



Report and Recommendation of the President to the Board of Directors

Project Number: 45169
October 2013

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

Asian Development Bank

CURRENCY EQUIVALENTS

(as of 8 October 2013)

Currency unit	–	som (Som)
Som1.00	=	\$0.0205
\$1.00	=	Som48.75

ABBREVIATIONS

ADB	–	Asian Development Bank
CAREC	–	Central Asia Regional Economic Cooperation
EDB	–	Eurasian Development Bank
EIRR	–	economic internal rate of return
km	–	kilometer
km/h	–	kilometers per hour
LARP	–	land acquisition and resettlement plan
PBM	–	performance-based maintenance
MOTC	–	Ministry of Transport and Communications
SDR	–	special drawing right

NOTE

In this report, "\$" refers to US dollars.

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PROJECT AT A GLANCE

1. Project Name: Central Asia Regional Economic Cooperation Corridor 3 (Bishkek–Osh Road) Improvement Project, Phase 4		2. Project Number: 45169-001	
3. Country: Kyrgyz Republic		4. Department/Division: Central and West Asia Department/Transport and Communications Division	
5. Sector Classification:			
		Sectors	Primary
		Transport, and information and communication technology	√
		Subsectors	
		Road transport	
6. Thematic Classification:			
		Themes	Primary
		Economic growth	
		Regional cooperation and integration	√
		Capacity development	
		Subthemes	
		Widening access to markets and economic opportunities	
		Cross-border infrastructure	
		Institutional development	
6a. Climate Change Impact No climate change indicator available.		6b. Gender Mainstreaming	
		Gender equity theme (GEN)	
		Effective gender mainstreaming (EGM)	
		Some gender elements (SGE)	
		No gender elements (NGE)	√
7. Targeting Classification:		8. Location Impact:	
General Intervention	Targeted Intervention		
	Geographic Dimensions of Inclusive Growth	Millennium Development Goals	Income Poverty at Household Level
√			
			High
			High
			Low
			Low
9. Project Risk Categorization: Low			
10. Safeguards Categorization:			
		Environment	B
		Involuntary resettlement	B
		Indigenous peoples	C
11. ADB Financing:			
Sovereign/Nonsovereign	Modality	Source	Amount (\$ Million)
Sovereign	Project grant	Asian Development Fund	35.0
Sovereign	Project loan	Asian Development Fund	65.0
Total			100.0
12. Cofinancing:			
Financier	Category	Amount (\$ Million)	Administration Type
Eurasian Development Bank	Official-Loan	60.0	Not ADB-administered
Total		60.0	
13. Counterpart Financing:			
Source	Amount (\$ Million)		
Government	31.8		
Total		31.8	
14. Aid Effectiveness:			
Parallel project implementation unit		No	
Program-based approach		No	

I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on (i) a proposed loan, and (ii) a proposed grant, both to the Kyrgyz Republic for the Central Asia Regional Economic Cooperation¹ Corridor 3 (Bishkek–Osh Road) Improvement Project, Phase 4.²

2. The project is located in the western part of the country where the income gap is significant. The project will improve connectivity and reduce transport costs by completing improvements to sections of an important national and regional corridor, the Bishkek–Osh road, which is part of Central Asia Regional Economic Cooperation (CAREC) Corridor 3. The project will also help strengthen the sustainability of the national road network by improving road safety and road assessment management.³

II. THE PROJECT

A. Rationale

3. 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.

4. 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.⁴ 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.

5. The complete rehabilitation of the Bishkek–Osh road will contribute to 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

¹ CAREC is a proactive facilitator of project-based cooperation in transport, trade, energy, and other key sectors of mutual interest. It is a partnership of 10 countries and six multilateral institutions working together to promote development through regional cooperation, leading to accelerated growth and poverty reduction.

² The design and monitoring framework is in Appendix 1.

³ The Asian Development Bank (ADB) provided project preparatory technical assistance. ADB. 2012. *Technical Assistance to the Kyrgyz Republic for Preparing the CAREC Corridor 3 (Bishkek–Osh Road) Improvement Project, Phase 4*. Manila.

⁴ ADB. 2007. *CAREC Transport and Trade Facilitation Strategy*. Manila.

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%.⁵ 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.

6. ADB has assisted the Kyrgyz Republic in rehabilitating 320 kilometers (km) of the 655 km Bishkek–Osh road in three phases.⁶ All three projects were rated *successful* and *highly relevant* in the performance evaluation report by ADB’s Independent Evaluation Department in 2010.⁷ Other development partners, such as the Japan International Cooperation Agency 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.⁸ 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 unable to provide the required level of service.⁹ They pose traffic hazards to road users and pedestrian traffic.¹⁰ 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.¹¹

7. 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, 2013–2017.¹² The project is also well aligned with ADB’s Strategy 2020¹³ and with the country partnership strategy, 2013–2017, for the Kyrgyz Republic (footnote 5). The priority theme for the country partnership strategy is the development of a successful and

⁵ ADB. 2013. *Country Partnership Strategy: Kyrgyz Republic, 2013–2017*. Manila.

⁶ 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.

⁷ 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.

⁸ Development Coordination (accessible from the list of linked documents in Appendix 2).

⁹ Extensive traffic survey was carried out under the project preparatory technical assistance (footnote 3). 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.

¹⁰ 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.

¹¹ Sector Assessment (Summary): Transport, and Information and Communication Technology (accessible from the list of linked documents in Appendix 2).

¹² Government of the Kyrgyz Republic. 2013. *National Strategy of Sustainable Development, 2013–2017*. Bishkek.

¹³ ADB. 2008. *Strategy 2020: The Long-Term Strategic Framework of the Asian Development Bank, 2008–2020*. Manila.

stable democratic state through inclusive growth and the reduction of regional disparities. This theme is also at the core of the project.

B. Impact and Outcome

8. 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.

C. Outputs

9. The 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.¹⁴ 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.

10. In addition, 67 km of the road section from Madaniyat to Jalal-Abad (Km 507.5–Km 574.5) will be rehabilitated to international and state highway category 2.¹⁵ This is to be financed by the Eurasian Development Bank (EDB) and the government.¹⁶

D. Investment and Financing Plans

11. The project is estimated to cost approximately \$191.8 million, including taxes and duties, to be financed by ADB, the EDB, and the government. The project investment plan is in Table 1.

¹⁴ 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).

¹⁵ As defined in the Kyrgyz Republic road design standards, the section will have a design speed of 100 km/h and two 3.75-meter traffic lanes.

¹⁶ A framework cofinancing agreement was signed between ADB and the EDB on 6 May 2013. The agreement details the institutional partnership through a programmatic cofinancing approach by establishing operational arrangements for planning and coordination. As part of the government's larger program for the Bishkek–Osh road, it is expected that the EDB will concurrently provide a loan of \$60 million equivalent to cofinance rehabilitation of 67 km of road from Madaniyat to Jalal-Abad (Km 507.5–Km 574.5). In connection with such planned financing, on 4 June 2013, ADB and the EDB signed a memorandum of understanding on collaborative cofinancing, summarizing the design, scope, components, and financing of the respective sections to be financed by ADB and the EDB.

Table 1: Investment Plan
(\$ million)

Item	Amount
A. Base Cost^a	
1. Reconstruction of the Bishkek–Kara-Balta road section (52.5 km) ^b	75.5
2. Rehabilitation of the Madaniyat–Jalal-Abad road section (67.0 km) ^c	47.5
3. Institutional strengthening ^d	9.2
4. Consulting services for engineering and supervision for Madaniyat to Jalal-Abad ^c	3.0
5. Project management support ^e	1.5
6. Land acquisition and resettlement for the Bishkek to Kara-Balta road section	1.3
7. Land acquisition and resettlement for the Madaniyat to Jalal-Abad road section ^f	0.6
8. Taxes and duties ^g	28.7
Subtotal (A)	167.3
B. Contingencies^h	23.5
C. Financing Charges During Implementationⁱ	1.0
Total (A+B+C)	191.8

EDB = Eurasian Development Bank, km = kilometer.

^a In mid-2013 prices.

^b Includes road safety measures such as road safety signs, lane markings, street and signal lighting, parking areas, bus stops, crash barriers, and sidewalks with an estimated cost of \$14.0 million.

^c To be financed by the EDB.

^d Includes an engineering and supervision firm, PBM contract, road safety 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%).

^e 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.

^f This is an EDB-financed section, with land acquisition and resettlement cost to be financed by the government.

^g Includes taxes and duties of about \$28.7 million to be financed from government resources.

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

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

Source: Asian Development Bank estimates.

12. 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.¹⁷ 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. ADB will finance (i) 52.5 km of reconstructed road from Bishkek to Kara-Balta (Km 8.5–Km 61.0), (ii) institutional capacity strengthening, (iii) project management support, and (iv) land acquisition and resettlement for the ADB-financed section.

13. 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% of a PBM pilot contract; and (iii) other miscellaneous costs for the ADB-financed and administered outputs.

14. The EDB will provide a loan of \$60.0 million from its Anti-Crisis Fund to help finance the rehabilitation of the 67 km Madaniyat–Jalal-Abad section (Km 507.5–Km 574.5) and consulting services for engineering and supervision of the section. The government will provide counterpart

¹⁷ A country's eligibility for Asian Development Fund grants under the revised grant framework is determined by its risk of debt distress. The latest debt sustainability analysis determined that the Kyrgyz Republic had a moderate risk of debt distress and was therefore eligible to receive 50% of its ADF allocation as grants.

funding of \$11.0 million for the EDB-financed and administered output to cover (i) taxes and duties related to all civil works, goods, and consulting services; (ii) land acquisition and resettlement costs; and (iii) other miscellaneous costs. The financing and administration of these activities will be fully carried out by the EDB in accordance with its policies, procedures, and guidelines. The proposed financing plan is summarized in Table 2.¹⁸

Table 2: Financing Plan

Source	Amount (\$ million)	Share of Total (%)
Asian Development Bank		
Special Funds resources (grant)	35.0	18
Special Funds resources (loan)	65.0	34
Eurasian Development Bank	60.0	31
Government of the Kyrgyz Republic	31.8	17
Total	191.8	100

Source: Asian Development Bank estimates.

E. Implementation Arrangements

15. The Ministry of Transport and Communications (MOTC) will be the executing agency. It has implemented all development-partner-financed road projects since 1995, and has accumulated considerable experience. The Investment Projects Implementation Group in the MOTC will be the project implementation unit responsible for project implementation activities.¹⁹

16. The Ministry of Finance is requesting ADB's consideration in procuring bitumen from non-ADB members. Because of the location of the project, countries that are non-ADB members could provide better-quality materials at more competitive prices. Due to climate conditions in the Kyrgyz Republic, bitumen required for construction has to be able to endure extreme weather. Bitumen from neighboring ADB members often cannot meet this requirement. Allowing bitumen to be procured from non-ADB members will result in time and cost savings in the civil works.²⁰ Therefore, to enable the government to source from the least-expensive producers, and thereby maximize the project's development impact, economic efficiency and quality assurance, it is proposed that bitumen procured from non-member countries of ADB be eligible for financing for use in the ADB-financed section.

17. The implementation arrangements for ADB financed and administered outputs are summarized in Table 3 and described in detail in the project administration manual.²¹

¹⁸ Detailed cost estimates by ADB and the government can be found in Section IV of the project administration manual.

¹⁹ The Investment Projects Implementation Group is funded by multiple development partners such as ADB, the World Bank, and the European Bank for Reconstruction and Development. For the implementation of the EDB-financed section, if additional staffing is required, EDB will discuss with MOTC to make further arrangements when necessary.

²⁰ An estimated \$1.8 million will be saved by procuring bitumen from non-ADB member countries.

²¹ Project Administration Manual (accessible from the list of linked documents in Appendix 2).

Table 3: Implementation Arrangements

Aspects	Arrangements ^a		
Implementation period	February 2014–October 2019		
Estimated completion date	30 October 2019 (loan and grant closing date: 30 April 2020)		
Management			
(i) Oversight body	Ministry of Finance, deputy minister (chair); head of Public Investment Program, Technical Assistance, and Foreign Aid Department (member); head of Investment Projects Implementation Group (member)		
(ii) Executing agency	Ministry of Transport and Communications		
(iii) Implementation unit	Investment Projects Implementation Group, Bishkek, 29 staff (20 more to be recruited by 2015)		
Procurement	International competitive bidding	One civil works contract One performance-based maintenance contract	\$75.5 million ^b \$5.0 million ^b
Consulting services	Quality- and cost-based selection	One engineering and supervision contract (247 person-months)	\$4.2 million ^b
	Least-cost selection	Financial audit	\$0.1 million ^b
	Individual consultants	One external resettlement monitor specialist Project management (1,350 person-months)	\$0.1 million ^b \$1.3 million ^b
Advance contracting	Engineering and supervision consulting services. Any proposal of advance contracting will not constitute a commitment by ADB to finance the project.		
Disbursement	The loan and grant proceeds will be disbursed in accordance with ADB's <i>Loan Disbursement Handbook</i> (2012, as amended from time to time) and detailed arrangements agreed upon between the government and ADB.		

ADB = Asian Development Bank.

^a These do not cover the scope to be financed and administered by the Eurasian Development Bank.

^b These estimated costs do not include contingencies.

Source: Asian Development Bank.

III. DUE DILIGENCE

A. Technical

18. Preliminary engineering designs for the Bishkek–Kara-Balta and Madaniyat–Jalal-Abad road sections have been carried out based on topographical survey data; geotechnical investigations; and pavement, drainage structure, and bridge condition surveys in accordance with design standards applicable in the Kyrgyz Republic and internationally. International standards are applied partly to improve any shortcomings in the national standards so as to allow for a more flexible approach in defining suitable solutions at individual locations. The construction method will utilize proven technology with standard materials compatible with local conditions. Under the ADB-financed portion of the project, 9 km of the Bishkek–Kara-Balta road will be reconstructed, climate proofed, and upgraded to six lanes, and the remaining 43.5 km will be upgraded to four lanes with asphalt pavement. For the EDB-financed portion, the existing two-lane Madaniyat–Jalal-Abad section will be rehabilitated with asphalt pavement. Improvement of road safety signs, pavement markings, light and signal systems, and street furniture are considered to enhance road safety. The two sections will follow existing alignments and mitigate accident black spots to comply with national geometric design standards. Feasible adaptation measures will be incorporated into the engineering design, the management contract, and road safety measures to reduce disruption resulting from climate-induced events. Civil works will be strengthened on existing road pavements to improve road capacity and to meet current and forecast traffic demand.

19. Analysis was also carried out on 10 feeder roads along the two sections as part of the feasibility study to be considered for financing. Technical, economic, social, and safeguard

analyses were conducted.²² However, because of limited funding, the feeder roads are not included in the project financing at this stage. During implementation, if there are project savings or additional financing, these feeder roads will be considered and selection of the feeder roads will be based on the findings of the feasibility study.²³

B. Economic and Financial

20. The project will contribute to lower transport costs, higher travel speeds, and improved road safety standards for international and national traffic on CAREC Transport Corridor 3. The economic evaluation of the project was undertaken using the Highway Development and Management Model²⁴ following ADB's Guidelines for the Economic Analysis of Projects.²⁵ The economic analysis compares the with- and without-project scenarios. The current pavement condition was determined by engineering surveys. Values for vehicle operating costs and travel time were estimated by updating recently completed studies, while maintenance costs were based on the MOTC's actual expenditures on the project sections. Construction costs were determined by road section based on engineering estimates and traffic forecasts. The economic costs are capital costs, including physical contingencies but excluding taxes, and operation and maintenance costs. The economic benefits are savings in vehicle operating costs resulting from the improved project road, and time savings. Historical traffic data were supplemented by additional traffic counts and origin–destination surveys to derive a base 2013 traffic estimate for individual sections of the project roads and each of the feeder roads. The rate of growth in demand for travel was set at 3.3% based on the growth in the last 2 years. The road sections comprise only a small part of some journeys, but there is also local traffic for which the entire journey is within the project road sections.

21. The project is economically viable with an estimated economic internal rate of return (EIRR) of 26% for both sections combined. The estimated EIRR for the Bishkek–Kara-Balta section to be financed by ADB is 27% and the estimated EIRR for the Madaniyat and Jalal-Abad section to be financed by the EDB is 24%. The high EIRR reflects the poor state of the roads and high traffic volumes. Sensitivity tests confirmed that the project would remain viable even if the envisaged project costs increase, or benefits decrease.²⁶

C. Governance

22. The Investment Projects Implementation Group has been implementing ADB-funded projects since 1996, and has delivered more than 10 ADB road projects amounting to more than \$300 million. The staff has adequate knowledge, understanding, and experience with ADB procedures to manage the project. The implementation group has satisfactory capacity for project financial accounting and a proven track record in ADB's disbursement procedures. Under the ADB-financed scope, goods and works will be procured according to ADB's Procurement Guidelines (2013, as amended from time to time), civil works will be procured through international competitive bidding, and consulting firms will be recruited in accordance with ADB's Guidelines on the Use of Consultants (2013, as amended from time to time) using quality- and cost-based selection, with a quality–cost ratio of 90:10.

²² Since feeder roads were considered during the feasibility study stage, an environmental assessment and review framework and a land acquisition and resettlement framework were prepared.

²³ Feeder Road Selection Summary (accessible from the list of linked documents in Appendix 2).

²⁴ World Road Association. 2002. *HDM-4 Version 2*. Paris.

²⁵ ADB. 1997. *Guidelines for the Economic Analysis of Projects*. Manila.

²⁶ Economic and Financial Analysis (accessible from the list of linked documents in Appendix 2).

23. ADB's Anticorruption Policy (1998, as amended to date) was explained to and discussed with the government and MOTC. The specific policy requirements and supplementary measures are described in the project administration manual (footnote 21). Under the ADB-financed scope, bidding documents for the civil works contract will include provisions specifying ADB's right to audit all project records and accounts, as well as those of all contractors, suppliers, and other service providers involved. Key measures to ensure proper governance are (i) independent external auditing of contracts, project accounts, and financial statements; (ii) transparent decision processes for all procurement matters; and (iii) verification of contractors' payment claims by the supervising consultant and oversight by the project implementation unit.²⁷

D. Poverty and Social

24. The project will contribute to poverty reduction by stimulating economic activities through improved transport of goods and people and access to services. It will also benefit local residents and enterprises by creating jobs during construction and reducing transport costs and travel time. Social and poverty assessments are shown in the summary poverty reduction and social strategy.²⁸ The project is classified as general intervention, with no direct poverty reduction component. It will benefit poor people in the project area by improving transport conditions for better access to social services.

25. Although 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 are respected. 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.

E. Safeguards

26. **Environment (category B).** In accordance with ADB's Safeguard Policy Statement (2009), MOTC submitted an initial environmental examination report including an environmental management plan for the ADB-financed Bishkek–Kara-Balta road section, which ADB disclosed on its website on 14 August 2013.²⁹ Public consultation was held on 10–13 June 2013.³⁰ Impacts from the project are expected to be limited in magnitude, of a short-term nature, and mostly related to construction work, and can be mitigated. The identified impacts include (i) noise, dust, vehicle emission, and vibration, which are especially significant within the

²⁷ Details are in Section V of the project administration manual (footnote 23).

²⁸ Summary Poverty Reduction and Social Strategy (accessible from the list of linked documents in Appendix 2).

²⁹ Initial Environmental Examination (accessible from the list of linked documents in Appendix 2).

³⁰ For the road section between Madaniyat and Jalal-Abad (Km 507.5–Km 574.5) to be financed by the EDB, the process for social and environmental assessment and planning, safeguard documentation, consultation, and disclosure requirements was conducted to satisfy ADB's Safeguard Policy Statement. Initial environmental examination report and land acquisition and resettlement plan for the EDB-financed road section were prepared and disclosed. The EDB confirms that the social and environmental assessment and planning, safeguard documentation consultations, and disclosure during rehabilitation of the road section between Madaniyat and Jalal-Abad shall be undertaken to the EDB's satisfaction. During implementation, the EDB shall be responsible for (i) ensuring that activities carried out in connection with its financed section comply with applicable safeguard requirements, and (ii) resolving any complaints in relation to such section only.

settlements along the project road and where sensitive receptors such as schools, hospitals, and mosques are located; (ii) impacts on water courses and rivers due to bridge rehabilitation; (iii) impacts from material transport from borrow sites; (iv) impacts of tree cutting along the project road due to site clearance activities; (v) impacts from asphalt plant and aggregate crushers; and (vi) impacts from contractors' working camps. Impacts have been divided into design phase, construction phase, and operation phase. The cost for implementing the environmental management plan will be financed by the loan and grant. Specifically, the costs of mitigation measures will be included in the construction contracts, and the cost of environmental monitoring will be included in the consulting services of the engineering and supervision consultants. Support to the Investment Projects Implementation Group in building capacity in environmental management is not included in the environmental management plan because the implementation group is managing several transport projects under which capacity building assistance has been provided.

27. Involuntary resettlement (category B). MOTC prepared a land acquisition and resettlement plan (LARP) for the ADB-financed Bishkek–Kara-Balta section where compensation for land, structures, and business interruption are detailed.³¹ Civil works under the project will entail mostly temporary involuntary resettlement. Based on the available preliminary design, the Bishkek–Kara-Balta section will entail impacts on (i) two houses with approximately 10 persons that will be severely affected; (ii) 38 shops, cafes, or kiosks that will experience temporary business interruption as these are mostly nontitled and will be moved back out of the existing right of way; (iii) two petrol stations, whose partial structures are within the existing right of way; (iv) a government structure and a shed; and (v) 58 secondary structures (concrete fences, gates, stone paving, etc.).³² The LARP was disclosed to the affected people through a series of public consultations and was posted on the ADB website on 15 August 2013. MOTC will be responsible for meeting ADB's safeguard requirements, including monitoring of LARP implementation. Safeguard staff in the Investment Projects Implementation Group has sufficient capacity to implement and monitor the LARPs. ADB will provide MOTC's safeguard staff with further training through technical assistance.³³

28. Indigenous peoples (category C). The project affects neither indigenous peoples nor vulnerable groups. General positive economic and social impacts are expected in areas traversed by the road sections.

F. Risks and Mitigating Measures

29. The project risks are considered manageable through the prescribed mitigating measures. Major project risks and mitigating measures are summarized in Table 4 and described in detail in the risk assessment and risk management plan.³⁴

³¹ Resettlement Plan: Land Acquisition and Resettlement Plan (accessible from the list of linked documents in Appendix 2).

³² The LARP for the EDB-financed Madaniyat–Jalal-Abad road section identifies impacts on (i) four houses with approximately 20 persons that will be severely impacted; (ii) 12 shops, cafes, or kiosks that will experience temporary business interruption as these are mostly nontitled and will be moved out of the existing right of way; and (iii) 103 secondary structures (metal shade, gates, fences, etc.). There will be partial impacts to six houses and two shops.

³³ ADB. 2009. *Technical Assistance for Mainstreaming Land Acquisition and Resettlement Safeguards in the Central and West Asia Region*. Manila (TA 7433-REG).

³⁴ Risk Assessment and Risk Management Plan (accessible from the list of linked documents in Appendix 2).

Table 4: Summary of Risks and Mitigating Measures

Risks	Mitigating Measures
Collusion, corruption, and cartel conduct	Extra due diligence to ensure ADB procurement guidelines and consulting services guidelines are met
Counterpart funding delay	Government assurance to include counterpart funds in the annual budget
Procurement delay	Advanced contracting action is to be taken for consultants; extended advertising and bidding periods taken into account
Safeguard noncompliance and complaint	Training and support on Safeguard Policy Statement (2009) and an independent external resettlement monitor to be recruited; public consultations to be held with nongovernment organizations and residents
Cost overrun	Sufficient contingency allocated and detailed design of engineering work to ensure better cost estimate prior to awarding of civil works
Insufficient funding for maintenance	Pilot performance-based maintenance contract and government assurances of sufficient maintenance fund

Source: Asian Development Bank.

IV. ASSURANCES AND CONDITIONS

30. The government and MOTC have assured ADB that implementation of the project shall conform to all applicable ADB policies including those concerning anticorruption measures, safeguards, gender, procurement, consulting services, and disbursement as described in detail in the project administration manual and financing document.

31. The government and MOTC have agreed with ADB on certain covenants for the project, which are set forth in the financing agreement.

V. RECOMMENDATIONS

32. I am satisfied that the proposed loan would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve

- (i) the loan in various currencies equivalent to SDR42,975,000 to the Kyrgyz Republic for the Central Asia Regional Economic Cooperation Corridor 3 (Bishkek–Osh Road) Improvement Project, Phase 4, from ADB’s Special Funds resources, with an interest charge at the rate of 1.0% per annum during the grace period and 1.5% per annum thereafter; for a term of 32 years, including a grace period of 8 years; and such other terms and conditions as are substantially in accordance with those set forth in the draft financing agreement presented to the Board; and
- (ii) the grant not exceeding \$35,000,000 to the Kyrgyz Republic from ADB’s Special Funds resources for the Central Asia Regional Economic Cooperation Corridor 3 (Bishkek–Osh Road) Improvement Project, Phase 4, on terms and conditions that are substantially in accordance with those set forth in the draft financing agreement presented to the Board.

33. I also recommend that the Board approve the proposal in para. 16 of this report to permit procurement of bitumen (i) in countries that are not (a) developing member countries of ADB, or (b) developed member countries of ADB that have contributed to ADB’s Special Funds resources; and (ii) that is produced in such countries.

Takehiko Nakao
President

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 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	MOTC project completion report	
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.

^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).

LIST OF LINKED DOCUMENTS

<http://www.adb.org/Documents/RRPs/?id=45169-001-3>

1. Financing Agreement
2. Sector Assessment (Summary): Transport, and Information and Communication Technology
3. Project Administration Manual
4. Contribution to the ADB Results Framework
5. Development Coordination
6. Economic and Financial Analysis
7. Country Economic Indicators
8. Summary Poverty Reduction and Social Strategy
9. Initial Environmental Examination
10. Resettlement Plan: Land Acquisition and Resettlement Plan
11. Risk Assessment and Risk Management Plan

Supplementary Document

12. Feeder Road Selection Summary