.
	Policy Framework and Dialogue	
4	<p>Uzbekistan will, through the Road Fund,</p> <ul style="list-style-type: none"> (i) ensure compliance with the Roadmap which identifies the institutional development actions as set out in Schedule 1 to the FFA; (ii) use the loan proceeds from Facility effectively and efficiently to implement the Investment Program and achieve its objectives; and (iii) implement the financing plan agreed for the Investment Program. 	Being complied.
5	<p>Uzbekistan will, through the Road Fund, keep ADB informed in a timely manner of any changes to and progress in implementing the Roadmap, the Investment Program and the financing plan. Uzbekistan will, through the Road Fund, consult with ADB and other donors involved in road sector in a policy dialogue affecting any of these elements and keep them regularly informed of the progress in implementing the road sector reforms.</p>	Being complied.

	Summary of Undertaking	Status
	Construction Quality	
6	Uzbekistan will, through the Road Fund, ensure that each project under the Investment Program is carried out in accordance with the agreed technical specifications and design and that the construction supervision, quality control and project management of each project are performed in accordance with applicable standards and best international practices.	Being complied.
	Road Safety	
7	Uzbekistan will, through the Road Fund, ensure that civil works contracts will include the contractors' obligation to comply with road safety measures. The Road Fund will provide to ADB the accident rate and traffic volume during the implementation of the Investment Program Road.	Being complied.
	Governance and Anti-Corruption	
8	Uzbekistan will, through the Road Fund, ensure that updated information on the RDP will be provided in the Road Fund webpage within the MOF website. Such information will reflect the performance of the RDP (with clear performance indicators), Uzbekistan's policy on roads construction and reconstruction, a 5-year investment plan, business opportunities, bidding process and guidelines, outcome of biddings, and summary progress reports of the ongoing projects.	Being complied.
9	Uzbekistan, through the Road Fund: <ul style="list-style-type: none"> (i) acknowledges that ADB consistent with its commitment to good governance, accountability and transparency under the ADB Anti-Corruption Policy (1998, as amended to date), reserves the right to investigate, directly or through its agents, any alleged corrupt, fraudulent, collusive or coercive practices relating to the Investment Program; and (ii) agrees to cooperate fully with any such investigation and to extend all necessary assistance, including providing access to all relevant books and records, for the satisfactory completion of any such investigation. (iii) In addition, Uzbekistan, through the Road Fund, will (iv) conduct periodic inspections of the contractor's activities relating to fund withdrawals and settlements; (v) ensure that all contracts financed by ADB in connection with the Investment Program include provisions specifying the right of ADB to audit and examine the records and accounts of all contractors, suppliers, consultants, and other service providers as they relate to the Investment Program; and (vi) the construction supervision consultant will unify the contractor's invoices in accordance with working drawings and contract specifications. 	Being complied
	Procurement Issues	
10	Uzbekistan will ensure that all ADB-financed works, goods, and services will follow, at all times without exception, all ADB procedures, rules, and guidelines.	Being complied

Table 9.7: Loan 2772-UZB: Status of Compliance with Loan Covenants

Schedule	Para No.	Description	Remarks/Issues
5	1	Project Management and Implementation: The Borrower, through the Road Fund, shall ensure that the Project is implemented in accordance with the detailed arrangements set forth in the FAM. Any update to the FAM shall become effective only after approval of such change by the Borrower and ADB. In the event of any discrepancy between the FAM and this Loan Agreement, the provisions of this Loan Agreement shall prevail.	Being complied.
5	2	Counterpart Funds: Without limiting the generality of Section 6.06 of the Loan Regulations, the Borrower, through the Road Fund, shall make available all counterpart funds required for timely and effective implementation of the Project through providing annual budget allocations to the Road Fund and releasing applicable funds in a timely manner. The Borrower, through the Road Fund, shall include updated funding requirements for implementation of the Project in its annual development program.	Being complied. Funds allocated and released during implementation.
5	3	Construction and Road Sector Development: The Borrower, through the Road Fund, shall ensure that the Project is carried out in accordance with the agreed technical specifications and design, and that the construction supervision, quality control and project management of the Project are performed in accordance with applicable standards and best international practices.	Being complied. International construction supervision consultant appointed to enforce applicable standards and international best practices.
5	4	The Borrower, through the Road Fund, shall ensure that Works contracts for the Project include the contractors' obligation to comply with road safety measures, and shall, through the Road Fund, ensure that such obligation is monitored during the term of the contracts. The Road Fund shall disclose on its website/provide to ADB the accident rate and traffic volume during construction and the operation of the Project.	Being complied.
5	5	The Borrower, through the Road Fund, shall keep ADB informed semiannually of the progress in implementing its road sector policy framework.	Being complied.
5	6	The Borrower, through the Road Fund, shall allocate routine maintenance budget in accordance with the Accelerated Development Program for all existing roads including new road sections to be constructed following the expiry of their defects liability period. For each fiscal year thereafter, such budget shall be increased by no less than the annual inflation rate. For implementation of the ADP, the Borrower shall allocate and make available, on a timely basis, sufficient funds and ensure that the road sections covered by the ADP are maintained in accordance with applicable standards and best international practices.	Being complied. Allocation of road maintenance budget has been consistently increasing every year at a rate higher than the annual inflation rate.
5	7	The Borrower, through the Road Fund, shall ensure that the preparation, design, construction, implementation and operation of the Project comply with (a) all applicable laws and regulations of the Borrower relating to environment, health, and safety; (b) the environment Safeguards; (c) the EARF; and (d) all measures and requirements set forth in the IEE and the EMP, and any corrective or preventive actions set forth in a Safeguards Monitoring Report.	Being complied.
5	8	The Borrower, through the Road Fund, shall ensure that the Project does not have any impacts with respect to involuntary resettlement or ethnic minorities within the meaning of the SPS. In the event that the Project does have any such impact, the Borrower, through the Road Fund, shall take all steps required to ensure that the Project complies with the applicable laws and regulations of the Borrower and with the SPS.	Being complied.

Schedule	Para No.	Description	Remarks/Issues
5	9	The Borrower, through the Road Fund, shall ensure that any change to the location, alignment of road or environmental impact arising from detailed design for the Project is subject to prior approval by ADB and the relevant government bodies of the Borrower in accordance with the approval process set forth in Schedule 4 to the FFA.	Being complied.
5	10	Human and Financial Resources to Implement Safeguards Requirements: The Borrower, through the Road Fund, shall make available necessary budgetary and human resources to fully implement the EMP.	Being complied.
5	11	Safeguards — Related Provisions in Bidding Documents and Works Contracts: The Borrower shall ensure or cause the Road Fund to ensure that all bidding documents and contracts for Works contain provisions that require contractors to: (a) comply with the measures and requirements relevant to the contractor set forth in the IEE and the EMP, and any corrective or preventative actions set out in a Safeguards Monitoring Report; (b) make available a budget for all such environmental measures and requirements; (c) provide the Borrower with a written notice of any unanticipated environmental or social risks or impacts that arise during construction, implementation or operation of the Project that were not considered in the IEE and the EMP; (d) adequately record the condition of roads, agricultural land and other infrastructure prior to starting to transport materials and construction; and (e) fully reinstate pathways, other local infrastructure, and agricultural land to at least their pre-project condition upon the completion of construction.	Complied.
5	12	Safeguards Monitoring and Reporting: The Borrower, through the Road Fund, shall do the following: (a) submit semiannual Safeguards Monitoring Reports to ADB and disclose relevant information from such reports to affected persons promptly upon submission; (b) if any unanticipated environmental and/or social risks and impacts arise during construction, implementation or operation of the Project that were not considered in the IEE and the EMP, promptly inform ADB of the occurrence of such risks or impacts, with detailed description of the event and proposed corrective action plan; and (c) report any actual or potential breach of compliance with the measures and requirements set forth in the EMP promptly after becoming aware of the breach.	Being complied. The environmental monitoring report (EMR) covering January 2013 to June 2014 was disclosed on ADB website on 7 October 2014. The EMR covering January to June 2015 was disclosed on ADB website on 13 October 2015.
5	13	Prohibited List of Investments: The Borrower shall ensure or cause the Road Fund to ensure that no proceeds of the Loan are used to finance any activity included in the list of prohibited investment activities provided in Appendix 5 of the SPS.	Being complied.
5	14	The Borrower, through the Road Fund, shall ensure that the gender action plan for the Project is fully implemented and monitored in a timely manner in accordance with its terms, related regulations of the Borrower, and ADB's Policy on Gender and Development (1998) and adequate resources are allocated for this purpose.	Being complied.
5	15	The Borrower, through the Road Fund, shall include a specific provision in the bidding documents to ensure that civil works contractors: (a) comply with core labor standards, applicable laws and	Being complied.

Schedule	Para No.	Description	Remarks/Issues
		<p>regulations in Uzbekistan and incorporate workplace occupational safety norms;</p> <p>(b) do not differentiate pay between men and women for work of equal value;</p> <p>(c) do not employ child labor in the construction and maintenance activities;</p> <p>(d) eliminate forced or compulsory labor;</p> <p>(e) eliminate employment discrimination;</p> <p>(f) allow for freedom of association; and</p> <p>(g) to the extent possible, maximize employment of local people for project construction purposes provided that the requirements for job and efficiency are adequately met.</p> <p>The Borrower, through the Road Fund, shall include in the quarterly progress reports for the Project the implementation status of such matters.</p>	
5	16	<p>The Borrower, through the Road Fund, shall ensure that appropriate bodies, particularly nongovernment organizations, disseminate information on the risks of sexually transmitted diseases, including human immunodeficiency virus/acquired immunodeficiency syndrome, to the employees of civil works contractors engaged under the Project and to members of the local communities surrounding the Project, particularly females.</p>	Being complied.
5	17	<p>Good Governance and Anticorruption:</p> <p>The Borrower, through the Road Fund: (a) acknowledges that ADB, consistent with its commitment to good governance, accountability and transparency and the ADB's Anticorruption Policy (1998, as amended to date), reserves the right to investigate, directly or through its agents, any alleged corrupt, fraudulent, collusive or coercive practices relating to the Project; and (b) agrees to cooperate fully with any such investigation and to extend all necessary assistance, including providing access to all relevant books and records, for the satisfactory completion of any such investigation. In addition, the Borrower, through the Road Fund, shall: (c) conduct periodic inspections on the contractors' activities related to fund withdrawals and settlements; (d) ensure that all contracts financed by ADB in connection with the Investment Program include provisions specifying the right of ADB to audit and examine the records and accounts of all contractors, suppliers, consultants, and other service providers as they relate to the Project; and (e) ensure that the construction supervision consultant verify the contractors' invoices in accordance with working drawings and contract specifications.</p>	Being complied.
5	18	<p>The Borrower, through the Road Fund, shall include, in the Road Fund's website information on the performance of the Project with clear performance indicators, the Borrower's policy on roads construction and reconstruction, a 5-year investment plan, business opportunities, bidding process and guidelines, outcome of biddings, and summary progress reports of the Project.</p>	<p>Being complied.</p> <p>Road Fund's website is updated regularly. It includes the program of construction and reconstruction of roads under the Uzbek National Highway for period of 2011-2015, a 5-year investment plan, information about tenders and competitions and their outcomes, business opportunities, and project's implementation progress.</p>

Table 9.8: Loan 2965-UZB: Status of Compliance with Loan Covenants

Schedule	Para No.	Description	Remarks/Issues
5	1	Project Management and Implementation: The Borrower, through the Road Fund, shall ensure that the Project is implemented in accordance with the detailed arrangements set forth in the FAM. Any update to the FAM shall become effective only after approval of such change by the Borrower and ADB. In the event of any discrepancy between the FAM and this Loan Agreement, the provisions of this Loan Agreement shall prevail.	Being complied.
5	2	Notwithstanding the generality of paragraph 1 of this Schedule, the Borrower, through the Road Fund, shall ensure that implementation of Part A of this Project shall adhere to the Project 1 Loan Agreement, including all the obligations set forth in Schedule 5 to the Project 1 Loan Agreement. Moreover, the Borrower, through the Road Fund, shall ensure that additional counterpart funds are promptly provided for any shortfall of funds or cost overrun for Part A of this Project. The following provisions of this Schedule are applicable to Parts B and C of the Project.	Being complied.
5	3	Counterpart Funds: Without limiting the generality of Section 6.06 of the Loan Regulations, the Borrower, through the Road Fund, shall make available all counterpart funds required for timely and effective implementation of Parts B and C of the Project, including for any shortfall of funds or cost overrun, through providing annual budget allocations to the Road Fund and releasing applicable funds in a timely manner. The Borrower, through the Road Fund, shall include updated funding requirements for implementation of these Parts of the Project in its annual development program.	Being complied.
5	4	Construction and Road Sector Development: The Borrower, through the Road Fund, shall ensure that Part B and C of the Project are carried out in accordance with the agreed technical specifications and design, and that the construction supervision, quality control and project management of these parts of the Project are performed in accordance with applicable standards and best international practices.	Will be complied.
5	5	The Borrower, through the Road Fund, shall ensure that Works contracts for Part B of the Project include the contractors' obligation to comply with road safety measures, and shall, through the Road Fund, ensure that such obligation is monitored during the term of the contracts. The Road Fund shall disclose on the Internet and provide to ADB the accident rate and traffic volume during construction and the operation of this Part of the Project.	Will be complied.
5	6	The Borrower, through the Road Fund, shall keep ADB informed semiannually of the progress in implementing its road sector policy framework.	Being complied.
5	7	The Borrower, through the Road Fund, shall allocate routine maintenance budget in accordance with the Accelerated Development Program for all existing roads including new road sections to be constructed following the expiry of their defects liability period. For each fiscal year thereafter, such budget shall be increased by no less than the annual inflation rate. For implementation of the Accelerated Development Program, the Borrower shall allocate and make available, on a timely basis, sufficient funds and ensure that the road sections covered by the ADP are maintained in accordance with applicable standards and best international practices.	Being complied. Allocation of road maintenance budget has been consistently increasing every year at a rate higher than the annual inflation rate.

Schedule	Para No.	Description	Remarks/Issues
5	8	<p>Environment: The Borrower, through the Road Fund, shall ensure that the preparation, design, construction, implementation and operation of Part B of the Project comply with</p> <ul style="list-style-type: none"> (a) all applicable laws and regulations of the Borrower relating to environment, health, and safety; (b) the Environmental Safeguards; (c) the EARF; and (d) all measures and requirements set forth in the IEE and the EMP, and any corrective or preventative actions set forth in a Safeguards Monitoring Report. 	Being complied.
5	9	<p>Land Acquisition and Involuntary Resettlement: The Borrower, through the Road Fund, shall ensure that all land and all rights-of-way required for Part B of the Project are made available to the Works contractor in accordance with the schedule agreed under the related Works contract and all land acquisition and resettlement activities are implemented in compliance with</p> <ul style="list-style-type: none"> (a) all applicable laws and regulations of the Borrower relating to land acquisition and involuntary resettlement; (b) the Involuntary Resettlement Safeguards; (c) the LARF; and (d) all measures and requirements set forth in the LARP, and any corrective or preventative actions set forth in a Safeguards Monitoring Report. 	Being complied. An External Monitor was appointed in December 2013. The External Monitor's contract was terminated in October 2015 due to health reasons. The process of recruiting a new External Monitor is ongoing.
5	10	<p>Without limiting the application of the Involuntary Resettlement Safeguards, the LARF or the LARP, the Borrower, through the Road Fund, shall ensure that no physical or economic displacement takes place in connection with Part B of the Project until:</p> <ul style="list-style-type: none"> (a) compensation and other entitlements have been provided to affected people in accordance with the LARP; and (b) a comprehensive income and livelihood restoration program has been established in accordance with the LARP. 	Being complied.
5	11	<p>Ethnic Minorities: The Borrower, through the Road Fund, shall ensure that Part B of the Project does not have any impact with respect to ethnic minorities within the meaning of the SPS. In the event that the Project does have any such impact, the Borrower, through the Road Fund, shall take all steps required to ensure that the Project complies with the applicable laws and regulations of the Borrower and with the SPS.</p>	Being complied.
5	12	<p>Human and Financial Resources to Implement Safeguards Requirements: The Borrower, through the Road Fund, shall make available necessary budgetary and human resources to fully implement the EMP and the LARP.</p>	Being complied.

Schedule	Para No.	Description	Remarks/Issues
5	13	<p>Safeguards – Related Provisions in Bidding Documents and Works Contracts: The Borrower shall ensure or cause the Road Fund to ensure that all bidding documents and contracts for Works contain provisions that require contractors to:</p> <ul style="list-style-type: none"> (a) comply with the measures and requirements relevant to the contractor set forth in the IEE, the EMP and the LARP, and any corrective or preventative actions set out in a Safeguards Monitoring Report; (b) make available a budget for all such environmental and social measures and requirements; (c) provide the Borrower with a written notice of any unanticipated environmental or social risks or impacts that arise during construction, implementation or operation of Part B of the Project that were not considered in the IEE, the EMP or the LARP; (d) adequately record the condition of roads, agricultural land and other infrastructure prior to starting to transport materials and construction; and (e) fully reinstate pathways, other local infrastructure, and agricultural land to at least their pre-project condition upon the completion of construction. 	Being complied.
5	14	<p>Safeguards Monitoring and Reporting: The Borrower, through the Road Fund, shall do the following:</p> <ul style="list-style-type: none"> (a) submit semiannual Safeguards Monitoring Reports to ADB and disclose relevant information from such reports to affected persons promptly upon submission; (b) if any unanticipated environmental and/or social risks and impacts arise during construction, implementation or operation of Part B of the Project that were not considered in the IEE, the EMP or the LARP, promptly inform ADB of the occurrence of such risks or impacts, with detailed description of the event and proposed corrective action plan; and (c) report any actual or potential breach of compliance with the measures and requirements set forth in the EMP or the LARP promptly after becoming aware of the breach. 	Will be complied
5	15	<p>The Borrower, through the Road Fund, shall ensure that any change to the location or alignment of the road, or environmental or social impact, arising from detailed design for the Project is subject to prior approval by ADB and the relevant government bodies of the Borrower in accordance with the approval process set forth in Schedule 4 to the FFA.</p>	<p>Being complied</p> <p>Due to the construction of new railway and power station plant on the project area, it is necessary to change the project detailed design. Official letters on this issue were officially sent to ADB on 31 January 2015 and 9 April 2015 and to Interministerial Council on 13 April 2015.</p>
5	16	<p>Prohibited List of Investments: The Borrower shall ensure or cause the Road Fund to ensure that no proceeds of the Loan are used to finance any activity included in the list of prohibited investment activities provided in Appendix 5 of the SPS.</p>	Being complied

Schedule	Para No.	Description	Remarks/Issues
5	17	<p>Gender and Labor: The Borrower, through the Road Fund, shall ensure that the gender action plan for Part B of the Project is fully implemented and monitored in a timely manner in accordance with its terms, related regulations of the Borrower, and 'DB's Policy on Gender and Development (1998) and adequate resources are allocated for this purpose.</p>	Will be complied
5	18	<p>The Borrower, through the Road Fund, shall ensure that the core labor standards and the Borrower's applicable laws and regulations, including workplace occupational safety norms, are complied with during implementation of Part B of the Project. The Borrower, through the Road Fund, shall include specific provisions in the bidding documents and contracts financed by ADB under the Project requiring that the contractors, other provider of goods and services and their subcontractors:</p> <ul style="list-style-type: none"> (a) comply with the Borrower's applicable labor law and regulations; (b) do not use child labor, within the meaning provided in Appendix 5 of the SPS; (c) provide equal opportunity and eliminate discrimination in relation to recruitment, compensation, working conditions and terms of employment for workers (including prohibiting any form of discrimination against women during hiring and providing equal pay for men and women for work of equal value; and to the extent possible, employing women and local people, including disadvantaged people, living in the Project area, provided that the requirements for efficiency are adequately met); (d) do not use forced labor, within the meaning provided in Appendix 5 of the SPS; (e) allow freedom of association and effectively recognize the right to collective bargaining; and (f) disseminate, or engage appropriate service providers to disseminate, information on the risks of sexually transmitted diseases, including HIV/AIDS, to the employees of contractors engaged under the Project and to members of the local communities surrounding the Project area, particularly females. 	Being complied
5	19	The Borrower shall strictly monitor compliance with the labor standards and provide ADB with regular reports.	Will be complied
5	20	<p>Good Governance and Anticorruption The Borrower, through the Road Fund:</p> <ul style="list-style-type: none"> (a) acknowledges that ADB, consistent with its commitment to good governance, accountability and transparency and the 'DB's Anticorruption Policy (1998, as amended to date), reserves the right to investigate, directly or through its agents, any alleged corrupt, fraudulent, collusive or coercive practices relating to Parts B and C of the Project; and (b) agrees to cooperate fully with any such investigation and to extend all necessary assistance, including providing access to all relevant books and records, for the satisfactory completion of any such investigation. <p>In addition, the Borrower, through the Road Fund, shall:</p> <ul style="list-style-type: none"> (a) conduct periodic inspections on the contractors' activities related to fund withdrawals and settlements; (b) ensure that all contracts financed by ADB in connection with the Investment Program include provisions specifying the right of ADB to audit and examine the records and accounts of all contractors, suppliers, consultants, and other service providers as they relate to Parts B and C of the Project; and (c) ensure that the construction supervision consultant verify the contractors' invoices in accordance with working drawings and contract specifications. 	Will be complied

Schedule	Para No.	Description	Remarks/Issues
5	21	The Borrower, through the Road Fund, shall include, on its websites information on the performance of Parts B and C of the Project with clear performance indicators, the Borrower's policy on roads construction and reconstruction, a 5-year investment plan, business opportunities, bidding process and guidelines, outcome of biddings, and summary progress reports of these Parts of the Project.	Being complied

4. Land Acquisition and Resettlement (LAR) Activities Monitoring

250. LAR tasks will be monitored internally and externally. Internal monitoring (IM) will be carried out by the PMU. For project with significant LAR impacts external monitoring (EM) will be assigned to an Independent Monitoring Agency (IMA) hired by RRF and approved by ADB from among local consultants or NGOs. The IMA will be mobilized prior to LARP implementation.

251. Resettlement monitoring activity has three main objectives; (1) to verify that resettlement activities have been effectively completed including quantity, quality, and timeliness and comply with the LARF and the LARP; (2) to assess whether APs have been able to restore, or improve, their livelihoods to their pre-project status; and (3) to identify the necessary corrective actions, when required.

252. **Internal Monitoring:** Internal monitoring (IM) will be carried out by the PMU. IM indicators will relate to process outputs and results, will be collected directly from the field, and will be reported quarterly to the PMU to assess the LARP implementation progress and adjust the work plan if necessary. These reports will be consolidated in the semiannual supervision reports for ADB. Specific IM benchmarks will be:

- (i) Information campaign and consultation with APs;
- (ii) Status of land acquisition and payments on land compensation;
- (iii) Compensation for affected structures and other assets;
- (iv) Relocation of APs;
- (v) Payments for loss of income;
- (vi) Selection and distribution of replacement land areas;
- (vii) Income restoration activities; and
- (viii) Ensure the gender mitigation measures G are adhered to during the internal monitoring and reporting process.

253. The above information will be collected by the PMU which will monitor the day-to-day resettlement activities of the project through the following instruments:

- (i) review of census information for all APs;
- (ii) consultation and informal interviews with APs;
- (iii) key informant interviews; and
- (iv) community public meetings.

254. **External Monitoring Agency (EMA).** For project with significant²² LAR impacts an external monitoring (EM) will be carried out by an independent agency on an ongoing basis, and

²² The Involuntary resettlement impacts of ADB-supported project are considered significant if 200 or more persons will experience major impacts, which are defined as (i) being physically displaced from housing, or (ii) losing 10% or more of their productive assets (income generating). (ADB OM section F1/OP, January 2010).

its results communicated to the PMU and ADB by quarterly, semi-annual or annual reports whichever more efficient and practical. Indicators for EM tasks include:

- (i) Review and verify internal monitoring reports prepared by PMU,
- (ii) Review of the socio-economic and census and inventory of losses baseline information of pre-displaced persons;
- (iii) Identification and selection of impact indicators;
- (iv) Impact assessment through formal and informal surveys with the affected persons;
- (v) Consult APs, officials, community leaders for preparing review report;
- (vi) Assess the resettlement efficiency, effectiveness, impact and sustainability, drawing lessons for future resettlement policy formulation and planning;
- (vii) Ensure the gender mitigation measures are implemented.

255. The External Monitoring Agency (EMA) will also assess the situation of affected vulnerable groups such as female-headed households, disabled/elderly, the landless and families below the poverty line. The following will be considered as the basic indicators in monitoring and evaluating the project.

- (i) Socio-economic conditions of APs in the post-resettlement period;
- (ii) Communications and reactions from APs on entitlements, compensation, options, alternative developments and relocation timetables etc.;
- (iii) Changes in housing and income levels;
- (iv) Rehabilitation of squatters, severely affected people, and different vulnerable groups;
- (v) Valuation of property;
- (vi) Ability to replace lost assets;
- (vii) Disbursement of compensation and other entitlements;
- (viii) Level of satisfaction of APs in the post resettlement period;
- (ix) Quality and frequency of consultation and disclosure; and
- (x) Conduct of grievance procedures.

256. Internal and external monitoring and reporting will continue until all LAR activities have been completed. External monitoring reports will be disclosed on the Project/ADB website.

5. Environmental Safeguards Monitoring

257. Monitoring is required during all three stages of a project, i.e. planning, construction and operation to record the mitigative actions taken and the resulting effects designed to either avoid or reduce predicted impacts. The preparation and oversight of any monitoring work is the responsibility of the Executing Agency and its consultant.

258. Monitoring during the planning stage usually takes place twice once to incorporate mitigative measures in the planning process and then at the end of that stage to monitor compliance. Construction monitoring takes place at regular intervals throughout the construction period, usually quarterly, with bi-annual monitoring reports.

259. Operating period monitoring is dependent on the types and duration of impacts identified during the environmental assessment, but usually are completed annually for three years, for a variable time period.

260. Some of the monitoring during both the construction and operating periods will require sample collection as well as field measurements.

6. Ethnic Minority Plan Monitoring

261. The Road Fund will establish a monitoring system involving Road Fund staff, Councils of Rural Communities, makhalla committees, and EM groups, to ensure participatory monitoring arrangements. A set of monitoring indicators will be determined during Ethnic Minority Plan (EMP) implementation. Project supervision and monitoring consultants will carry out external monitoring. Appropriate monitoring formats will be prepared for internal and external monitoring and reporting requirements.

262. For project with significant adverse impacts on ethnic minorities, a qualified and experienced external experts or qualified NGO will be engaged by the Road Fund to verify monitoring information of the EMP. The external experts will advise on compliance issues and if any significant issues are found, the Road Fund will prepare a corrective action plan or an update to the approved EMP. The Road Fund requires implementing the corrective actions and following up these actions to ensure their effectiveness.

7. Poverty and Social Action Plans

263. The Project will involve civil works of a major highway, using mostly machinery and skilled labor. Only a limited amount of unskilled labor will be needed during construction. No specific pro-poor activities are planned in this Project. The social and gender analyses conducted under the Investment Program produced a Gender Action Plan (GAP) showing that the following needs should be addressed: (i) capacity building on social and gender issues at Road Fund and Saramaya; (ii) development of social infrastructure and business skills in Saramaya; (iii) improved access to health care in Saramaya. To monitor and report these activities, a monitoring and reporting tool will be developed by a community and gender development specialist no later than the second quarter of 2011, and monitoring reports will be produced quarterly throughout the plan.

D. Evaluation

264. ADB will field an inception mission within 3 months after signing of the FFA and the loan agreement for Project 1. Review missions will be carried out on a semiannual basis jointly by representatives of ADB, Borrower, and the Road Fund. The review missions will assess the status of the project implementation including procurement, civil works, financing, compliance to environmental and social safeguards, and the road sector sustainability. Site visits are required for all projects with environment or social impacts. A mid-term review mission will be carried out 2 years after each loan becomes effective. Each mid-term review will evaluate compliance with the terms, conditions, and undertakings set out in the FFA, environmental and social safeguards, and loan covenants set out in the loan agreements. The review will allow for any necessary midcourse corrections to ensure successful implementation and the achievement of the project objectives. Within 3 months of physical completion of each Project, the Road Fund will submit a project completion report to ADB.²³

²³ Project completion report format available at: <http://www.adb.org/Consulting/consultants-toolkits/PCR-Public-Sector-Landscape.rar>

E. Reporting

265. The PMU will prepare quarterly progress reports and will submit them to ADB within 2 weeks from the end of the related quarter. Overall progress and compliance with conditions of the loan agreement will be monitored regularly and reviewed by ADB, consistent with existing project implementation requirements. Reports will include evaluation of issues and will recommend remedial actions.

266. The PMU will establish a project performance monitoring system within 6 months from loan effectiveness and collect baseline data for performance monitoring. The key indicators and assumptions outlined at the impact and outcome levels in the Investment Program's design and monitoring framework will be the primary data required for analysis.

F. Stakeholder Communication Strategy

Project Documents	Means of Communication	Responsible Party	Frequency	Audience(s)
Project Information Document (PID)	ADB's website	ADB	initial PID no later than 30 calendar days of approval of the concept paper; quarterly afterwards	General Public
Design and Monitoring Framework (DMF)	ADB's website	ADB	draft DMF after post fact-finding mission	Project-affected people
Environmental Impact Assessments	ADB's website	ADB	at least 120 days before Board consideration	General Public, project-affected people in particular
Resettlement Planning Documents	ADB's website	ADB	post fact-finding mission	General Public, project-affected people in particular
Ethnic Minority Planning Documents	ADB's website	ADB	post fact-finding mission	General Public, project-affected people in particular
Reports and Recommendations of the President	ADB's website	ADB	within 2 weeks of Board approval of the loan	General Public
Legal Agreements	ADB's website	ADB	no later than 14 days of Board approval of the project	General Public
Initial Poverty and Social Assessment	ADB's website	ADB	within 2 weeks of completion	General Public, project-affected people in particular
Documents Produced under Technical Assistance	ADB's website	ADB	within 2 weeks of completion	General Public
Facility Administration Memorandum	ADB's website	ADB	After loan negotiations	General Public
Social and Environmental Monitoring Reports	ADB's website	ADB	routinely disclosed, no specific requirements	General Public, project-affected people in particular
Major Change in Scope	ADB's website	ADB	within 2 weeks of approval of the change	General Public
Audited Project Financial Statements and Auditor's Opinion on the Financial Statements*	ADB's website	ADB	within 30 days of the date of receipt	General Public

Project Documents	Means of Communication	Responsible Party	Frequency	Audience(s)
Completion Reports	ADB's website	ADB	within 2 weeks of circulation to the Board for information	General Public
Evaluation Reports	ADB's website	ADB	routinely disclosed, no specific requirements	General Public
Performance of the investment program with clearly defined information requirements and indicators, policy on roads construction and reconstruction, 5-year investment plan, business opportunities, bidding process and guidelines, results of bidding process, and summary progress reports of the ongoing projects.	The borrower's Website	The borrower (Executive Agency)	per project progress, no longer than monthly	General Public

* Applicable to Loan 2965-UZB and Tranche 3.

X. ANTICORRUPTION MEASURES

267. The Government will comply with, and will ensure that the Road Fund complies with, ADB's Anticorruption Policy (1998, as amended to date). The Government, consistent with its commitment to good governance, accountability and transparency, agrees (a) that ADB has the right to investigate, directly or through its agents, any alleged corrupt, fraudulent, collusive or coercive practices relating to the Investment Program; and (b) to cooperate fully with any such investigation and to extend all necessary assistance, including providing access to all relevant books and records, as may be necessary for the satisfactory completion of any such investigation. In addition, the Government will (a) conduct periodic inspections on the contractors' activities related to fund withdrawals and settlements; (b) ensure that all contracts financed by ADB in connection with the Investment Program include provisions specifying the right of ADB to audit and examine the records and accounts of all contractors, suppliers, consultants, and other service providers as they relate to the Investment Program; and (c) the construction supervision consultant shall verify the contractors' invoices in accordance with working drawings and contract specifications.

XI. ACCOUNTABILITY MECHANISM

268. People who are, or may in the future be, adversely affected by the project may address complaints to ADB, or request the review of ADB's compliance under the Accountability Mechanism.²⁴

²⁴ For further information see: <http://compliance.adb.org/>.

XII. RECORD OF FAM CHANGES

269. All revisions/updates during course of implementation should be retained in this Section to provide a chronological history of changes to implemented arrangements recorded in the FAM.²⁵

Table 12.1: Record of FAM Changes

FAM Version	Created Date	Revision Date	Reasons of Change	Main Contents of Change
V1	28 April 2011	NA	Initial	NA
V2		04 July 2011	Loan Negotiations	Procurement Plan updated
V3		27 Nov 2012	Loan Negotiations for Tranche 2	Addition of paras 6-9 in project description Table 2.1 amended Para 12 amended Para 13 amended Paras 14-15 added Figure 2.1 updated Table 2.2 updated Table 2.3 added Figure 2.3 added Chapter III Sections A and B updated Figure 3.1 updated Para 22 and Table 4.1 updated Para 23 updated Table 4.2 updated Table 4.4 added Table 4.5 updated Table 4.7 added Table 4.8 updated Table 4.10 added Figures 4.2, 4.3 and 4.4 added

²⁵ The Road Fund and ADB shall ensure that changes to the FAM during Investment Program implementation must be consistent with the FFA and applicable loan agreements.

FAM Version	Created Date	Revision Date	Reasons of Change	Main Contents of Change
				<p>Figure 4.5 updated</p> <p>Figure 4.6 added</p> <p>Para 32-33 added</p> <p>Para 35 updated</p> <p>Para 37 updated</p> <p>Para 40 added</p> <p>Figure 6.1 updated</p> <p>Figure 6.2 added</p> <p>Table 6.1 and 6.2 updated</p> <p>Tables 6.3 and 6.4 added</p> <p>Table 6.5 updated</p> <p>Section D – Terms of Reference for Project 2 added</p> <p>Para 132 added</p> <p>Para 134 updated</p> <p>Table 9.3 added</p> <p>Table 9.6 updated</p> <p>Table 9.7 added</p>
V4	August 2013	Review Mission	<p>Cover page and abbreviations updated</p> <p>Program description, paras 2 and 8, 9 updated</p> <p>Implementation plan, para 10, Table 2.1, para 14, Figure 2.1, Tables 2.2 and 2.3 updated</p> <p>Key Persons Involved in Implementation – ADB updated</p> <p>Program organization structure, Figure 3.1 updated</p> <p>Detailed cost estimates by year for projects 1 and 2, Tables 4.9 and 4.10 updated</p>	

FAM Version	Created Date	Revision Date	Reasons of Change	Main Contents of Change
				<p>CAD s-curves, Figures 4.1, 4.2, 4.3, and 4.4 updated</p> <p>Procurement plans, Figures 6.1 and 6.2, and Tables 6.3 and 6.4 updated</p> <p>FFA undertakings and loan covenants compliance, Tables 9.6 and 9.7 updated; Table 9.8 added</p> <p>E. Stakeholder Communication Strategy updated to include APFS for L2965</p> <p>References to COSO changed to OSFMD</p> <p>Publication dates of the Procurement Guidelines, Consulting Guidelines, Loan Disbursement Handbook updated</p>
V5		October 2014	Processing of Project 3 (to reflect Project 3 information)	<p>Updated the following sections:</p> <p>I. Program Description</p> <p>II. Implementation Plans</p> <p>III. Program Management Arrangement, B. Key Persons Involved in Implementation</p> <p>IV. Costs and Financing</p> <p>V. Financial Management</p> <p>VI. Procurement of Goods, Works and Consulting Services</p> <p>VII. Safeguards</p> <p>IX. Performance Monitoring, Evaluation, Reporting and Communication</p>
V6		September 2015	Processing of Project 3 (to reflect Project 3 information)	<p>Updated the following sections:</p> <p>II. Implementation Plans</p> <p>III. Program Management Arrangement, B. Key Persons Involved in Implementation</p> <p>V. Financial Management, C. Disbursement</p> <p>VI. Procurement of Goods, Works and</p>

FAM Version	Created Date	Revision Date	Reasons of Change	Main Contents of Change
				Consulting Services
				IX. Performance Monitoring, Evaluation, Reporting and Communication
V7		November 2015	Processing of Project 3 (to reflect Project 3 information)	<p>Updated the following sections:</p> <p>Facility Administration Manual Purpose and Process</p> <p>II. Implementation Plans (updated Table 2.1, Figure 2.1, Table 2.2, Table 2.3, Table 2.4, Figure 2.3, and Figure 2.4)</p> <p>IV. Costs and Financing (added Table 4.3, Table 4.4, and Table 4.5; updated Table 4.12, Table 4.13, Table 4.15, Table 4.16, Figure 4.3, and Table 4.17)</p> <p>V. Financial Management (updated section on Auditing and Public Disclosure)</p> <p>VI. Procurement of Goods, Works and Consulting Services (updated Figure 6.1 and Table 6.6)</p> <p>IX. Performance Monitoring, Evaluation, Reporting and Communication (updated Table 9.4, Table 9.7, and Table 9.8)</p>