



Project Administration Manual

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Loan and Grant Numbers: L3056; G0366
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Kyrgyz Republic: Central Asia Regional Economic
Cooperation Corridor 3 (Bishkek–Osh Road)
Improvement Project, Phase 4

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ATTACHMENTS

1. Progress Report Template
2. Social Monitoring Report Template
3. Bi-Annual Environmental Monitoring Report

Project Administration Manual Purpose and Process

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

The Ministry of Transport and Communications of Kyrgyz Republic are wholly responsible for the implementation of ADB financed projects, as agreed jointly between the beneficiary and ADB, and in accordance with Government and ADB's policies and procedures. ADB staff is responsible to support implementation including compliance by Ministry of Transport and Communications of their obligations and responsibilities for project implementation in accordance with ADB's policies and procedures.

At Loan and Grant Negotiations the beneficiary and ADB shall agree to the PAM and ensure consistency with the Financing Agreement. Such agreement shall be reflected in the minutes of the Loan and Grant Negotiations. In the event of any discrepancy or contradiction between the PAM and the Financing Agreement, the provisions of the Financing Agreement shall prevail.

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

ABBREVIATIONS

ADB	=	Asian Development Bank
ADF	=	Asian Development Fund
AFS	=	audited financial statements
CQS	=	consultant qualification selection
ICB	=	international competitive bidding
IEE	=	initial environmental examination
IPIG	=	Investment Projects Implementation Group
LARP	=	land acquisition and resettlement plan
MOTC	=	Ministry of Transport and Communications
NCB	=	national competitive bidding
PAM	=	project administration manual
PBM	=	performance-based management
PIU	=	project implementation unit
QBS	=	quality based selection
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. PROJECT DESCRIPTION

1. The Kyrgyz Republic is a landlocked, mountainous country with formidable geographic barriers that constrain its ability to effectively participate in international trade. Its development efforts are further hampered by inadequate physical infrastructure, which is in need of investment and regular maintenance. Development of the transport sector is very important for the Kyrgyz Republic as this will lower barriers, reduce the cost of doing business, and generate employment in the region.

2. The capital, Bishkek, is the country's political and economic hub with a population of about 1 million. The second largest city after Bishkek is Osh (population 250,000), located in the Fergana valley in the south, the country's major agricultural area. The gross domestic product of these two cities accounts for nearly half of the country's total. The Bishkek–Osh road connects the two regional economic and population centers, and in a regional context forms part of CAREC Corridor 3, which runs from west and south of the Siberian region of the Russian Federation through Afghanistan, Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan to the Middle East and South Asia.¹ In the national context, the Bishkek–Osh road represents about one-third of the core international road corridor network in the Kyrgyz Republic, and links the country to Kazakhstan in the north, Tajikistan and Uzbekistan in the south, and the People's Republic of China in the southeast. It crosses four of the country's seven provinces and serves at least 4 million people. It is the only direct land link between the southern and northern parts of the country, making it crucial for maintaining the Kyrgyz Republic's social, political, and economic integrity.

3. Being the last two unimproved sections along CAREC Corridor 3, the Bishkek–Osh road project will play a significant role in expanding trade and increasing competitiveness among the CAREC economies and the rest of the world. The project road also passes through some of the poorest *oblasts* (districts) in the country with the greatest need for improved connectivity for the population to access goods and services and so improve their quality of life. Two such *oblasts* are Osh and Jalal-Abad, both of which have urban and rural poverty rates of more than 40%.² By improving the key corridor in the Kyrgyz Republic, the poorest regions in the country will have improved access to regional and domestic economic activities. Improving the road network, especially to connect rural populations to urban centers for access to services and trade in domestic and regional markets, is critical for inclusive economic growth and social development.

4. ADB has assisted the Kyrgyz Republic in rehabilitating 320 kilometers (km) of the 655 km Bishkek–Osh road in three phases.³ All three projects were rated *successful* and *highly relevant* in the performance evaluation report by ADB's Independent Evaluation Department in 2010.⁴ Other development partners, such as the Japan Bank for International Cooperation and the Islamic Development Bank, also recognize the importance of this road. Overall, development partners have assisted the government in rehabilitating more than 539 km (about 82%) of the Bishkek–Osh road.⁵ However, because of funding limitations, there are still two sections that need urgent attention: Bishkek to Kara-Balta and Madaniyat to Jalal-Abad. These two sections are in very poor condition, with an international roughness index above 7 and truck and bus average travel speed of less than 50 kilometers per hour (km/h), and are

¹ ADB. 2007. *CAREC Transport and Trade Facilitation Strategy*. Manila.

² ADB. 2013. *Country Partnership Strategy: Kyrgyz Republic, 2013–2017*. Manila.

³ Phase 1 of the Bishkek–Osh road project was completed in 2001, phase 2 in 2005, and phase 3 in 2007. The combined lessons include (i) long-term planning and proper sequencing are needed to reform the road sector, sufficient resources must be allocated for capacity building in institutions, and monitoring of reform implementation is needed; (ii) close coordination with development partners is needed to avoid conflicting policy advice; (iii) an assessment of affordability of road rehabilitation projects is needed in the economic analysis; and (iv) time overruns should be avoided as they can undermine the project's efficiency and economic internal rate of return.

⁴ Independent Evaluation Department. 2010. *Project Performance Evaluation Report: Road Rehabilitation Project, Second Road Rehabilitation Project, and Third Road Rehabilitation Project (Kyrgyz Republic)* (Loans 1444-KGZ, 1630-KGZ, and 1853-KGZ). Manila: ADB.

⁵ Development Coordination (accessible from the list of linked documents in Appendix 2).

unable to provide the required level of service.⁶ They pose traffic hazards to road users and pedestrian traffic.⁷ In addition to connecting the poorest population needing access to services, goods, and markets and enhancing regional connectivity, upgrading the Bishkek–Osh road will improve safety for all road users.⁸

5. The project will improve national and regional connectivity by reconstructing and rehabilitating an estimated 120 km of crucial road sections between Bishkek and Osh, and will include road safety measures such as road signs, lane markings, street lighting, parking areas, bus stops, crash barriers, and sidewalks. The project is fully consistent with the government's priority of upgrading key corridors as stated in the National Strategy of Sustainable Development, 2013–2017.⁹ The project is also well aligned with ADB's Strategy 2020¹⁰ and with the country partnership strategy, 2013–2017, for the Kyrgyz Republic (footnote 2). The priority theme for the country partnership strategy is the development of a successful and stable democratic state through inclusive growth and the reduction of regional disparities. This theme is also at the core of the project.

A. Impact and Outcome

6. The impact of the project will be enhanced regional connectivity and trade via CAREC Corridor 3. The outcome will be improved efficiency and safer movement of goods and people on the Bishkek–Osh road.

B. Outputs

7. The Project outputs, to be financed by ADB and the government are as follows:

- (i) **Reconstructed road from Bishkek to Kara-Balta totaling 52.5 km (Km 8.5–Km 61.0).** This includes 43.5 km of the road section to be upgraded to four lanes and 9.0 km to six lanes.¹¹ Reconstruction of six bridges and rehabilitation of one bridge 6–24 meters long are also included.
- (ii) **Strengthened institutional capacity.** This component comprises (a) a 100 km performance-based maintenance (PBM) pilot contract, covering the section from Kara-Balta to Km 161, and knowledge building and sharing relating to PBM; (b) a road safety audit and awareness program; and (c) consulting services for engineering, supervision, and project management, including climate change adaptation assessment and independent external resettlement monitoring.

⁶ Extensive traffic survey was carried out under the project preparatory technical assistance. In the Bishkek–Kara-Balta section, the 2013 average annual daily traffic between Km 9 and Km 17 near the Bishkek bypass junction is 42,000 vehicles, and between Km 17 and Km 29 near Sokuluk town is 48,600 vehicles.

⁷ A sample pedestrian count was carried out on a typical weekday (Thursday, 20 June 2013) at Km 25.5 near the market area of Sokuluk. From 12 p.m. to 2 p.m., 4,064 pedestrians were counted on the sidewalk and 1,881 pedestrians were counted at the crossing. From 5 p.m. to 7 p.m., 1,561 pedestrians were counted on the sidewalk and 1,052 pedestrians were counted at the crossing. Based on a conservative estimate, this section of the road, on a typical weekday, would have at least an estimated 10,000 pedestrians passing by it.

⁸ Sector Assessment (Summary): Transport, and Information and Communication Technology (accessible from the list of linked documents in Appendix 2).

⁹ Government of the Kyrgyz Republic. 2013. *National Strategy of Sustainable Development, 2013–2017*. Bishkek.

¹⁰ ADB. 2008. *Strategy 2020: The Long-Term Strategic Framework of the Asian Development Bank, 2008–2020*. Manila.

¹¹ Based on the Kyrgyz Republic road design standards, Km 8.5–Km 16.0 and Km 21–Km 60 will be considered as traffic regulated highways according to urban road standards (design speed of 80 km/h and 4–6 3.5-meter traffic lanes), whereas Km 16–Km 21 section is located outside settled areas and should be categorized as an international and state highway of category 1-b (design speed of 120 km/h and four 3.75-meter traffic lanes).

II. IMPLEMENTATION PLANS

A. Project Readiness Activities

Indicative Activities	Months									Responsible Party
	Jul 2013	Aug 2013	Sep 2013	Oct 2013	Nov 2013	Dec 2013	Jan 2014	April 2014	June 2014	
Advance contracting actions			X							ADB and MOTC
Establish project implementation arrangements	X									MOTC
ADB Board consideration					X					ADB
Grant/Loan signing							X			ADB and MOF
Government legal opinion provided									X	MOTC
Government budget inclusion		X								MOTC
Grant/Loan effectiveness									X	ADB/MOTC

ADB = Asian Development Bank, MOF = Ministry of Finance, MOTC = Ministry of Transport and Communications.
Source: Asian Development Bank.

B. Overall Project Implementation Plan (To be Updated)

Activity	Start	Finish	2013		2014				2015				2016				2017				2018				2019				2020			
			Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Financing Approval																																
ADB Management's Approval																																
Grant/Loan Negotiations		III Sept 13	■																													
Grant/Loan Consideration by ADB's Board		I Nov 13		■																												
Grant/Loan Signing		IV Jan 14			■	■																										
Grant/Loan Effectivity		IV Mar 14			■	■																										
Procurement Activities																																
Recruitment of Engineering and Supervision Consultant	I Oct 13	IV Mar 14	■	■	■																											
Posting of Consultant Recruitment Notice		IV Oct 13	■																													
Preparation of RFP		II Dec 13	■																													
Evaluation of Proposals by MOTC		IV Feb 14			■	■																										
Contract Negotiations and ADB Approval		IV Mar 14			■	■																										
Preparation of Detailed Design and Bid Documents	I Apr 14	IV Sep 15			■	■	■	■	■	■	■																					
Procurement of Works	I Sept 14	IV Sep 15				■	■	■	■	■	■																					
Posting of General Procurement Notice		I Sept 14				■	■																									
Preparation of Bid Documents		I Sept 14				■	■																									
ADB Approval of Bid Documents		I Oct 14						■	■																							
Bid Preparation		I Nov 14						■	■																							
Evaluation of Proposals by MOTC		I Jun 15								■	■																					
ADB Approval of Evaluation		I July 15									■	■																				
Contract Negotiations and ADB Approval		I Aug 15										■	■																			
Construction																																
Mobilization of Contractor	I Oct 15	IV Oct 18										■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		
Works Supervision	I Aug 15	IV Oct 19											■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■		
Project Completion		IV Oct 19																											■			
Defects Liability Period	I Oct 18	IV Oct 19																												■		
Grant/Loan Closing		I Apr 20																												■		

ADB = Asian Development Bank, RFP = request for proposal, MOTC = Ministry of Transport and Communications.
 Source: Asian Development Bank.

III. PROJECT MANAGEMENT ARRANGEMENTS

A. Project Implementation Organizations – Roles and Responsibilities

Project Implementation Organizations	Management Roles and Responsibilities
<ul style="list-style-type: none"> • Ministry of Transport and Communications (MOTC) (the executing agency) • Investment Projects Implementation Group, IPIG (project implementation unit) 	<ul style="list-style-type: none"> ➤ Focal point for communication with ADB on project related matters, and signatory to important documents such as civil works contracts, consultancy service contracts, withdrawal applications, and audit reports ➤ Ensure timely completion of project ➤ Ensure that Investment Projects Implementation Group (IPIG) is fully staffed and functional during the entire period of implementation ➤ Administer all consultancy and works contracts (instructing the supervision consultant, approving variations, suspending and terminating contracts) ➤ Ensure compliance with loan covenants, ADB's guidelines, procedures, and policies ➤ Pre-construction phase: <ul style="list-style-type: none"> - advise MOTC on procurement of goods, works, consulting and audit services - design the learning and development program - review and verify documents submitted by contractors and consultants - obtain ADB approvals ➤ Construction phase: <ul style="list-style-type: none"> - monitor and evaluate project activities and outputs - ensure minimal variations and deviations from original prices and schedules - report the Project's progress to MOTC and ADB - assist ADB project review missions - consult with the public and disclose project information in consultation with ADB
<ul style="list-style-type: none"> • Asian Development Bank (ADB) 	<ul style="list-style-type: none"> ➤ Assist MOTC in implementing the Project by: <ul style="list-style-type: none"> - Reviewing and facilitating approval of project implementation and procurement documents submitted by EA - Disclosing project information to the public - Fielding review missions - Facilitating knowledge sharing
<ul style="list-style-type: none"> • Ministry of Finance 	<ul style="list-style-type: none"> ➤ Facilitate negotiation, signing, and execution of the loan agreement ➤ Expedite implementation and minimize cost by: <ul style="list-style-type: none"> - allocating and making available counterpart funds on time - approving contracts and payment to contractors, goods, and service providers - monitoring project progress and instructing MOTC to take corrective action to prevent significant variations and deviations from schedules and budgets

B. Key Persons Involved in Implementation

Executing Agency

Ministry of Transport and
Communications (MOTC)

Minister of Transport and Communication
Telephone: +996 312 314313
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Email address: bishkekoshroad@infotel.kg
42, Isanova Str., Bishkek 720017, Kyrgyz Republic

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42, Isanova Str., Bishkek 720017, Kyrgyz Republic

Asian Development Bank (ADB)

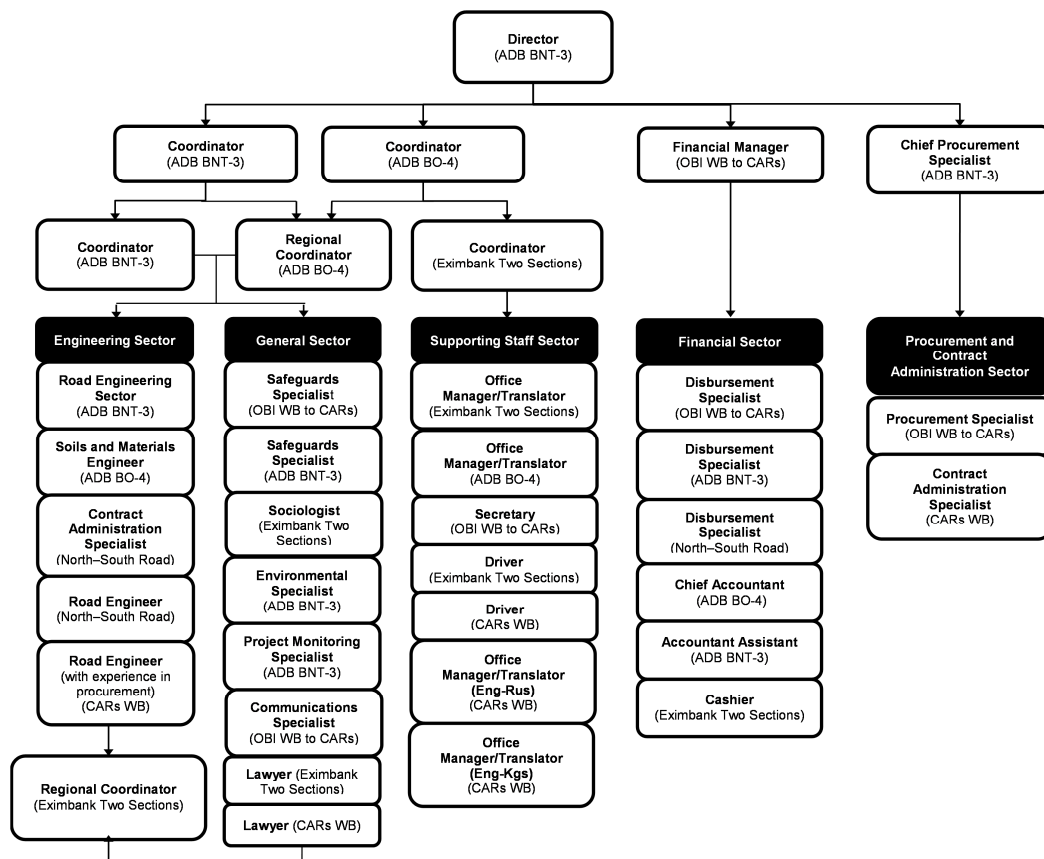
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C. Project Organization Structure



ADB = Asian Development Bank, BNT = Bishkek–Torugart Project, BO = Bishkek–Osh, Ph = Phase, CARs = Central Asia Road Links, OBI = Osh–Batken–Isfana, WB = World Bank.
Source: Ministry of Transport and Communications of the Kyrgyz Republic.

IV. COSTS AND FINANCING

8. The Project shall comprise the following components:
- (i) reconstruction of a 52.5 km road section from Bishkek to Kara-Balta (Km 8.5–Km 61), incorporating specific features for preserving the road structure and reducing vehicle crashes; and
 - (ii) institutional capacity strengthening, including:
 - (a) piloting a performance-based maintenance contract on the 100 km road section from Kara-Balta to Km 161;
 - (b) conducting road safety enhancement and awareness program and audit; and
 - (c) provision of support for detailed engineering and construction supervision of the road section referred to in subparagraph (a) of this paragraph and for project management.
9. The Project is estimated to cost approximately \$120.8 million to be financed by ADB and the Government, including taxes and duties.¹²
10. The government has requested ADB to provide (i) a loan in various currencies equivalent to SDR42,975,000; and (ii) a grant not exceeding \$35.0 million, both from ADB's Special Funds resources, to help finance the project. The loan will have a 32-year term, including a grace period of 8 years, an interest rate of 1.0% per annum during the grace period and 1.5% per annum thereafter, and such other terms and conditions set forth in the draft loan and project agreements.
11. The government will provide counterpart funding of \$20.8 million to cover (i) taxes and duties related to all civil works, goods, and consulting services, (ii) 50% PBM contract pilot, and (iii) other miscellaneous costs for the ADB-financed and administered outputs.
12. The Project is expected to be completed by October 2019.

¹² In addition, 67 km of road from Madaniyat to Jalal-Abad (Km 507.5–Km 574.5) will be rehabilitated to international and state highway category 2. This is to be financed by the Eurasian Development Bank (EDB) and the government.

A. Cost Estimates by Expenditure Category

Item	Amount
A. Base Cost^a	
1. Reconstruction of the Bishkek–Kara-Balta road section (52.5 km)	75.5
2. Institutional strengthening ^b	9.2
3. Project management support ^c	1.5
4. Land acquisition and resettlement for the Bishkek to Kara-Balta road section	1.3
5. Taxes and duties ^d	18.3
Subtotal (A)	105.8
B. Contingencies^e	14.0
C. Financing Charges During Implementation^f	1.0
Total (A+B+C)	120.8

Km = kilometer.

^a In mid-2013 prices.

^b Includes an engineering and supervision consulting firm, performance-based maintenance pilot contract and management consultants, road safety enhancement and awareness program and audit, climate change adaptation assessment, external resettlement monitoring specialist, insurance, consulting services income tax on non-residents, and employer's social fund contributions for individual consultants (3%).

^c Includes project implementation unit staff salaries plus employer's social fund contributions (17.25%), office operating expenses, financial audit firm, bank charges, local transport, and insurance.

^d Includes taxes and duties of about \$18.3 million to be financed from government resources.

^e Physical contingencies computed at 10% for civil works and consulting services. Price contingencies computed according to the ADB price escalation factors; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^f Includes interest charges financed from the loan and calculated at 1.0% per annum.

Source: Asian Development Bank estimates.

B. Allocation and Withdrawal of Loan Proceeds

ALLOCATION AND WITHDRAWAL OF LOAN PROCEEDS (CAREC Corridor 3 [Bishkek-Osh Road] Improvement Project, Phase 4)			
Number	Item	Total Amount Allocated for ADB Financing (SDR) Category	Basis for Withdrawal from the Loan Account
1	Works – Project Road	[\$55,000,000]	60 percent of total expenditure claimed
2	Interest Charge	[\$1,000,000]	100 percent of amount due
3	Unallocated	[\$9,000,000]	
	Total	[\$65,000,000]	

Allocation and Withdrawal of Grant Proceeds

ALLOCATION AND WITHDRAWAL OF GRANT PROCEEDS (CAREC Corridor 3 [Bishkek–Osh Road] Improvement Project, Phase 4)			
Number	Item	Total Amount Allocated for ADB Financing (\$) Category	Basis for Withdrawal from the Grant Account
1	Works – Project Road	20,500,000	22 percent of total expenditure claimed
2	Institutional Strengthening		
2a	Pilot Performance- based Maintenance Contract	2,500,000	41 percent of total expenditure claimed
2b	Consulting Services	4,200,000	90 percent of total expenditure claimed
3	Recurrent Costs for Project Management	1,500,000	90 percent of total expenditure claimed
4	Land Acquisition and Resettlement	1,300,000	100 percent of total expenditure claimed
5	Unallocated	5,000,000	
	Total	35,000,000	

C. Detailed Cost Estimates by Financier^a

Item	<u>ADB Loan</u>		<u>ADB Grant</u>		<u>Government^g</u>		Total
	Amount (\$ million)	% of Cost Category	Amount (\$ million)	% of Cost Category	Amount (\$ million)	% of Cost Category	
A. Investment Costs							
1. Reconstruction of the Bishkek–Kara-Balta road section (52.5 km)	55.00	60	20.50	22	16.56	18	92.06
2. Institutional strengthening ^b							
2a. Pilot performance-based maintenance contract			2.50	41	3.60	59	
2b. Consulting services			4.20	90	0.47	10	
3. Project management support ^c			1.50	90	0.17	10	
4. Land Acquisition and Resettlement ^d			1.30	100	20.80		
Total Base Cost	55.00		30.00				
B. Contingencies^e	9.00	64	5.00	36			14.00
C. Financing Charges During Implementation^f	1.00						1.00
Total Project cost	65.00		35.00		20.80		120.80

ADB = Asian Development Bank, and km = kilometer.

^a In mid-2013 prices.

^b Includes an engineering and supervision consulting firm, performance-based maintenance pilot contract and management consultants, road safety enhancement and awareness program and audit, climate change adaptation assessment, external resettlement monitor specialist, insurance, consulting services income tax on non-residents, and employer's social fund contributions for individual consultants (3%).

^c Includes project implementation unit staff salaries plus employer's social fund contributions (17.25%), office operating expenses, financial audit firm, bank charges, local transport, and insurance.

^d LARP compensation has no taxes based on the Kyrgyz tax legislation.

^e Physical contingencies computed at 10% for civil works and consulting services. Price contingencies computed according to the ADB price escalation factors; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^f Includes interest charges financed from the loan and calculated at 1.0% per annum.

^g Includes taxes and duties of about \$18.3 million to be financed from government resources.

Source: Asian Development Bank estimates.

D. Detailed Cost Estimates by Year (ADB)

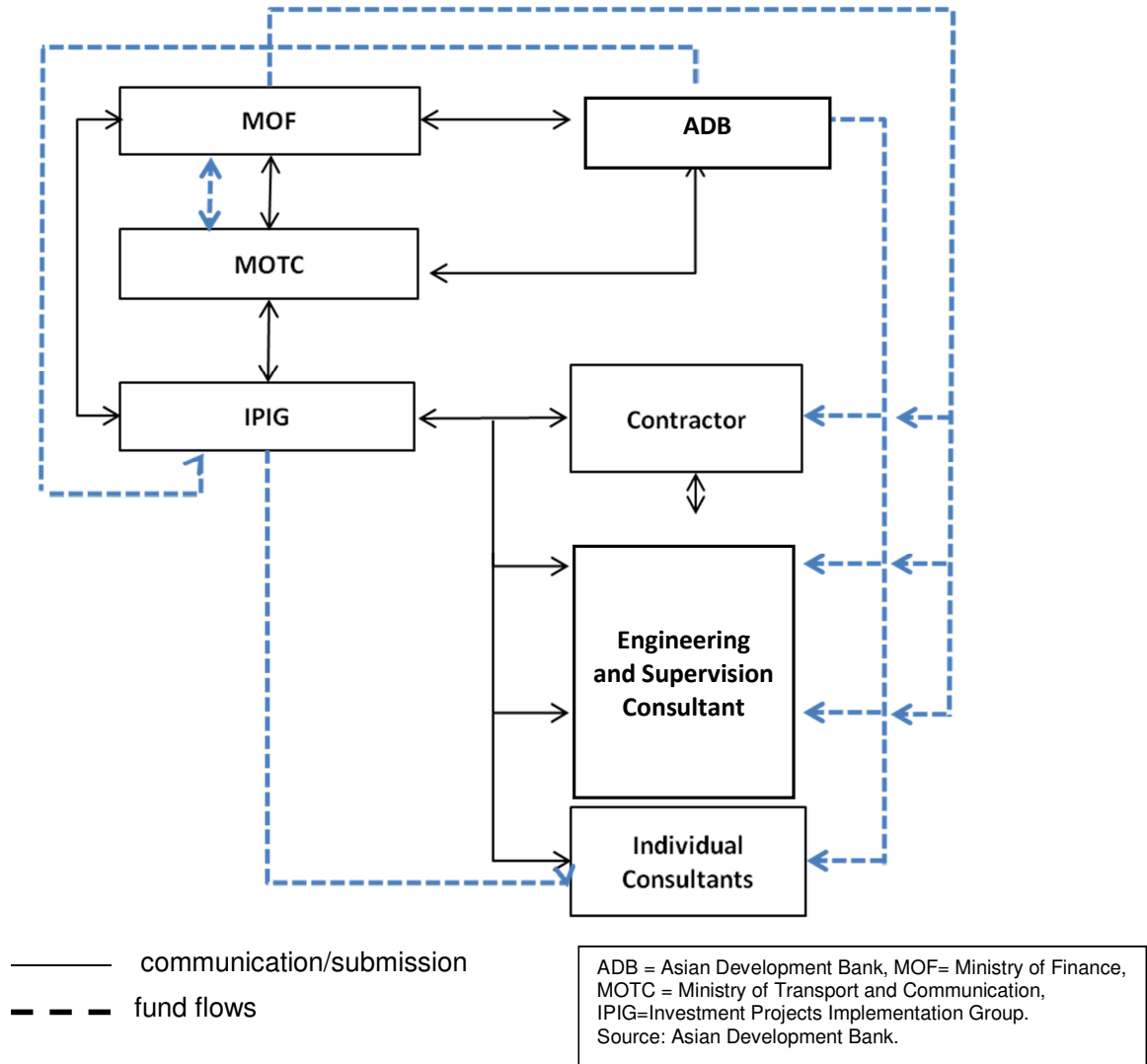
Item	Amount (\$ million)							
	Total Cost	2014	2015	2016	2017	2018	2019	2020
A. Investment Costs								
1. Reconstruction of the Bishkek–Kara-Balta road section (52.5 km)	75.5	0.0	10.0	10.0	15.0	15.0	15.0	10.5
2. Institutional strengthening	6.7	0.4	1.0	1.0	1.3	1.3	1.0	0.7
3. Project management support	1.5	0.2	0.2	0.2	0.3	0.3	0.2	0.1
4. Land Acquisition and Resettlement	1.3	0.0	1.3	0.0	0.0	0.0	0.0	0.0
5. Taxes and duties	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Base Cost	85.0	0.6	12.5	11.2	16.6	16.6	16.2	11.3
B. Contingencies	14.0	0.0	0.0	0.0	0.0	5.0	6.0	3.0
C. Financing Charges During Implementation	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Total Project Cost	100.00	0.6	12.5	11.2	16.6	21.6	22.2	15.3

ADB = Asian Development Bank, and km = kilometer.

^a In mid-2013 prices.

Source: Asian Development Bank estimates.

F. Funds Flow Diagram



V. FINANCIAL MANAGEMENT

A. Financial Management Assessment

13. A country financial accountability assessment was undertaken by the World Bank in 2009. The report noted that at that time a low predictability of availability of funds exists apart from protected items in the budget. The main reasons for the re-allocations within the budget are unforeseen events, external shocks and ad hoc political initiatives that require additional funding. The score for the aggregate revenue out-turn is A, and reflects the very conservative revenue estimates. However, the distribution of additional funds was undertaken in a non-transparent way outside the annual budgeting process. Late distribution of additional budgets resulted in hasty procurement decisions. Overall, fiscal prudence is clearly given priority over predictability of funds. There is still no systematic process by which the government can comprehensively monitor the level of expenditure arrears. Improvements can only be expected once the planned Treasury Modernization will be implemented, which includes a commitment accounting system.

14. The government has made efforts to further consolidate the budget. Many extra-budgetary funds were brought onto the budget in the past years. The introduction of the new classification system, one of the most visible improvements of recent Public Financial Management (PFM) reform efforts, is potentially a first step towards a consolidated budget. Despite these improvements, fiscal reports of Autonomous Government Agencies (AGAs) and the Social Fund as well as the large quasi-fiscal deficit originating from the energy sector are still not part of key fiscal reports, thereby making it difficult to determine the overall fiscal position of the Kyrgyz Republic.

15. Revenues in excess of budget and significant rises in revenues—by nearly 80% between 2006–2008—have not overcome problems in cash planning, which continues to be on a monthly basis. Only certain protected and mandatory items are guaranteed payment. The problem is the unpredictability of revenues that appear to be seasonal and related to the type of tax. Since there have been regular changes of taxes, each with their own seasonality, predicting the timing of receipt has been made more difficult in the absence of a history on which to base it. The majority of changes to budgets above the level of the management of the ministries and agencies take place in the fourth quarter of each year and these have been to increase expenditure; the rules regarding changes need clarifying. Spending bodies efforts tend to be focused on short-term cash planning. By contrast, public debt is carefully monitored using a specialist software system and loans are only taken by the government on the advice of the Ministry of Finance, the only body authorized to manage public debt and enter into agreements. Although not all accounts are consolidated the full extent of the balances is known.

16. Apart from the computerized treasury payment system, which is used for all types of expenditure and for recording revenues, most systems are manual and operated in a decentralized system with nearly 5,000 individual budget organizations. This number includes bodies subordinate to main ministries. In such a situation control is inevitably weakened with entire reliance placed upon staff in each budgetary organization undertaking their functions in accordance with the rules. However, there are concerns about the skill of personnel and payroll staff to correctly calculate salaries based on a number of complex factors. Most staff continue to be paid in cash, which represents an obvious weakness.

17. The computerization of treasury functions enables regional treasuries to agree expenditure details with the local transit banks daily before submitting details to the central treasury which then agrees the total with the National Bank. Revenue details are also received by regional treasuries which pass information to local tax offices to enable them to update taxpayers' accounts. There are established arrangements for monthly and quarterly reconciliations between budgetary organizations' records and those of the central treasury that lead, each quarter, to reports to the President and the Prime Minister. Although the arrangements are cumbersome and probably do not resolve all data errors they are the only possible arrangements in the absence of a fully integrated system. No reports are made available to line ministries or other bodies. Neither are reports produced on resources received by local delivery units. Annually a cash-based budget execution report, in respect of the previous financial year, is produced by the government for submission to the President by the middle of May 2013. This report is the nearest there is to financial statements, and, though it includes extensive information on revenues and expenditures, it does not include accounting policies. The huge amount of numerical data it does contain is unsupported by any useful summaries or commentary that would assist in their interpretation.

(i) Risk Analysis

18. The objectives of the project's financial management system are:

- (i) to ensure that funds are used only for their intended purposes in an efficient and economical way;
- (ii) to ensure that funds are properly managed and flow smoothly, adequately, regularly and predictably in order to meet the objectives of the project;
- (iii) to enable the preparation of accurate and timely financial reports;
- (iv) to enable project management to monitor the efficient implementation of the project; and
- (v) to safeguard the project assets and resources.

19. Table below identifies the key risks that the project management may face in achieving these objectives and provides a basis for determining how management should address these risks.

Risk	Risk Assessment *	Risk Mitigation Measures
Government's failure to provide counterpart fund on time during project implementation	M	Government assurances to include counterpart funds in the annual budget
Budget of some project elements are underestimated due to price escalation	M	Provision of contingencies to cover price fluctuations. Budget to be revised where necessary. The FM staff will monitor actual expenditure against budget.
Break-down of the accounting system	N	Frequent system back-ups.
Delays in submitting audit reports	N	The audit will be carried out on TORs with submission schedule of audit reports agreed with the ADB.
Weak vetting controls over payments to contractors and consultants	N	Strict adherence to the guidelines and procedures outlined in the

		PAM and Operational Manual
* H = High, S = Substantial, M = Moderate, N = Negligible or Low		

(ii) Project Financial Management (FM) System: Strength and Weaknesses

20. MOTC with its IPIG is responsible for overall project financial management, i.e. planning, accounting, disbursement, replenishment, reporting, maintaining adequate control of the accounting information, and ensuring its timely, full and proper registration in the accounting system.

21. IPIG has a strong financial management capability and maintains separate project accounts and records by funding source for all expenditure incurred on the Project. Project accounts are follow international accounting principles and practices including the procedures outlined in the manual prepared for IPIG by the World Bank.

22. Audits of project accounts have been carried out in the past and no major deficiencies have been noted by auditors.

23. The project financial management is strengthened by the following salient features:

- (i) The accounting personnel within IPIG are adequately qualified and experienced
- (ii) The accounting system is computerized
- (iii) Adequate accounting policies and procedures are in-place.
- (iv) Budgeting arrangements are adequate;
- (v) External auditing arrangements are adequate; and
- (vi) Funds flow arrangements are adequate.

(iii) Implementing Entity

24. The Automobile Roads Act gives the main responsibility for planning and administering road policies, programs and projects to the Ministry of Transport and Communications of Kyrgyz Republic (MOTC), which is responsible for policy making and regulating, planning and developing transport and communications, including the road, railway and civil aviation sectors.

25. MOTC is the Executive Agency on preparation and implementation of investment projects in road sector development.

26. In compliance with provisions of Loan and Grant Agreements on the implementation of investment projects, MOTC established by Order dated 01.02.2010 No.10-k/1, with the concurrence of Ministry of Finance, the Investment Projects Implementation Group (IPIG) for coordination, management, monitoring and evaluation of all projects implementation aspects.

27. The main objectives of IPIG are:

- (i) Implementation of investment projects in road sector development;
- (ii) Preparation of investment projects in the sector of road infrastructure development;

- (iii) Assistance in implementation of loan commitments towards donors, in compliance with signed international agreements on the investment projects.

(iv) Investment Projects Implementation Group (IPIG)

28. IPIG will handle day-to-day implementation activities, in particular (i) advising MOTC on procurement of best quality goods, works and consulting and audit services at the least cost, (ii) designing the learning and development program, (iii) verifying supporting documents submitted by contractors and consultants (iv) obtaining ADB approvals, (v) monitoring and evaluating project activities and outputs, (vi) reporting the Project's progress to MOTC and ADB, (vii) reviewing the Project with ADB missions, and (viii) consulting with the public and disclosing project information to them in consultation with ADB.

29. The Director of the IPIG is responsible for the day-to-day supervision of implementation activities. Additional staff, including professional staff with experience in procurement, financial management, construction supervision, and safeguards supports the project implementation.

30. To achieve the objectives set out in the Order from MOTC, IPIG's scope of works include:

- (i) Jointly with international consultant, timely preparation of appropriate documents and agreements, on investment projects implementation issues.
- (ii) Holding meetings and negotiations with donors on preparation and implementation of investment projects, as well as on discussion, execution, conclusion and making amendments in the contract and other agreements.
- (iii) Preparation of tenders on investment projects, strictly in compliance with donors procurement procedures.
- (iv) Submission to the Government of Kyrgyz Republic, Ministry of Finance, Ministry of Economic Regulation, Ministry of Transport and Communications and donors, information on planned investment projects in the sector of road infrastructure development and information on the implementation of investment projects. Provide assistance in solving issues, regarding visits of construction sites by the representatives of donors involved in the projects, inspections and examining its conditions, assessment of projects execution and putting into operation the projects after their completion.
- (v) Carrying out necessary actions on the acceptance of and payment of the executed works in compliance with donors' procedures based on the agreements and signed contracts.
- (vi) Monitoring and controlling work progress and quality, fulfillment of project obligations by the consultants, contractors and suppliers, assessment of draft decisions and making amendments, also performing other duties arising out contents of agreements and signed contracts.
- (vii) Coordination of consultants, contractors and suppliers relations with local and republic authorities in the sphere of taxation and social payments.
- (viii) Timely submission of audit reports on the project accounts to donors and Ministry of Finance of Kyrgyz Republic.
- (ix) Preparation draft decisions, orders, decrees, correspondence related to the department, for the consideration of Ministry of Transport and Communications management.

- (x) Evaluation of bidding proposals, expression of interests, CVs, price quotations and preparation of appropriate evaluation reports to submit for consideration of suitable tender committees.
- (xi) Preparation recommendations for contract awards.
- (xii) Taking part in working out of budget and other programs with necessary justifications in cooperation with departments of the Ministry of Transport and Communications, and participation in working out of current and perspective plans of investments in the sector of road infrastructure.
- (xiii) Participation in research, design-technical, technological and exploratory projects.
- (xiv) Carrying on correspondence on the matters of investment projects implementation with donors, ministries and agencies, local administrations of Kyrgyz Republic, as well as on matters related to IPIG competence. By order of the Ministry of Transport and Communications IPIG performs other functions on the implementation of investment projects.

31. Presently IPIG is implementing 12 investment projects financed by ADB, World Bank, European Commission, EBRD, EXIM Bank, and China Development Bank. It had been acknowledged that MOTC through IPIG possessed considerable experience of handling internationally financed projects.

B. Disbursement

32. The Loan proceeds will be disbursed in accordance with ADB's *Loan Disbursement Handbook* (2012, as amended from time to time),¹³ and detailed arrangements agreed upon between the Government and ADB.

33. To facilitate project implementation through timely release of loan and grant proceeds, the MOTC will establish two imprest accounts promptly after loan and grant effectiveness at a commercial bank acceptable to ADB.¹⁴ The maximum ceiling of the respective imprest account will not exceed 10% of the respective loan and grant amount. The imprest accounts are to be used exclusively for the respective ADB's share of eligible expenditures. The currency of the respective imprest account will be the USD. The MOTC who established the imprest account in its name is accountable and responsible for proper use of advances to the imprest account. The government may request for initial and additional advances to the respective imprest account based on 6 months estimated expenditures to be financed through the respective 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. 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. The SOE procedure may be used for reimbursement of eligible expenditures or liquidation of advances to the imprest account. The ceiling of the SOE procedure is the equivalent of \$10,000 per individual payment. Supporting documents and records for the expenditures claimed under the SOE should be maintained and made readily available for

¹³ Available at: http://www.adb.org/Documents/Handbooks/Loan_Disbursement/loan-disbursement-final.pdf.

¹⁴ The bank charges incurred in the operation of the imprest account may be financed from the loan and grant proceeds.

review by ADB's disbursement and review missions, upon ADB's request for submission of supporting documents on a sampling basis, and for independent audit. Reimbursement and liquidation of individual payments in excess of the SOE ceiling should be supported by full documentation when submitting the withdrawal application to ADB.

35. MOTC/IPIG's Finance Division will be responsible for (i) preparing disbursement projections, (ii) requesting budgetary allocations for counterpart funds from MOF, (iii) collecting supporting documents, and (iv) preparing and sending withdrawal applications to ADB. Before the submission of the first withdrawal application, the MOF 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 US\$100,000 equivalent, unless otherwise approved by ADB.

C. Accounting

36. MOTC/IPIG will maintain separate project books and records by funding source for all expenditures incurred on the Project. Project financial statements will follow international accounting principles and practices including the procedures outlined in the manual prepared for IPIG by the World Bank.

D. Auditing

37. MOTC/IPIG will cause the project financial statements to be audited in accordance with International Standards on Auditing and in accordance with the Government's audit regulations by an independent auditor acceptable to ADB. The audited financial statements will be submitted in the English language to ADB within 6 months of the end of the fiscal year by the executing agency. The annual audit report 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 and grant 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 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. The Government and MOTC have been made aware of ADB's policy on delayed submission, and the requirements for satisfactory and acceptable quality of the audited accounts.¹⁵ ADB reserves the right to require a change in the auditor (in a manner consistent

¹⁵ ADB Policy 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

with the constitution of the recipient, 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. 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).¹⁶ 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.

VI. PROCUREMENT AND CONSULTING SERVICES

A. Advance Contracting and Retroactive Financing

41. Advance contracting for civil works and consultants will be undertaken in conformity with ADB's Procurement Guidelines (2013, as amended from time to time)¹⁷ and ADB's Guidelines on the Use of Consultants (2013, as amended from time to time).¹⁸ Issuance of invitation for bids will be subject to ADB's approval. ADB has advised the Borrower and MOTC that approval of advance contracting does not commit ADB to finance the Project. Advance contracting will be limited to consulting services for engineering and supervision. MOTC will carry out recruitment of consultants.

B. Procurement of Works and Consulting Services

42. All procurement of works will follow ADB's Procurement Guidelines and the procurement plan to be developed for the project. Civil works contracts \$1 million and above will be procured through international competitive bidding (ICB) using single-stage: two-envelope procedure. ADB's prior review procedures will be followed.

43. All consultants will be recruited according to ADB's Guidelines on the Use of Consultants.¹⁹ The outline terms of reference for all consulting services are detailed in Section VII.

C. Procurement Plan

Methods, Thresholds, Review and 18-Month Procurement Plan

1. Procurement and Consulting Services Thresholds

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.

¹⁶ Available from <http://www.adb.org/documents/ppc-2011?ref=site/disclosure/publications>.

¹⁷ Available at: <http://www.adb.org/Documents/Guidelines/Procurement/Guidelines-Procurement.pdf>.

¹⁸ Available at: <http://www.adb.org/Documents/Guidelines/Consulting/Guidelines-Consultants.pdf>.

¹⁹ Checklists for actions required to contract consultants by method available in e-Handbook on Project Implementation at: <http://www.adb.org/documents/handbooks/project-implementation/>.

44. 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 (ICB) for Works	\$3,000,000 and above	Revised due to ADB's Procurement 10-pt action plan
Shopping for Goods	Below \$100,000	Revised due to ADB's Procurement 10-pt action plan

Consulting Services	
Method	Comments
Consultant's Qualification Selection for Consulting Firm	
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

45. 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 (in USD)	Procurement Method	Review (Prior/Post)	Bidding Procedure	Advertisement Date (quarter/year)	Comments
tbd	Bishkek to Kara-Balta	75.5 million	ICB	Prior	Single Stage 2 Envelope	Q3/2015	Bidding docs being prepared
tbd	Performance-based maintenance contract	5.0 million	ICB	Prior	Single Stage 2 Envelope	Q3/2015	Bidding docs to be submitted to ADB by June 2015

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

46. 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
various	Project Management	1.3 million	ICS	Prior	various	N/A	5 national consultants on board.
tbd	External resettlement monitoring	0.1 million	ICS	Prior	Q1/2015	N/A	Assignment: International Recruitment ongoing
tbd	Auditing	0.1 million	LCS	Prior	Q2/2015	BTP	Assignment: National Recruitment ongoing

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

47. 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
tbd	PIU office equipment	\$0.05	tbd	shopping	prior	-	?	

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

Indicative List of Packages Required Under the Project

48. 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							

List of Awarded, Ongoing, and Completed Projects

49. The following tables list the awarded and on-going contracts, and 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	Comments
Consulting Services							
Package Number	General Description	Estimated Value	Contract Value	Recruitment Method	Advertisement Date (quarter/year)	Date of ADB Approval of Contract Award	Comments
-	Engineering and Construction Supervision	4.2 million	4.18 million	QCBS	Q4/2013	19-DEC-14	

D. ADB's Review of Procurement Decisions

50. ADB will review contract modifications in accordance with the procedures set forth in the loan agreement between the Borrower and ADB and ADB Procurement Guidelines (2013 as modified from time to time).

E. Draft Outline Consultant's Terms of Reference

1. Engineering and Supervision Consultant

51. The objectives of the assignment are to:

- (i) prepare detailed engineering design including detailed design drawings;
- (ii) update the Initial Environmental Examination (IEE), update the Land Acquisition and Resettlement Plan (LARP);
- (iii) prepare the Bidding Documentation (BD) following the International Competitive Bidding procedures in accordance with ADB Procurement Guidelines;
- (iv) assist the Ministry of Transport and Communications of the Kyrgyz Republic (MOTC) ("the Client") in administering the contracts and supervising the construction works to ensure their quality and timely completion;
- (v) ensure climate-resilient designs are properly incorporated into the project roads;
- (vi) develop awareness campaigns and also establishes in-country expertise for further road safety campaigns; and
- (vii) provide procurement support, supervision, training, and promoting dialogue and exchange of information services during the period of on the pilot PBM contract on a section of Bishkek–Osh road, starting from Kara-Balta to Km 161, with total length of 101 km.

2. Staffing Inputs

52. The Client will select an international firm, in association with national consultants, to carry out the tasks in this TOR. The QCBS selection method will be used. Consulting services require a total of 105 person-months of international experts and 142 person-months of national experts, and will take place in over a period of 66 months.

International	No. of Expert	No. of Person-Months
Highway Engineer/Team Leader	1	38
Pavement and Materials Engineer	1	12
Soil/Geotechnical engineer	1	3
Bridge/Structural Engineer	1	7
Hydraulic and Drainage Engineer	1	4
Road Safety Specialist	1	9
Quality Assurance Engineer	1	6
Electrical/Street light Specialist	1	3
Contract specialist	1	3
Social and Resettlement Specialist	1	6
Environment Specialist	1	6

International	No. of Expert	No. of Person-Months
PBM Consultant	1	4
Climate Change Specialist	1	4
Total	12	105
National		No. of Person-Months
Highway Engineer/Deputy Team Leader	1	38
Pavement and Materials Engineer	1	21
Soil/Geotechnical engineer	1	3
Bridge/Structural Engineer	1	12
Hydraulic and Drainage Engineer	1	3
Road Safety Specialist	1	9
Quality Assurance Engineer	1	18
Quantity Surveyor	1	18
Contract specialist	1	4
Social and Resettlement Specialist	1	6
Environment Specialist	1	6
PBM Consultant	1	4
Total	12	142

The team should also include cost estimator, CAD draftsmen, technicians, translators (with knowledge of technical terminology), and other supporting staff.

2. Scope of Consulting Services

53. The scope of the assignment would include but not limited to the following tasks:

- (i) Detailed design and bidding documents;
- (ii) Construction supervision;
- (iii) Road safety awareness campaigns;
- (iv) Road safety audits; and
- (v) Performance-based maintenance contract.

54. The scope of the consultancy services would include but not limited to the tasks below.

1. Detailed Design and Bidding Documents

(a) Field Surveys, Investigations, and Tests

55. The consultant should review and verify the surveys, investigations and tests prepared under the PPTA, and carry out any additional survey and test which are required to complete the assignment. Field surveys, investigations and tests for detailed design would include, but not limited to the following:

- (i) **Topographic Surveys.** Based on the recent existing surveys, the Consultant shall develop a digital terrain model at a scale of 1:1,000 covering each of the proposed segments. Additional surveys should be carried out as necessary with cross-sections taken at 20m intervals or more frequently where characteristics change. The cross-sections shall extend to a sufficient width to include the edges of the Right of Way (ROW). The topographic surveys shall cover all necessary points of embankment and excavation slopes, road pavement and shoulders, junctions, roadside drainage, drainage structures, bridges, railway crossings, retaining walls, river training structures, safety features, road signs, utilities, trees, boundary fences and entrances to roadside properties, watercourses and any other feature that would affect the design of road rehabilitation or new construction. The Consultant shall prepare Computer Aided Design and Drawing (CADD) drawings and a digital terrain model of the completed ground survey.
- (ii) **Geo-technical, Soils, and Pavement Surveys.** Pavement and materials surveys and tests, shall include the following:
 - (a) core sampling and testing of existing asphalt concrete pavement at appropriate intervals;
 - (b) subsurface investigations and testing at the sites of proposed new bridges and other structures, as necessary for foundation design;
 - (c) soil sampling and testing at appropriate intervals, as necessary for road rehabilitation design;
 - (d) sampling and testing of materials from quarries and borrow sites; and
 - (e) any other geo-technical and soils investigations and testing necessary for detailed design.
- (iii) **Inspection of Bridges, Culverts, and Other Structures.** The Consultant shall undertake a detailed inspection and dimensioning of existing bridges, culverts, retaining walls, river training and other structures, including non-destructive concrete testing of bridges and other major structures.
- (iv) **Hydrological, Hydraulic, and Drainage Investigations.** The Consultant shall investigate the hydraulic and drainage efficiency of existing bridges, culverts and road side drainage facilities; shall examine scour, erosion, drainage and flood characteristics along the road; and shall review the locations of climatic zone changes as they affect pavement design.

(b) Detailed Design

56. The detailed design shall be based on the preliminary design developed during the PPTA, shall conform to the design standards approved and adopted for the Project, and shall incorporate the requirements and modifications or alternatives resulting from the Land Acquisition and Resettlement Plan (LARP), Environmental Assessment or any IEE/EIA and the EMP.

57. The Consultant will prepare detailed engineering design and bidding documents for rehabilitation and upgrading of the road section from Bishkek to Kara-Balta (Km 8.5–Km 61) following recommendations of the preliminary design prepared under the PPTA, and the agreed design parameters between the Government and ADB. The Consultant shall make maximum

use of available data, topographic, geological and seismic maps, road condition surveys, technical studies and documents available from MOTC and other government agencies. Detailed design activities shall include, but not be limited to, the following:

- (i) **Geometric Design.** The detailed design alignment shall be based on the alignment developed during the preliminary design, with minor adjustments made to improve geometric characteristics, wherever practical. The detailed road profile would reflect the new pavement structure, embankment raising for drainage purposes in low lying areas, and minor geometric improvements for safety reasons. The road cross-section shall conform to the approved design standards, with the exception of areas where narrower roadway or shoulder widths would be justified on a cost basis or to avoid land acquisition and resettlement. Geometric design shall also include the design of junctions.
 - (ii) **Pavement Design.** Pavement design shall consider the composition and strength of existing pavement and sub-grade, forecast traffic loads, and the use of natural or processed construction materials that are readily available.
 - (iii) **Drainage Design.** The Consultant shall determine the drainage areas and basins of water crossings (based on topographic maps, aerial photos and field inspections), study rainfall, water flow and flood characteristics, and determine the requirements for cross-drainage, based on appropriate return flood periods for each drainage area and type of structure. When existing culverts are in poor condition or are deemed to be inadequate, replacements shall be provided. Otherwise, the existing structures will be repaired. Drainage design shall also cover requirements for longitudinal drains, including lining of same, sub-surface drainage, energy-dissipation works to preserve the stability of slopes and pollution control measures.
 - (iv) **Geo-technical Design.** Geo-technical design shall include the design of foundations for new bridges and structures, if any, river training design, and the design of measures for stabilization and protection of unsafe slopes, including retaining walls, wherever practical and economically justified.
 - (v) **Bridge and Structures Design.** The design of remedial works to existing bridges shall include all repairs necessary to render them safe and capable of supporting projected heavy loads. New bridges, if any, shall conform to the seismic design requirements for the project area.
 - (vi) **Other Design Requirements.** Other items to be covered in the detailed design include safety measures (pavement markings, signs, safety barriers, speed bumps), access design, entrances to roadside properties, urban section features (such as sidewalks, gutters, storm sewers), utility relocation, bus bays and bus shelters, pedestrian crossings, and other items.
- (c) **Drawings, Specifications, Cost Estimates, Bidding Documents, and Design Reports**

58. The Consultant shall prepare drawings, technical specifications, quantity and cost estimates, design reports, and bidding and contract documents in compliance with ADB's and the Government's requirements as required for the proper execution of the Project.

- (i) **Technical Specifications.** Shall be based on modern standards having international applicability, amended by Special Provisions to suit conditions in Kyrgyzstan and the Project's requirements. The Consultant shall propose the standards to be used for Client's approval. The Technical Specifications shall include lists and descriptions of work (pay) items to be executed.
- (ii) **Quantity Calculations.** The Consultant shall prepare Bills of Quantities based on the various items of work to be executed in accordance with the Drawings and the work (pay) items specified in the Technical Specifications.
- (iii) **Unit Price Analysis and Cost Estimates.** Unit prices shall be classified into direct costs (labor, materials and equipment), indirect costs (mobilization, on-site and general overheads, contractor's contingencies and profit) and taxes. The Consultant's Cost Estimate shall break out separately all taxes for ease of identification.
- (iv) **Design Report and Other Documents.** The Consultant shall submit a Design Report providing a description of the Project and summarizing the environmental, and land acquisition and resettlement analysis (and EIAs and/or RAPs where required), EMPs, and the detailed design analysis, including selection of design standards, field surveys and investigations, geometric design, pavement design, geo-technical design, drainage design, bridge and structures design, specifications, bidding and contract documents (including prequalification documents), rehabilitation work program, ROW acquisition requirements, quantity estimates, and various calculations. The Consultant shall also submit a Soils and Materials Report, including location and characteristics of sources of borrow materials.
- (v) **Bidding Documents.** The Consultant should prepare full set of bidding documents following ADB's Procurement Guidelines and Standard Bidding Documents for Works.
- (vi) **Technical Specifications.** The Technical Specifications shall be based on modern standards having international applicability, amended by Special Provisions to suit conditions in the Kyrgyz Republic and the Project's requirements. The Consultant shall propose the standards to be used for Client's approval.
The Technical Specifications shall include lists and descriptions of work (pay) items to be executed.
- (vii) **Quantity Calculations.** The Consultant shall prepare Bills of Quantities based on the various items of work to be executed in accordance with the Drawings and the Technical Specifications. The items in the Bill of Quantities shall correspond to the work (pay) items specified in the Technical Specifications.
- (viii) **Unit Price Analysis and Cost Estimates.** The Consultant shall develop for each work item a unit price analysis. Unit prices shall be classified into direct costs (labor, materials and equipment), indirect costs (mobilization, on-site and general overheads, contractor's contingencies and profit) and taxes. The Consultant's Confidential Cost Estimate shall break out separately all taxes for ease of identification.

- (ix) **Design Report and Other Documents.** The Consultant shall submit a Design Report providing a description of the Project and summarizing the environmental, and land acquisition and resettlement analysis (and EIAs and/or RAPs where required), EMPs, and the detailed design analysis, including selection of design standards, field surveys and investigations, geometric design, pavement design, geo-technical design, drainage design, bridge and structures design, specifications, bidding and contract documents (including prequalification documents), rehabilitation work program, ROW acquisition requirements, quantity estimates, and various calculations. The Consultant shall also submit a Soils and Materials Report, including location and characteristics of sources of borrow materials.
- (x) **Bidding Documents.** The Consultant should prepare full set of bidding documents following ADB's Procurement Guideline and Standard Bidding Documents for Works.
- (xi) **Technical Specifications.** The Technical Specifications shall be based on modern standards having international applicability, amended by Special Provisions to suit conditions in the Kyrgyz Republic and the Project's requirements. The Consultant shall propose the standards to be used for Client's approval. The Technical Specifications shall include lists and descriptions of work (pay) items to be executed.

2. Social Development, Resettlement, and Environmental Safeguards Document Finalization

59. **Social Development and Resettlement.** The consultant will (a) prepare a final implementation ready LARP for ADB and government approvals, (b) review and update as needed the grievance redress system for the project and assist MOTC in addressing LAR-related complaints during the finalization of the LARP, (c) finalize and implement the consultation and participation plan for the project; (d) review the existing capacity of the IPIG and other units involved in LAR implementation (including grievance redress), and (e) conduct the necessary training to improve capacity. Based on the final valuation of all affected assets and agreements reached with APs, prepare a final implementation ready LARP for ADB and MOTC review and approval and ensure its translation to Kyrgyz and Russian languages and public disclosure through information brochure to APs. This consultant will also monitor implementation of ADB gender and safeguards policies, including enforcement of core labor standards.

60. **Environmental Safeguards.** The consultant will (a) conduct further detailed field and desk studies that will lead to the submission of all necessary statutory, updating the IEEs as needed, and other required documents to achieve environmental clearance for the Project, (b) ensure that the requirements identified in the EMP are included in the bidding documents and contracts, and (c) ensure that all potential contractors are made aware of requirements for all environmental mitigation measures included in EMP through the tender documentation.

3. Construction Supervision

61. The Consultant, designated as the Engineer for the civil works contracts as defined in the FIDIC conditions for construction, will assist the Ministry of Transport and Communications

(MOTC) of the Kyrgyz Republic, the executing agency for the Project and the Employer for the civil works contracts, in reviewing and approving the contractor's working drawings, supervising the civil works for the road sections, and ensuring compliance with road safety standards, environmental protection measures, and social safeguards.

62. The construction period will be 36 months plus 12 months defects liability period. It should be noted that all construction works is likely to be halted in winter between December and March. The language used for all official communications with MOTC is Russian. The Consultant will be required to have proficient translators and interpreters in its team to ensure that quality communication and correspondence.

63. The Consultant will:

- (i) review the contractor's working drawings and oversee the civil works to ensure that the quality and the completed works meet all the standards and specifications, including the environmental protection measures, set out in the works contract documents;
- (ii) ensure that all works comply with the agreed schedule and budget, terms and conditions of the contracts, standard engineering practice, and ADB's safeguards policies;
- (iii) monitor and report on progress and quality of works during the periods and times
- (iv) provide general guidance and issue instructions to contractors;
- (v) make engineering decisions in consultation with the Client, and
- (vi) advise the Client on work progress, quality control, and implementation issues, if any.

64. The specific tasks of the Consultant during construction supervision are the following:

(a) Supervision and Administration

- (i) Ensure that the construction methods proposed by the contractor for carrying out the works are satisfactory.
- (ii) Inspect contractor's construction equipment, results of material and soil tests, safety of the works, property and personnel, and schedule of mitigation measures for adverse environmental impacts. Notify contractor to remedy works and materials that fail to comply with the specifications.
- (iii) Monitor and supervise (a) progress of contractors' works vis-à-vis contract schedule, and (b) quality of contractors' works vis-à-vis applicable technical specifications and design.
- (iv) Check that 'as-built' drawings are prepared by the contractors for all works as construction progresses.
- (v) Ensure that road safety design requirements are implemented following the contract specifications.
- (vi) Develop quality assurance system and quality control plan for provisions of asphalt-concrete pavement for road and reinforced concrete for bridges.
- (vii) Establish procedures to verify contractor performance and report progress and problems on time, including quality control reports, quantity survey records, requests for variation or change orders, and contractor's claims and invoices.

- (viii) Evaluate any proposed changes (e.g., time, scope and cost) by the contractor during the course of the Project.
- (ix) Review and certify work volume, and process interim and final payments of the contractor. Ensure timely submission of contractor's interim payment certificates, and release of payment.
- (x) Ensure project financial management procedures are in place and are strictly followed, specifically relating to payments, financial accounting, requests for time extension, and contractor's claims and invoices.

(b) Documentation and Reporting

- (i) Report and update the works implementation schedule, highlight any unforeseen delays, and timely propose corrective measures.
- (ii) Undertake project performance monitoring and evaluation²⁰ and reporting up to project completion. Collect baseline survey data based on the indicators in the project's design and monitoring framework; and measure the indicators over time during the assignment period. Design a simple MS Excel or similar system for recording the baseline and periodic data.
- (iii) Prepare and submit reports as indicated in Section F (Reporting Requirements) in this Terms of Reference (TOR).
- (iv) Develop and maintain a storage and retrieval system of records documenting information supplied by the field teams, decisions made at meetings, progress on civil works, certified achievements and milestones, financial records, any deviations from or changes to the contract plans (scope, cost, materials, time), correspondences, site diaries, test data and quality control reports, quantity survey records, as-built drawings, and progress reports.

(c) Environmental Safeguard Supervision

65. The consultant will:

- (i) undertake a cumulative assessment of the potential environmental impact of the Project;
- (ii) update the EMP detailing environmental mitigation measures to address each identified impact, and recommend appropriate environmental mitigation measures;
- (iii) assist IPIG in implementation of EMP to ensure compliance;
- (iv) assess the cost, responsibilities, schedule, location, and monitoring framework associated with the implementation of the mitigation measures and the EMP;
- (v) assist IPIG in incorporating EMP in bidding documents and bid evaluation;
- (vi) provide guidance and quality assurance in undertaking the environmental monitoring as outlined in the EMP;
- (vii) prepare a section in Project quarterly progress report on environmental safeguard compliance;

²⁰ Following the project framework and ADB's Project Performance Management System Handbook.

- (viii) assist IPIG in compiling semi-annual environmental monitoring reports;
- (ix) monitor compliance with environmental mitigation and management plans, contractor health and safety plan;
- (x) conduct consultation with groups to be affected by the project;
- (xi) undertake the environmental monitoring as outlined in the EMP; and
- (xii) prepare related certificates or any relevant papers or documentations.

(d) Social Development and Resettlement Supervision

66. The consultant will:

- (i) assist in monitoring and reporting of the land acquisition and resettlement plan (LARP) implementation;
- (ii) monitor contractor's compliance with and performance of required actions regarding HIV/AIDS, human trafficking, and core labor standards in accordance with the contract documents, such as awareness and education of laborers and workers; and
- (iii) ensure that the contractor does not involve child labor in the execution of the civil works contracts in accordance with the provisions of the contract agreement.

(e) Development of Road Safety Awareness Campaigns

67. The scope of services comprises the development of awareness campaigns and also establishes in-country expertise for further road safety campaigns. The safety awareness campaign for the Bishkek–Osh road should take into consideration safety-issues related to high-speed traffic and the likely implication to both the road-users and roadside communities. The target-groups would therefore be (i) road-users and drivers of all types of vehicles, and (ii) roadside communities. Suggested campaigns will include (but are not limited to):

- (i) Safety Code for Major Roads: Educating drivers about the correct code of behaviour while driving on Bishkek–Osh road. It should consist of design of materials to be used in program and the actual education should be conducted to all road-users through joint collaboration with MOTC, Traffic Police and the consultants.
- (ii) Awareness Campaign for Heavy Vehicles: The main message behind this campaign will be to underscore the importance of observing safe-driving habits with special consideration given to pedestrians and non-motorized vehicles on mixed traffic road sections. This campaign should be conducted at truck and bus operator's depots and should include preparation of brochures and stickers and lectures at transport operator's depots with the assistance of MOTC and Traffic Police.
- (iii) Pedestrian Awareness Campaign: This campaign should use posters and literature related to increased danger from heavy-vehicles and safe pedestrian behaviour when walking by heavily trafficked roads. This program should be conducted in schools along the project roads: Activities should include, preparation of posters and other literature, conduct lectures at schools with the assistance of MOTC and Traffic Police.

- (iv) Publicity through Public Media: The Project should produce a documentary on public media highlighting the following issues pertaining to the Project roads, including code of driving behaviour on high speed roads. For newspaper publicity a set of road safety advertisements/information should be designed and placed in national and regional papers.

(f) Road Safety Audit

68. Road Safety Audits shall be carried out in accordance with international recognized guidelines for safety audit on roads and road projects und Kyrgyz national standards and shall include audits at the following stages of the project:

- (i) **Detailed Design Stage**: This audit must be done at an appropriate stage towards the end (but not at the end) of the detailed design, or as soon as it is possible to determine the safety implications of the design and when changes can be made at the most opportune time to avoid costly redesign. This may necessitate separate audit checks as various elements of the project reach the desired stage of design. The audit work at this stage includes auditing the suitability and workability of the proposed traffic management that will be carried out during the construction.
- (ii) **Construction/Pre-Opening Stage**: Road Safety Audit Stage shall include two distinct aspects as follows:
- a. Audit of the compliance of the works to the Detailed Design Stage Audit to ensure that the decisions with regards to the previous audit are 'carried through' in the construction. In particular the audit shall include a final detailed check of the project just prior to it being 'opened to traffic'.
 - b. Audit of traffic management through and in the vicinity of the project during the construction phase. This includes the observation of the effectiveness of the Traffic Management Plans prepared by the contractor/consultant and the devices employed during the night.
 - c. The audit at construction/pre-opening stage will be carried out three (3) times during the construction duration.
 - d. Part 1 or Verification Audit to be carried out after the issuance of construction and traffic management drawings.
 - e. Part 2 to be carried out when the construction work's progress is about 50%.
 - f. Part 3 to be carried out during the preopening of the project. Both day and night audit will be required.

69. Road safety audits shall be carried out together with road safety experts from the Ministry of Transport and communications to provide training-on-the-job and enhance the capability of the local staff.

4. Performance-Based Maintenance Contract

70. The Government intends to combine well-known and traditional methods of road rehabilitation and reconstruction, with a new concept of PBM covering about 101 km of the international road network, a section of Bishkek–Osh road, starting from Kara-Balta, Km 60 to Km 161. The assignment covers essentially the following activities:

- (i) **Procurement Support.** Procurement support and supervision of pilot PBM project for Kara-Balta to km 161 should be provided. The objective of the consultancy is to provide technical and financial supervision in order to ensure that works are carried out in accordance with the contract and to the satisfaction of the Employer. A second objective is to draw as much experience as possible from the pilot contracts to assist the possible wider deployment of PBM contracts on other parts of the road network.
- (ii) **Environmental Safeguards.** The consultant will (a) conduct further detailed field and desk studies that will lead to the submission of necessary IEEs as needed, and other required documents to achieve environmental clearance for the Project, (b) ensure that the requirements identified in the EMP are included in the bidding documents and contracts, and (c) ensure that all potential contractors are made aware of requirements for all environmental mitigation measures included in EMP through the tender documentation.
- (iii) **Supervision.** For supervision duties, the consultant shall be appointed Project Manager as defined in the PBM contract document and shall provide construction supervision as described hereinafter including the provision of qualified experienced personnel, management, co-ordination and efficient execution of these services. The Consultant is to supervise the works and to approve the materials and the workmanship of the works. This shall be done in co-operation and consultation with the Employer and the Consultant shall have no authority to relieve the Contractor of any of his duties or obligations under the Contract. Neither work entailing delays nor any extra payment by the employer shall be ordered by the Consultant without the authority of the Employer.
- (iv) **Training.** Training will include:
 - a. Development of training courses. Before the actual startup of the PBM contracts, the consultant will develop training courses for the staff of contractor and road agency professionals. These courses shall bring together professionals and cover all aspects of PBM, including subjects such as (i) PBM concept and approach, (ii) administration of PBM contracts, (iii) planning and design of interventions needed to comply with required service levels, (iv) verification and control of service levels, etc. The consultant will develop the course content and the training materials for each course, including handouts to participants.
 - b. Carry out training courses. Throughout the contract period, the consultant shall periodically hold the training courses, in such a way that each course is offered at least once a year, and more often if needed. This task will include: (i) planning of schedule of courses, (ii) identification and invitation of potential participants, (iii) logistical organization of courses, (iv) execution of courses, including evaluation by participants. Courses should also be open to outside participants, possibly against the payment of a fee.
- (v) **Promoting dialogue and exchange of information.** This will include:

- a. Prepare and distribute newsletter. The consultant will prepare and distribute on a quarterly basis a newsletter destined for the key stakeholders (contractor, MOTC, road users, etc.) presenting (i) the progress of PBM contract, (ii) a summary of problems encountered and solutions found
- b. Organize events for discussion and exchange of information. The consultant shall periodically organize events (workshops or similar) for discussion and exchange of information between stakeholders involved in the execution of PBM contracts.

5. Requirements for Key Staff

71. The key staff should have expertise, knowledge and skills as described below.

Team Leader / Senior Highway Engineer

The team leader must have expertise in all aspects of road design and construction supervision with experience in leading a team of multi-discipline experts. The team leader will have overall responsibility for implementing the project and managing the team of consultants with expertise in bridge and road engineering, cost estimation and contract documentation, geology, traffic engineering, road safety, social development, environment, and construction supervision. He/she should be a senior engineer with a minimum of 15 years of relevant experience covering road design and construction projects He should have good communication and reporting skills.

Highway Engineer

Should be familiar with the design of urban and rural highways or other major road schemes incorporating major bridges, tunnels and major grade separated interchanges, should have a minimum of 5 years' experience and preferable having experience in the region. He/she should be familiar with highway design software as well as detailed electronic designs for contract drawings.

Pavement / Materials Engineer

The Pavement / Materials Engineer should be a senior engineer with university degree in his/her field, or higher with a minimum of 10 years of relevant experiences in pavement design and works supervision of road projects with extensive knowledge in materials of roads and pavement and materials investigations. He/she should be familiar with international pavement design guidelines and state-of-the art pavement construction technologies. He/she should be familiar with the preparation of Contract Specifications for materials and testing.

Soil / Geotechnical Engineer

The Soil / Geotechnical Engineer should have at least 10 years' experience in geotechnical engineering and soil Mechanics. He should be familiar with local condition, slope and embankment construction, laboratory and in-situ testing, and foundation investigations.

Bridge/Structural Engineer

The Bridge/Structural Engineer should be a civil engineering degree with at least 15 years of work experience including a minimum of 7 years in structural engineering, design and supervision of Construction of bridges, culverts and other structures. The Bridge/Structural Engineer should possess knowledge and skills in bridge and structural engineering, seismic retrofitting, bridge loading tests, investigations of bridge failures, bridge design review, and

bridge assessment and maintenance. Shall have experience in similar geographic areas, and is proficient in both written and spoken English.

Hydraulic/Drainage Engineer

The Hydraulic/Drainage Engineer should have a civil engineering degree with at least 15 years of work experience including a minimum of 7 years in hydrological and drainage engineering, and design and supervision of drainage structures. He/she should have experience in similar geographic areas and should be familiar with local condition, calculation and design methods.

Road Safety Engineer

The international Road Safety Engineer should have a bachelor degree in civil engineering, road safety or related field with at least 10 years of work experience including a minimum of 5 years in implementing and monitoring road safety in road construction projects. The Road Safety Engineer should have knowledge and skills in road safety aspects in design, road safety standards, preparing a road safety and traffic management plan in road construction sites, and development of road safety campaigns. Shall have experience in similar geographic areas, and is proficient in both written and spoken English. Knowledge of local languages is an advantage, but not required.

Quality Assurance Engineer

The international Quality Assurance Engineer should have a civil engineering degree or related field with at least 15 years of work experience including a minimum of at least 7 years in quality assurances and quality control in construction works, and materials testing. The Quality Assurance Engineer should possess knowledge and skills in supervision of works, and laboratory and in-situ testing. He/she should have experience in similar geographic areas, and is proficient in both written and spoken English. Knowledge of local languages is an advantage, but not required.

Electrical / Street Lighting Specialist

The Electrical / Street Lightening Specialist should have at least 5 years relevant experience in road and street lighting design and installation.

Contracts Specialist

The Contract Specialist should have a minimum of 5 years' experience in the preparation of Contract Documents and Specifications for major road or infrastructure projects using FIDIC. He/she should be familiar with ADB standard bidding documents and procurement guidelines. The Contracts Specialist shall possess knowledge and skills in contractor's claims management, resolution of disputes, and arbitration proceedings in any project involving FIDIC general conditions. Shall have experience in similar geographic areas, and is proficient in both written and spoken English.

Social Development / Resettlement Specialist

The specialist should have a master's degree in social science with a minimum 10 years of work experiences. Up- to- date knowledge of ADB's safeguards policies and procedures, particularly on social impact assessment, poverty assessment, core labour standards, land acquisition, and resettlement, and its implementation are desirable. Experiences in ADB funded projects or projects funded by multilateral agencies in the transport sector will be preferable. The specialist shall also have experience in working in multidisciplinary teams with good communication skill.

Environmental Specialists

The Environmental Specialist should have at least 10 years' experience and familiarity with all aspects of environmental management and with significant experience in environmental management and monitoring of projects, environmental assessment and/or implementation of environmental mitigation measures on construction projects. The Environmental Specialist shall also have experience in working in teams of multi-discipline experts.

PBM Consultant

The PBM Consultant should have a civil engineering degree or related field with at least 15 years of work experience including a minimum of at least 5 years performance based maintenance contracts. The PBM Consultant should have demonstrable communicating skills. He/she should have be proficient in both written and spoken English. Knowledge of local languages is an advantage, but not required.

Climate Change Specialist

The Climate Change Specialist should have an advanced degree in climate science, geography or other relevant subject and at least 10 years of experiences of working in the fields of climate change scenario analysis, climate change impact, vulnerability and adaptation. He/she should have demonstrable skills in communicating climate science to a wide range of audiences. Russian language skills are an advantage

1. Reporting Requirements

72. The Consultant shall prepare the following reports in English and Russian and distribute them in the number of copies indicated below to MOTC and ADB. The format and content of each report is to be agreed with MOTC and ADB. For each report submitted an electronic copy will be provided. Standard software shall be used for preparation of the reports.

2. Reports required during the Detailed Design Phase

73. The Inception Report shall be submitted within 5 weeks from signing of the contract and shall describe the planning the consultant has established for the assignment, the staffing and remarks as deemed appropriate. This report shall update the methodology and program of work that was included in the Consultant's proposal, noting the changes and detailing any difficulties encountered, together with a proposal on how they may be overcome. The Inception Report shall include at least the following:

- (i) methodology statement defining the proposed limits of the design, including (a) an accurate estimation of the time they will take to complete; (b) methods and parameters; (c) any changes to the composition of the Consultant's team and specialists needed; (d) agencies and government departments which would need to be involved; and (e) methods of consultation with the local authorities and population; and
- (ii) detailed program of work, including field surveys and final design, showing time, duration and personnel as well as the inter-relationship between activities.

74. Monthly Progress Reports shall be provided, reporting on the on-going and planned activities of the study team.

75. A climate change assessment technical report shall be submitted within 6 months from signing of the Contract on the study, including:

- (i) An executive summary including key findings and their implications for the design, construction and maintenance of project components;
- (ii) Methodological framework;
- (iii) Data, scenarios and assumptions underlying the study;
- (iv) Key findings: projected climate change in the project sites/areas, potential impacts of projected climate change on project components; possible options to address impacts/risks to ensure climate resilient design, construction and maintenance of project components; and
- (v) Wider implications of climate change and associated impacts for road network development in Kyrgyz Republic, caveats and limitations of the study.

76. A road safety audit report shall be submitted within 6 months from signing of the contract and should specifically describe the safety deficiencies, potential or real, which have been identified along with the relevant references to accepted standards, practices and road safety principles. The points should be illustrated wherever practicable by 'marking-up' on the plans or other relevant drawings and / or by colour photographs of the items concerned.

77. The Draft Final Design shall be submitted within 6 months from signing of the Contract, including draft Bidding Documents (including Instructions to Bidders, Bid Data Sheet, Evaluation and Qualification Criteria, Bidding Forms, Bill of Quantities, Technical Specifications, cost estimates etc.), draft final LARP (including compensation and rehabilitation program and DMS final forms/ Description protocols signed with all the APs), and draft Final IEE and EMP.

78. Final Design and Bidding Documents shall be submitted within 4 weeks after receiving comments on the Draft Final documents and shall include also Final Implementation-Ready LARP, IEE, and EMP. Special Reports, in addition to the regular submissions outlined above, the Consultant shall also submit various special reports, addressing specific Project requirements. Such reports may include the selection of design standards, field survey, investigation and test reports, and other aspects of the detailed design.

79. A road safety awareness report will be prepared at the conclusion of the assignment, summarizing the work undertaken by the consultants on road safety awareness campaigns. The report should also include recommendations for the expansion of the safety program.

3. Reports required during the Construction Supervision Phase

80. The Consultant will prepare and submit the following reports during the construction supervision phase in a format and content agreed with the Client and ADB:

- (i) a traffic management and road safety plan within 2 months after commencement,
- (ii) Monthly progress reports by 10th day of each following month,
- (iii) Detailed quarterly progress reports by 15th day of each following quarter, reflecting safeguard compliance,
- (iv) Semi-annual safeguard monitoring reports (environment, social and land acquisition and resettlement), during project construction, within one month after each reporting period,

- (v) Performance monitoring and evaluation reports as required under the Loan Agreement,
- (vi) Road safety audits reports at issuance of construction and traffic management drawings, at about 50% physical completion, and at preopening of the project road,
- (vii) A detailed draft project completion report at 90% physical completion and a final project completion report within 2 months after physical completion of the Project, or on an alternative date as agreed with MOTC, and
- (viii) 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. External Resettlement Monitoring Consultant

(i) Objectives

81. ADB policy requires that external monitoring be carried out in parallel with the implementation of the RP and its internal monitoring. The main goal of external monitoring is to assess relevance, efficiency, effectiveness and impact of the LAR processes and to suggest any corrective measures, if necessary. The Resettlement Monitoring Consultant (RMC) will monitor and verify RP preparation and implementation to determine whether resettlement goals have been achieved, livelihood and living standards have been restored and provide recommendation for improvement, if needed. The RMC scope of work will also include analysis of site conditions, compensation disbursement, and grievance redress procedures.

82. The RMC is expected to submit monthly reports of the resettlement progress, RP Implementation Review, Quarterly Reports, and RP Compliance Report, which indicates whether the compensation program has been carried out based on the provisions of the RP and ADB policy and with the satisfaction of the displaced persons (DPs). The RP Compliance Report is a precondition to the commencement of civil works.

83. The objectives of the RMC will be the following:

- (i) Verify that resettlement has been implemented in accordance with the approved final RP;
- (ii) Monitor and evaluate the schedules and the achievement of targets related to land acquisition and resettlement activities;
- (iii) Ensure that DPs have been able to at least restore their livelihoods and living standards;
- (iv) Review the project impacts on vulnerable groups and assess the effectiveness of the mitigation measures adopted; and
- (v) Assess resettlement relevance, efficiency, effectiveness and impact drawing both on policies and practices and to suggest any corrective measures, if necessary.

(ii) Scope of Work

84. The RMC will be involved in ongoing monitoring of the resettlement efforts by the PIU. The major tasks of the RMC are the following:

- (i) Develop specific monitoring indicators for LAR;
- (ii) Monitor the progress of the land acquisition and resettlement activities against the targeted performance indicators;
- (iii) Verify claims through random check at the field level to assess whether resettlement objectives have been generally met;
- (iv) Identify the strengths and weaknesses of the resettlement objectives and approaches, and implementation strategies;
- (v) Review and verify the progress in RP implementation and prepare quarterly reports for the PIU and ADB;
- (vi) Evaluate the adequacy of compensation given to the DPs as well as livelihood opportunities and incomes and quality of life of DPs;
- (vii) Evaluate the adequacy and effectiveness of the consultative process with DPs, particularly those vulnerable, including the adequacy and effectiveness of grievance procedures and legal redress available to the DPs, and dissemination of information about these;
- (viii) Monitor land acquisition timelines and terms of temporary land acquisition, and, if needed, recommend adjustment of timelines/terms; and
- (ix) Conduct baseline update surveys with DPs who incurred damages resulting from construction works under the Project, in order to identify the level of satisfaction with types and sizes of compensation.

(iii) External Monitoring Methodology and Procedure

85. The following research methodologies and procedures are suggested for monitoring and evaluation of RP preparation, implementation and post-implementation activities:

- (i) Desk review (secondary data analysis);
- (ii) Baseline survey (face to face interviews); and
- (iii) Participatory rapid assessment (focus groups, interviews, observations).

86. The monitoring and evaluation of RP progress against the targeted performance indicators will be based on data from secondary and primary sources. RMC will use field visits and interviews with a representative sample of the DPs.

87. The work of the RMC can be subdivided into two phases:

a. Assessing pre-RP implementation status. This involves establishing the pre-RP implementation conditions of the DPs to allow for the measurement of the initial impacts of the compensation and assistance provided in the course of RP implementation. In this phase, the RMC will undertake:

- a1. Desk review/secondary data analysis. Review the socio-economic baseline survey, land acquisition and resettlement information available with PIU and confirm its accuracy and validity. The completeness of the profiles for all the affected land plots/structures/businesses should be checked, which includes desk review of the information available at PIU. In order to obtain insight on the number and types of DPs and impacts and determine the sampling plan for the conduct of surveys, the RMC shall review the socio-economic survey/census/valuation information. The RMC will propose a methodology for confirming the

results of socio-economic survey and census, as provided in the RP, through sample random checks of a representative number of DPs. The RMC will identify and select appropriate indicators to measure the impact of the RP, including possible impact differences on men and women DPs.

- a2. Baseline survey. Having confirmed the validity of available socio-economic survey and census data available with the PIU, the RMC will undertake a baseline survey for the Project. To ensure that adequate pre-project data is collected and available for monitoring, the baseline survey shall be conducted, to the extent possible, prior to the implementation of the RP. The survey will cover a representative sample of DPs based on the census list, stratified according to types and severity of impacts. The survey shall follow the general rule of taking 10% of all DPs and at least 20% of vulnerable DPs. However, adjustment in the sample size can be made to ensure that the error margin is +/- 5% at a CI of 95%. The sampling procedures for the baseline survey and the subsequent formal survey should be consistent to ensure comparability of samples. The results of the survey will be reported through Baseline Survey Report.
- a3. Public consultation process. RMC will observe the public consultations organized by PIU. This will allow evaluating the effectiveness of the public participation and the cooperative attitude of the DPs towards the LAR process. Monitoring of public consultation process shall to the extent possible be conducted before the resettlement implementation.

b. RP implementation review and preparation of RP Compliance Report.

This involves the review of RP implementation process to ensure that activities are implemented in accordance with the approved RP. Upon the completion of the RP implementation, an evaluation shall be made as to what extent the RP was able to accomplish its objectives. This evaluation shall be used as basis for issuing the Notice-To-Proceed to Construction Contractor(s). In this phase the RMC shall undertake:

- b1. Verification of compliance with RP. This includes review of reports prepared by the PIU. The RMC shall review and verify in the field the results of the reports prepared by the PIU. The review shall involve a random check of payment/compensation records. Field verification will be done through interviews with DPs. The RMC shall also review the compliance of compensation process with procedures/methodologies/mechanisms stated in the approved RP. The RMC shall check if the valuation, consultations, disclosure, payments, and related processes are done in accordance with the approved RP.
- b2. Assess the impact of the RP. This will be carried out through formal and informal surveys with the DPs. Upon completion of compensation payments / assistance, the RMC shall conduct a survey of a representative sample of DPs to determine changes that have occurred on the DPs. Focus group discussions, conversational open-ended interviews and other unstructured data gathering methods will also be used for DP groups to supplement the findings from the survey.

The assessment will also look into potential impacts or benefits that men and women DPs experienced from the resettlement activities.

- b3. Assess DPs satisfaction on the valuation of assets and entitlements, timing of payments, etc. Through post-RP survey, the RMC shall ascertain the degree of satisfaction of DPs on the valuation of assets, as well as, the scope and timing of assistance provided under the RP.
- b4. Post-RP evaluation shall be carried out to find out if the objectives of the RP have been attained or not and to assess resettlement efficiency, drawing lessons for future resettlement planning. The Post-RP Report will be developed at this stage. Should the outcome of the study show that the objectives of the RP have not been attained; the RMC will recommend appropriate supplemental assistance for the DPs.

88. The following data is considered to serve as the basis for developing the Post-RP Report:

- (i) Socio-economic conditions of the DPs in the post-resettlement period;
 - (ii) Communications with DPs and reaction from DPs on entitlements, compensation options, alternatives and relocation timetables, etc.;
 - (iii) Changes in housing conditions and income levels;
 - (iv) Rehabilitation of informal settlers;
 - (v) Grievance procedures;
 - (vi) Disbursement of compensation; and
 - (vii) Level of satisfaction of DPs in the post-resettlement period.
- b5. Prepare the RP Compliance Report. That shall demonstrate as to what extent the RP was able to accomplish its objectives. The RP Compliance Report will be used as precondition to allow for commencement of the construction works. As part of the RP Compliance Report, the RMC will also assess the status of project affected vulnerable groups, such as households with income below subsistence minimum, households headed by single women, large households with 5 or more children below 18 years, and households with disabled member. Prior to submission of the RP Compliance Report, the RMC shall ensure that informal and formal meetings are held with the men and women DPs, PIU and other key officials and seek feedback on the contents/ analysis presented the report. Highlights of these consultations will also be attached as an annex to the RP Compliance Report. HHs below the poverty line; single women headed HHs.

(iv) Implementation Arrangements

89. The RMC shall report directly to the PIU and carry out the works in close collaboration with the PIU's Resettlement Specialist and appropriate representatives of EA. The RMC will deliver copies of all monitoring reports to ADB. The RMC assignment is on an intermittent basis following the pace of the progress of RP verification, finalization and implementation for the Project.

(v) Reporting Requirements

90. The RMC is expected to prepare and submit to the PIU and ADB the following deliverables:

- (i) An Inception Report and detailed Work Plan including draft formats (as appropriate for various outputs, such as questionnaires, guides, etc.) and draft outlines for various reports (including Baseline Survey Report, RP Implementation Review Quarterly Report, Post-RP Report, RP Compliance Report) in 1 month upon signing of the contract;
- (ii) Baseline Survey Report;
- (iii) RP Implementation Review Quarterly Reports;
- (iv) Post-RP Report;
- (v) RP Compliance Report; and
- (vi) Final Report upon completion of the assignment.

91. In addition to the abovementioned programmatic reports, the RMC will submit to PIU and ADB the monthly progress reports describing their activities undertaken during the specific month of assignment.

92. The RMC shall submit the deliverables in Kyrgyz/Russian and English languages in electronic and hard copies along with the cover letter.

(vi) Consultant Qualifications

93. National Consulting Firm or a Non-Governmental Organization or Individual Consultant, will be engaged as the RMC for the Project. The Consultant shall have prior experience in conducting external resettlement monitoring for development projects. Familiarity with ADB Safeguards Policy Statement (2009) and LAR related Kyrgyz laws and regulations is an advantage.

VII. SAFEGUARDS

A. Environment

94. Impacts from the project are expected to be limited in magnitude of a short-time nature, mostly related to construction work and can be mitigated. The identified impacts include (i) noise, dust, vehicle emission, and vibration, which is especially of high significance within the settlements alongside the Project road and where sensitive receptors are located such as schools, hospitals mosques or other, (ii) impacts on water courses and rivers due to bridge rehabilitation (iii) impacts from material transportation from borrow sites; (iv) impacts of tree cutting alongside the Project road due to site clearance activities; (v) impacts from asphalt plant and aggregate crushers and; (vi) impacts from contractor's working camps. Impacts have been divided in to design phase, construction phase, and operation phase.

95. IPIG will be responsible for EMP implementation. IPIG will ensure that EMP will be adequately included in bidding documents all environmental mitigation measures will be included in construction contracts. Monitoring of environmental quality and the implementation of mitigation measures will be performed by the Construction Supervision Consultant (CSC) with sufficient TORs and staff-time for this task. The monitoring results will be included in the project quarterly progress reports and semi-annual environmental reports.

96. The cost for implementing EMP will be financed by the loan, specifically: the costs of mitigation measures will be included in the construction contracts, and the cost for environmental monitoring will be included in the consulting service of the CSC.

97. Mitigation measures for each of the impacts have been developed and incorporated into the EMP. In addition the contractor will have to submit a site-specific Environmental Management Plan (SEMP) for the following prior to commencing operations: (i) SEMP in the downtown of the main urban areas; (ii) Layout of the work camp with sewage management and waste management plan; (iii) Siting and description asphalt and crushing plants, equipment maintenance and storage facilities; (iv) Spoil soil management plan; (v) borrow site management including restoration; (vi) Method statement for bridge reconstruction works. The SEMP shall be approved by the Construction Supervision Consultant and endorsed by IPIG.

98. IPIG will promptly inform ADB of the occurrence of any risks or impacts, with detailed description of the event and proposed corrective action plan 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. IPIG will 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.

99. **Safeguards (environment) monitoring.** CSC will submit quarterly project progress report reflecting environmental safeguard compliance (see Attachment 3 for the prescribed format). CSC will assist IPIG in compiling and submitting semiannual monitoring reports (EMR) during project construction within one month after each reporting period. EMRs will be disclosed at ADB website and to local authorities.

B. Land Acquisition and Resettlement and Indigenous Peoples

100. The project is category B for involuntary resettlement safeguards. Land acquisition and resettlement plan (LARP) was prepared.

101. The LARP was prepared consistent with the requirements of the ADB Safeguard Policy Statement (2009). During project preparation stage, all the requirements of the SPS were followed and accordingly all requirements during LARP implementation shall be followed. A qualified and experienced expert (external resettlement monitoring consultant [RMC]) shall be engaged to verify the MOTC monitoring information. The RMC will advise on safeguard compliance issues, and if any significant involuntary resettlement issues are identified, a corrective action plan will be prepared to address such issues. Until such planning documents are formulated, disclosed and approved, MOTC will not proceed with implementing the specific road section for which involuntary resettlement impacts are identified.

102. Following detailed design, the draft LARP will be finalized to determine the actual impacts on each affected land plot and/or assets. Consultation and disclosure activities will be undertaken with the affected households and concerned groups. Valuation will also be carried out to determine the current market value of land and non-land assets. The final LARP will be disclosed to affected persons and households and will be submitted to ADB for review and concurrence. Land acquisition, relocation of affected households, and clearance of land will not

commence until the final resettlement plans has been agreed between ADB and MOTC. MOTC shall ensure that no civil work contract (for a particular road section) is awarded until the LARP is approved by the ADB, and no notice to proceed is given to contractor(s) until such LARP is implemented according to its terms.

103. MOTC, through its IPIG, will be responsible for the day-to-day implementation, including ensuring grievance redress mechanism is operating appropriately and be accountable for resolving all safeguards issues and concerns.

104. On the indigenous peoples safeguards, MOTC will, to the extent possible, avoid physical relocation of indigenous peoples that will result in adverse impacts on their identity, culture and customary livelihoods. If avoidance is not possible, MOTC will formulate a combined Indigenous Peoples Plan and LARP to address both resettlement and indigenous people's issues.

105. **Safeguards (resettlement) monitoring.** MOTC will prepare semi-annual monitoring reports that describe the progress of the implementation of resettlement activities and any compliance issues and corrective actions (see Attachment 2 for the prescribed format). These reports will closely follow the involuntary resettlement monitoring indicators agreed at the time of LARP approval.

VIII. GENDER AND SOCIAL DIMENSIONS

Labor, Gender, Health, and Social Protection

106. MOTC will include a specific provision in the works and service contracts to ensure that its Employees: (i) comply with national labor standards, applicable laws and regulations 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 activities; (iv) eliminate forced or compulsory labor; (v) eliminate employment discrimination; (vi) allow freedom of association; and (vii) 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.

107. MOTC will coordinate with the Ministry of Internal Affairs and other relevant agencies to implement adequate surveillance measures in the Bishkek–Osh road to prevent human and narcotic trafficking, and other unlawful activities. Through the contractor and Engineer, MOTC will disseminate information on prevention of sexually transmitted diseases and to workers employed in road construction and communities living adjacent to the Project road.

108. People residing along the road will be able to find employment in physical works and ancillary services during construction. The increased in traffic will help sustain the service businesses that people started during construction. Civil works and service contracts financed by ADB will require equal employment opportunities, wages, and relevant working conditions be given to women. The Government has gradually increased border and internal security monitoring, and will implement a national road safety awareness program in the local communities. These measures will help prevent possible negative social effects such traffic accidents, human and drug trafficking, and spread of sexually transmitted diseases, which may result from increased travel and trade.

109. Although it is expected that there will be substantial demand for employment opportunities arising from this project, there will be careful monitoring throughout implementation to ensure that core labor standards (CLS) are respected (the US State Department warned in June 2013 that the Kyrgyz Republic is a source and transit country for men, women, and children subjected to forced labor, and for women and children subjected to sex trafficking. Within the Kyrgyz Republic itself, the construction industry is mentioned as one of those where forced labor can be an issue). The civil works contract will require that contractors (i) comply with the Kyrgyz Republic's applicable labor laws and related international treaty obligations, and not employ child labor; (ii) provide safe working conditions and separate sanitation facilities for male and female workers; (iii) provide equal wages to male and female workers for work of equal value; (iv) provide employment opportunities for women; (v) carry out road safety, HIV/AIDS, illicit drugs, and human trafficking prevention and awareness programs in workers' campsites; and (vi) construct toilets along the project road.

IX. PERFORMANCE MONITORING, EVALUATION, REPORTING, AND COMMUNICATION

A. Project Design and Monitoring Framework

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
<p>Impact Enhanced regional connectivity and trade via CAREC Corridor 3</p>	<p>Speed with delay increased by 36% from 37 kph in 2012 to 50 kph in 2023 between Bishkek and Osh^a</p> <p>Crash rate maintained at no more than 71.35 per 100 million vehicle-kilometers travelled for the CAREC Corridor 3 (Bishkek–Osh road) by 2023</p>	<p>CAREC Corridor Performance Measurement and Monitoring Annual Report</p> <p>Ministry of Interior surveys</p> <p>MOTC surveys</p>	<p>Assumption Implementation of the transport infrastructure investment program as planned</p> <p>Risks Vulnerability to economic and political instability</p> <p>Poor customs procedures</p>
<p>Outcome Improved efficiency and safer movement of goods and people on the Bishkek–Osh road</p>	<p>Use of roads upgraded in the first full year of operation increased to 2,057,000 average daily vehicle-km in 2020 (baseline: 1,430,000 in 2013)</p> <p>Reduced travel time between Bishkek and Kara-Balta of 18% (40 minutes) by 2020 (baseline: 50 minutes in 2013)</p>	<p>MOTC report</p> <p>MOTC report</p>	<p>Assumption A functioning road safety monitoring system is implemented</p> <p>Risk Rapid deterioration of the road network caused by insufficient funding for maintenance and by weak axle-load control</p>
<p>Outputs Reconstructed road from Bishkek to Kara-Balta^b</p> <p>Institutional capacity strengthened</p>	<p>52.5 km of road reconstructed with pavement international roughness index reduced to 3.0 meters per km by 2020 (baseline: 7.0 meters per km in 2013)</p> <p>100 km pilot PBM contract completed by 2020</p> <p>Road safety campaign implemented by 2020</p>	<p>MOTC project progress report</p> <p>MOTC project completion report</p> <p>MOTC project progress report</p> <p>MOTC project completion report</p>	<p>Assumption Continued government commitment to improving road safety</p> <p>Risks Cost overruns caused by unexpected increases in prices of fuel and key raw materials</p> <p>Low capacity of the private sector in PBM</p>

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
	Road safety audit for all phases (design, construction, and operation) completed by 2020		
Activities with Milestones 1. Reconstruction of Bishkek–Kara-Balta section (Km 8.5–Km 61.0) 1.1 Detailed design and supervision consultants recruited by March 2014 1.2 Civil works contract awarded by October 2015 2. Institutional capacity strengthened 2.1 100-km performance-based maintenance pilot contract, covering the section from Kara-Balta to Km 161, awarded by October 2015 2.2 Road safety awareness program initiated by September 2014 2.3 First road safety audit carried out by September 2014		Inputs ADB: \$35 million (ADF loan) \$65 million (ADF grant) Government: \$20.8 million	

ADB = Asian Development Bank, CAREC = Central Asia Regional Economic Cooperation, km = kilometer, kph = kilometer per hour, MOTC = Ministry of Transport and Communications, and PBM = performance-based maintenance.

Note: The design and monitoring framework covers only the scope to be financed and administered by ADB. The Eurasian Development Bank will finance and administer the Madaniyat–Jalal-Abad rehabilitated road section (67 km).

^a Derived as the ratio of distance travelled to the total time taken to traverse the entire journey, which includes transit time as well as time spent on stop activities. Speed with delay is an indicator of the efficiency of border crossing points along the corridors.

^b The Eurasian Development Bank will finance (\$60 million loan) and administer the Madaniyat–Jalal-Abad rehabilitated road section (67 km).

Source: Asian Development Bank.

B. Monitoring

110. **Project performance monitoring.** MOTC will establish a project performance monitoring system similar to the systems that are already in place for on-going ADB financed projects. The current base data will be updated prior to commencement of civil works. Thereafter, IPIG staff together with the Engineer and contractor will collect data at least once every 12 months and include in its annual reports. ADB through the project performance reporting (PPR) system will monitor the overall performance of the Project.²¹

111. **Compliance monitoring.** loan covenants on policy, legal, financial, economic,

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

environmental, labor standards and others will be monitored regularly through various reports (monthly progress reports, quarterly progress reports, and annual reports), and discussion during review missions.

112. **Safeguards monitoring.** The monitoring and reporting of the activities identified in the environment and resettlement action plans is discussed in Section VIII.

113. **Gender, poverty, and social action plans.** Gender and social data will also be input by IPIG into the performance monitoring system. Public consultations will be conducted regularly to foster public awareness of the project and its social implications.

C. Evaluation

114. In addition to the periodic monitoring, ADB and MOTC will evaluate the Project's impact. Within 6 months of physical completion of the Project MOTC will submit a project completion report to ADB.²² Thereafter, ADB will conduct its own evaluation based on MOTC's report and other assessments and prepare a report for discussion with the Government. ADB's Independent Evaluation will also examine the Project within 3 years of completion.

D. Reporting

115. MOTC/IPIG will submit to ADB (i) monthly reports; (ii) quarterly progress reports in a format consistent with ADB's project performance reporting system, within 2 weeks of the end of each quarter covered; and (iii) a project completion report within 3-6 months of physical completion of the Project. A project annual report will report on inputs and outputs and start generating information for the outcome and impact indicators of the design and monitoring framework. The sample outline format and minimum contents shown in Attachment 1 must be followed for the progress reports submitted to ADB. MOTC/IPIG will furnish to ADB, not later than six (6) months after the end of each related fiscal year, certified copies of such audited financial statements and the report of the auditors relating thereto (including the auditors' opinion on the use of the Loan proceeds and compliance with the financial covenants of this Loan Agreement), all in the English language; and other project account and financial related information. To ensure the project continue to be both viable and sustainable, the project account and the executing agency audited financial statements, together with the associated auditor's report, should be adequately reviewed.

E. Stakeholder Communication Strategy

116. MOTC/IPIG will maintain and regularly update its website with information on the Project, and regularly consult with the public and civil society organizations in respect of each of the foregoing matters.

Project Document	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;	General Public

²² Project completion report format is available at: <http://www.adb.org/Consulting/consultants-toolkits/PCR-Public-Sector-Landscape.rar>.

			quarterly afterwards	
Initial Environmental Examination Report	ADB's and MOTC/IPIG's website, public consultations and brochures/leaflets for affected people	ADB, MOTC	IEE to be posted on the websites before project loan approval; documents always available online at ADB and MOTC/IPIG websites; EMP updated regularly	General public and project affected people
LARP	ADB's and MOTC/IPIG's website, public consultations and brochures/leaflets for affected people	ADB, MOTC	LARP to be posted on the websites before project loan approval; documents always available online at ADB and MOTC/IPIG websites; and every time LARP is revised.	General public and project affected people
Report and Recommendation to the President (RRP)	ADB's website	ADB	No later than 14 days of Board approval of the project	General Public
Loan Agreement	ADB's and MOTC/IPIG's website	ADB	No later than 14 days of Board approval of the project	General Public
Project Administration Manual (PAM)	ADB's and MOTC/IPIG's website	ADB	No later than 14 days of Board approval of the project, always available online after update	General Public, project contractors and consultants
Project Performance Management System	MOTC/IPIG's website	IPIG	Routinely disclosed, no specific requirements	General Public and project affected people in particular
Major Change in Scope	ADB's website	ADB	Within 2 weeks of approval of change	General Public
Completion Reports	ADB's and IPIG's website	ADB	Within 2 weeks of circulation to the Board for information	General Public
Evaluation Report	ADB's website	ADB	No later than 14 days from the date of circulation to Management and the Board	General Public

X. ANTICORRUPTION POLICY

117. ADB reserves the right to investigate, directly or through its agents, any violations of the Anticorruption Policy relating to the Project.²³ All contracts financed by ADB shall include provisions specifying the right of ADB to audit and examine the records and financial statements of the executing agency and all Project contractors, suppliers, consultants and other service providers. Individuals/entities on ADB's anticorruption debarment list are ineligible to participate in ADB-financed activity and may not be awarded any contracts under the Project.²⁴ To support these efforts, relevant provisions are included in the loan agreement/regulations and the bidding documents for the Project.

²³ Available at: <http://www.adb.org/Documents/Policies/Anticorruption-Integrity/Policies-Strategies.pdf>.

²⁴ ADB's Integrity Office web site is available at: <http://www.adb.org/integrity/unit.asp>.

XI. ACCOUNTABILITY MECHANISM

118. 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.²⁵ MOTC will maintain the present grievance redress mechanism outlined in the Table below, and ensure that:

- (i) All action taken are in full compliance with ADB Safeguard Policy Statement (2009);
- (ii) IPIG posts project information together with names and contact information of its focal persons as well as those of the Contractor and the Engineer (construction supervision consultant) for grievance redress at the project site and in Bishkek focal persons; and
- (iii) IPIG will ensure that the Consultant's and Contractor's Safeguards Specialists are carrying out their tasks adequately, and Safeguards Specialists consult with local communities and local authorities every month and include a summary of the discussions in its progress reports to ADB.

XII. RECORD OF PAM CHANGES

119. 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 PAM.

Version	Creation Date	Revision Date	Reasons of Change	Main Content of Change
0	Oct 2013		Project Processing	
1		June 2015	Review Mission	-Implementation plans -Key persons -Project Organization structure -Contract Awards and Disbursements Projections -Procurement plan

²⁵ For further information see: <http://compliance.adb.org/>.

Progress Report Format Sample

Purpose

To inform the Borrower and Asian Development Bank of the:

- actual versus programmed (planned) rate of completion and rate of disbursement up to the reporting time of main activities in each component (for example):
 - detailed design
 - land acquisition and resettlement
 - recruitment of consultants
 - procurement of works
 - physical works
 - consultants' services
 - IPIG staff services
 - safeguards monitoring (meetings with stakeholders, environmental tests, etc.)
 - training and education (technical, health, social, etc.)
 - institutional reorganizations
 - legislative and procedural reform
- reasons or justification for the deviations from the program (plan)
- summary of actions proposed in previous report and their results
- continuing or new deviations²⁶, if any, from the scope, schedule, budget, covenants, etc.
- consequences of the deviations (financial, environmental, social, technical, etc.)
- planned (target) rate of completion the main activities, and any new activities planned for the next reporting period
- major events such as public complaints, instructions from government agencies (e.g., environmental authority), serious traffic accidents, etc.
- steps taken to correct the deviations, responsibility for the action and the expected action date

Required Information and Data

- Key project data (<= half a page)
- Gantt charts of planned and actual completion of all major activities (details of each major activity in separate charts if necessary)
- Cumulative graphs (S-curves) of planned and actual expenditure
- Matrix of the rate of completion (meeting) the main covenants
- Complete information, if ADB approval is requested, for change orders or reallocation of funds:
 - Description of change in scope or design
 - Reason for the change-- technical
 - FIDIC condition(s) that requires or allows the change (i.e., clause[s])
 - Agreement on the change between the Engineer and Contractor
 - Employer's acceptance of the change
 - Cost or saving due to the change (material, labor, time)
 - Implications on construction and supervision schedule, economics, covenants
 - New financing plan

²⁶ The Borrower or Recipient must inform ADB if it wishes to make changes that would vary one or more of the following:

- The alignment (e.g., a spur road to a new locate on or a deviation through a town/city not previously included in the scope);
- The physical site or location of the infrastructure that involves an entirely new set of stakeholders and distribution of benefits and impacts;
- The road classification (e.g., type of paving and/or vehicle capacity such as changing from a two-lane bitumen road to a four-lane concrete road);
- The initial contract price by more than 25%;
- The project's outputs, outcomes, impacts, total cost, financing plan, completion time, etc; and
- The covenants.

- Expected date of ADB's approval of change
- IPIG Management letter.

Social Monitoring Report

{Annual/Semestral/Quarterly} Report
{Month Year}

KGZ: CAREC Transport Corridor 3
(Bishkek–Osh Road) Improvement Project Phase 4

Prepared by {complete and accurate name of implementing agency or external monitoring agency} for the {complete name of the borrower} and the Asian Development Bank.

CURRENCY EQUIVALENTS

(as of {Day Month Year})

{The date of the currency equivalents must be within 2 months from the date on the cover.}

Currency unit	–	{currency name in lowercase (Symbol)}
{Symbol}1.00	=	\${ }
\$1.00	=	{Symbol_____}

ABBREVIATIONS

{AAA}	–	{spell out (capitalize only proper names)}
{BBB}	–	{spell out}
{CCC}	–	{spell out}

{WEIGHTS AND MEASURES}

{symbol 1 (full name 1)}	–	{Definition 1}
{symbol 2 (full name 2)}	–	{Definition 2}
{symbol 3 (full name 3)}	–	{Definition 3}

{GLOSSARY}

{Term 1}	–	{Definition 1}
{Term 2}	–	{Definition 2}
{Term 3}	–	{Definition 3}

NOTE{S}

- (i) The fiscal year (FY) of the Government of {name of borrower} {and its agencies} ends on {day month}. FY before a calendar year denotes the year in which the fiscal year ends, e.g., FY20XX ends on {day month} 20XX. {Note: If FYs are not referred to within the text, delete the entire note and change NOTES to NOTE.}
- (ii) In this report, "\$" refers to US dollars. {Note: If a second \$ currency is referred to in the text, e.g., NZ\$ or S\$, add: unless otherwise stated. In the text, use "\$" for US dollars and the appropriate modifier, e.g., NZ\$ or S\$, for other currencies that use the "\$" symbol.}

This {environmental and/or social} monitoring report is a document of the borrower. The views expressed herein do not necessarily represent those of ADB's Board of Directors, Management, or staff, and may be preliminary in nature.

In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.

{Read and delete:

- (i) **Guidelines:** *Following requirements of the ADB Safeguard Policy Statement (2009) and the Operations Manual section on safeguard policy (OM F1), borrowers/clients are required to establish and maintain procedures to monitor the status of implementation of safeguard plans and ensure progress is made toward the desired outcomes. Borrowers/clients are required to submit the following monitoring reports for ADB review:*

Project Category	Frequency of Reports
<i>Environment category A</i>	<ul style="list-style-type: none"> • <i>Semi-annual monitoring reports during project construction</i> • <i>Annual monitoring reports during project operation</i>
<i>Environment category B</i>	<ul style="list-style-type: none"> • <i>Periodic monitoring reports as deemed appropriate</i>
<i>Involuntary resettlement category A and B</i>	<ul style="list-style-type: none"> • <i>Semiannual monitoring reports</i>
<i>Indigenous peoples category A and B</i>	<ul style="list-style-type: none"> • <i>Semiannual monitoring reports</i>
<i>Highly complex and sensitive deemed by ADB</i>	<ul style="list-style-type: none"> • <i>Quarterly monitoring reports</i>

The level of detail and comprehensiveness of a monitoring report is commensurate with the complexity and significance of social and environmental impacts. An environment and social monitoring report may include the following elements, as applicable :}

- (a) Background/context of the monitoring report (adequate information on the project, including physical progress of project activities, scope of monitoring report, reporting period, and the monitoring requirements including frequency of submission as agreed upon);
- (b) Changes in project scope and adjusted safeguard measures, if applicable;
- (c) Qualitative and quantitative monitoring data;
- (d) Monitoring parameters/indicators and methods based on the monitoring plan/program previously agreed upon with ADB;
- (e) Monitoring results compared against previously established benchmarks and compliance status (e.g., national environmental emission and ambient standards and/or standards set out in the WB's EHS guidelines; timeliness and adequacy of environmental mitigation measures; IR compensation rates and timeliness of payments, adequacy and timeliness of IR rehabilitation measures including serviced housing sites, house reconstruction, livelihood support measures, and training; budget for implementing EMP, RP, or IPP, timeliness and adequacy of capacity building, etc.);
- (f) Monitoring results compared against the objectives of safeguards or desired outcomes documented (e.g. IR impacts avoided or minimized; livelihood restored or enhanced; IP's identity, human right, livelihood systems and cultural uniqueness fully respected; IP not suffer adverse impacts, environmental impacts avoided or minimized, etc.);
- (g) If noncompliance or any major gaps identified, include a corrective action plan;
- (h) Records on disclosure of monitoring information to affected communities;
- (i) Identification of key issues, or complaints from affected people, or recommendations for improvement;
- (j) Monitoring adjustment measures recommended based on monitoring experience/trends and stakeholders response;
- (k) Information about actual institutional arrangement for implementing the monitoring program/plan provided or adjusted, as may be required;
- (l) Compliance on national labor laws and internationally accepted core labor standards;
- (m) Details of community programs (CSR) and engagement with civil society/NGOs in the implementation of programs
- (n) Proposed items of focus for the next report and due date.

- (ii) **Page limit:** Not applicable.

Bi-Annual Environmental Monitoring Report

Project Number: {XXXXXX}
{Reporting period: Month Year}

KGZ: CAREC Transport Corridor 3 (Bishkek–Osh Road) Improvement Project Phase 4

Prepared by {author(s)}
{Firm name}
{City, country}

For {Executing agency}
{Implementing agency}

Endorsed by: (staff name of IA/PIU) and signature, submission date

Table of Contents

Part I Introduction

- Construction activities and project progress during the previous 6 months.
- Changes in project organization and environmental management team.
- Relationships with contractors, owner, lender, etc.

Part II Environmental Monitoring

Summarize the previous 6 months of environmental monitoring data, and provide explanations of any instances in which environmental standards or guidelines were exceeded. Typically, this will cover:

- noise and vibrations,
- water quality,
- air quality, and
- flora and fauna monitoring.

Recommendations are required to show how any exceedances will be prevented in the future. Graphs can be used in this section to show trends, but large tables of data or multiple graphs should be attached in an appendix.

Part III Environmental Management

- The environmental management system (EMS), site-specific environmental management plan (SEMP), and work plans – to report on delivery of documents, required amendments, etc.
- Site inspections and audits – to summarize the number and type of site visits.
- Noncompliance notices – to summarize the details, including the number of notices given out, the issues covered, and the ranking of issues.
- Corrective action plans – to report on timeliness of preparation and completion.
- Consultation and complaints – to report on any consultations undertaken and list any complaints received.

Annexes

- Monitoring data.
- Photographs.
- Implementation report on the environmental impact assessment (EIA)/initial environmental examination (IEE) mitigation requirements, using the following format:

Reference	Requirement	Action to date	Action required/comment