

# Project Administration Manual

Project Number: 46145  
Loan Number: LXXXX  
31 August 2012

Republic of Kazakhstan: CAREC Corridor 3  
(Shymkent-Tashkent Section) [Link to the Western  
Europe-Western People's Republic of China  
International Transit Corridor] Road Improvement  
Project

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1. Implementation Schedule
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### **Project Administration Manual Purpose and Process**

The project administration manual (PAM) describes the essential administrative and management requirements to implement the project on time, within budget, and in accordance with 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 (MOTC) and the Committee of Roads (COR) are wholly responsible for the implementation of ADB financed projects, as agreed jointly between the borrower and ADB, and in accordance with Government and ADB's policies and procedures. ADB staff is responsible to support implementation including compliance by MOTC and COR of their obligations and responsibilities for project implementation in accordance with ADB's policies and procedures.

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

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

## ABBREVIATIONS

ACN	=	advance contracting notice
ADB	=	Asian Development Bank
CAREC	=	Central Asia Regional Economic Cooperation
COR	=	Committee of Roads
CSC	=	construction supervision consultant
CSRN	=	Consulting Services Recruitment Notice
CTL	=	controller department
CW	=	civil works
DMF	=	design and monitoring framework
DP	=	displaced people
EMP	=	environmental management plan
GDP	=	gross domestic product
ICB	=	international competitive bidding
IEE	=	initial environmental examination
IFB	=	invitation for bids
IPC	=	interim payment certificate
IRI	=	international roughness index
IP	=	indigenous people
IR	=	involuntary resettlement
KARM	=	Kazakhstan Resident Mission
km	=	kilometer
LA	=	loan agreement
LAR	=	land acquisition and resettlement
LARP	=	land acquisition and resettlement plan
m	=	meter
MOF	=	Ministry of Finance
MOTC	=	Ministry of Transport and Communications
PAM	=	project administration manual
PMU	=	program management unit
PPMS	=	project performance monitoring system
QCBS	=	quality- and cost-based selection
RRP	=	report and recommendation of the President to the Board
SKRD	=	South Kazakhstan Road Department
SPS	=	Safeguard Policy Statement
TD	=	treasury department
TOR	=	terms of reference
TPV	=	Third Party Variation
vpd	=	vehicle per day
WA	=	withdrawal application

## I. PROJECT DESCRIPTION

### A. Rationale

1. The proposed Project involves the rehabilitation of a 37-km section of the Shymkent-Tashkent Road, a main transport artery of South Kazakhstan, and a section of Corridor 3<sup>1</sup> under the Central Asia Regional Economic Cooperation (CAREC) Transport and Trade Facilitation Strategy (TTFS).<sup>2</sup> The road also connects with CAREC Corridor 1 linking eastern Europe with western PRC. The European Bank of Reconstruction and Development (EBRD) will finance the remaining 62 km of the road in parallel. The rationale for the proposed Project emanates from (i) South Kazakhstan's economic and social performance, which is below the country's average; (ii) the significance of the Project road in the Central Asian regional context being at the junction of two major CAREC corridors; and (iii) the dilapidated physical condition of the road, which impedes transport, efforts to diversify South Kazakhstan's economy, and regional integration.
2. Kazakhstan has over the last three years enjoyed strong economic growth driven mainly by a substantial increase in oil production, prevailing high commodity prices, and an influx of direct foreign investments. The positive macroeconomic development has, however, masked growing disparities across regions. South Kazakhstan is among the provinces that have not proportionately benefited from the favorable macroeconomic development (see para. 21). The province has only limited access to good roads and transport, which affected the availability of public transport. As transport operators are more likely to work on good-quality roads, people have noted the difficulties involved in reaching administrative centers of the province.
3. The Government has adopted the 2020 Strategy for Economic Development and the State Program on Accelerated Industrial-Innovative Development (SPAID) to diversify the economy and promote balanced regional development.<sup>3</sup> To this end, Shymkent, South Kazakhstan's capital, has been designated as a national growth center. The proposed reconstruction of the Shymkent-Tashkent road will complement the regional development activities of the Government. To support the 2020 Strategy and SPAID, the Government reformulated and expanded its previous road development plan into the Transport Sector Program (TSP) for 2010–2014.<sup>4</sup> The TSP will develop a transport system that is integrated into the international transport network. The project aligns with ADB's Strategy 2020,<sup>5</sup> its country operations business plan for 2010–2011,<sup>6</sup> and Kazakhstan's SPAID and TSP.
4. In addition to supporting national socio-economic goals, a major part of the project's justification stems from Kazakhstan's strategic geographic location in the Central Asian region. The country serves as a land bridge in the growing trade between Asia and Europe and is already capturing a significant volume of transit traffic. Shymkent is at the junction of

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<sup>1</sup> The TTFS and its Action Plan cover the development of six priority CAREC transport corridors. Corridor 3 links the Russian Federation with the Middle East and South Asia, connecting the following ADB Developing member Countries: Afghanistan, Kazakhstan, the Kyrgyz Republic, Tajikistan, and Uzbekistan.

<sup>2</sup> The Joint Transport and Trade Facilitation Strategy (TTFS) was endorsed by the CAREC Ministerial Conference (MC) in November 2007 and the corresponding Action Plan endorsed by the MC in 2008.

<sup>3</sup> <http://www.inform.kz/eng/article/2437463>

<sup>4</sup> The 2020 Strategy for Economic Development was approved in February 2010; the SPAID was approved in March 2010, and the TSP in July 2010.

<sup>5</sup> ADB. 2008. *Strategy 2020: The Long-Term Strategic Framework of the Asian Development Bank, 2008–2020*. Manila.

<sup>6</sup> ADB's Country Operations Business Plan: Kazakhstan, 2010–2011 is being finalized and will include this project.

two major CAREC corridors, Corridor 1 connecting West Asia with Europe, and Corridor 3 providing an important route to South Asia, to major ports in the Persian Gulf, and also to Europe. The proposed Project is thus consistent with the Strategy CAREC 2020<sup>7</sup> aimed at the development of priority transport routes, increasing trade through transport connectivity, and facilitating cross-border movement of goods.

5. Kazakhstan's road sector has operational and institutional bottlenecks related to deteriorating infrastructure, the sustainability of road infrastructure in the face of poor asset management, inadequate funding mechanism, road planning, road traffic safety, and limited project development and management capacity. These bottlenecks raise transport costs and hamper regional cooperation and integration opportunities, undercutting the country's competitiveness. Based on the lessons learned, ADB realized that sufficient support for institutional capacity development throughout the duration of the project has to be sustained. This is further described under implementation arrangements (para. 13).
6. Kazakhstan's 93,600 km road network includes 23,495 km of republican (national and international) roads, with the rest being rural and urban roads. Road freight traffic has increased as a result of growth in vehicular traffic and private road-hauling companies, shorter transport hauls of goods compared to other modes of transport, and a changing industrial and distribution pattern. In 2009, roads accounted for 25% of Kazakhstan's freight traffic by ton-km and 85% of its passenger traffic by passenger-km. These shares are likely to continue to grow in the foreseeable future. Much of the road network is in poor condition, as 40% of republican roads require major rehabilitation and proper maintenance.
7. The Project road built 40 years ago will not be able to act as a stimulus for the economy and for regional integration, in its current poor condition. It was not designed for the current traffic loads. The advent of heavy trucks not common when the road was designed has been particularly damaging to the structure of the pavement. The road has not undergone any major rehabilitation work or reconstruction. Major structural problems have occurred indicating that the need for reconstruction has become urgent.

## **B. Impact and Outcome**

8. The project's impact will be improved regional cooperation and trade along CAREC corridors. The outcome will be efficient transport network in the Shymkent–Tashkent road section.

## **C. Outputs**

9. The output will be a 37 km rehabilitated road section from Shymkent toward Tashkent, with construction supervision support.

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<sup>7</sup> ADB. 2012. *A Strategic Framework for the Central Asia Regional Economic Cooperation Program 2011–2020*. CAREC 2020. Manila.

## II. IMPLEMENTATION PLAN

### A. Project Readiness Activities

Indicative Activities	2012						2013						2014	Responsible
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Jul	Oct		
Design ready	√													
Establish project implementation arrangements							√							ADB, MOTC
Approve and disclose safeguards documents	√													MOTC, ADB
Allocate government counterpart funds						√								MOF, MOTC
Start Procurement of construction supervision consultant		√												MOTC/COR
Start Procurement for civil works bids		√												MOTC/COR
Sign loan agreement						√								ADB, MOF
Declare loan effectiveness								√						ADB, MOF

ADB = Asian Development Bank, COR = Committee of Roads, CSRN = consulting services recruitment notice, EMP = environment management plan, IEE=Initial Environmental Examination, IFB = invitation for bids, LARP = land acquisition and resettlement plan, MOF = Ministry of Finance, MOTC = Ministry of Transport and Communications.

### B. Overall Project Implementation Plan

- The project is planned to be implemented over 3 years with target completion in December 2015 as shown in the overall program in Attachment 1.

### III. PROJECT MANAGEMENT ARRANGEMENTS

#### A. Project Implementation Organizations – Roles and Responsibilities

##### 1. Organizations

Project Stakeholders	Management Roles and Responsibilities
Ministry of Finance	<ul style="list-style-type: none"> <li>• Sign and oversee the implementation of the Loan Agreement;</li> <li>• Allocate, release, and monitor the use of counterpart funds;</li> <li>• Endorse to ADB staff authorized to approve withdrawal applications processing; and</li> <li>• Request ADB to reallocate or cancel loan proceeds, if required.</li> </ul>
Executing Agency (Ministry of Transport and Communications)	<ul style="list-style-type: none"> <li>• Oversee implementation and performance of the Project</li> <li>• Liaise with ADB;</li> <li>• Establish a team to manage the Project; and</li> <li>• Responsible for submission of the W/A to ADB, retention of supporting documents, and submission of any reporting requirements, including, the annual report and financial statements.</li> </ul>
Implementing Agency assisted by (South Kazakhstan Road Department - Committee of Roads)	<ul style="list-style-type: none"> <li>• Manage and implement the Project;</li> <li>• Resolve issues that would compromise results' quality, costs, or completion time of the Project; and</li> <li>• Ensure safeguard compliance, legal conformity, and sound financial management.</li> </ul>
ADB	<ul style="list-style-type: none"> <li>• Monitor and evaluate implementation and performance of the Project; and</li> <li>• Ensure timely completion and achievement of Project outputs, outcomes, and impact.</li> </ul>

##### 2. Personnel

Key Personnel	Responsibility
Project Director <sup>a</sup>	<ul style="list-style-type: none"> <li>• Has the overall responsibility to implement all Project activities including project preparation, implementation, monitoring, and reporting.</li> <li>• Prepare and submit monthly and quarterly progress reports to ADB within 2 weeks from the end of the related quarter.</li> <li>• Submit to ADB other required performance and monitoring reports.</li> </ul>
MOTC Staff <sup>b</sup>	<ul style="list-style-type: none"> <li>• Assist the Project Director with engineering, finance, legal, and procurement matters.</li> </ul>
Construction Supervision Consultants	<ul style="list-style-type: none"> <li>• Assist the Project Director in supervising civil works road construction to ensure quality and timely completion of construction works;</li> </ul>



Key Personnel	Responsibility
	<ul style="list-style-type: none"> <li>Administer the civil works contracts including assessment of contract variations and progress claims;</li> <li>Guide and issue instructions to the contractors, and monitor work schedules;</li> <li>Ensure that all works comply with the approved designs and technical specifications, work schedule and budget, contract terms and conditions, road safety plan, standard engineering practice, and ADB safeguard policy; and</li> <li>Maintain up-to-date and accurate records</li> </ul>

ADB = Asian Development Bank, EMP = environment management plan, LARP = land acquisition and resettlement plan, MOTC = Ministry of Transport and Communications.

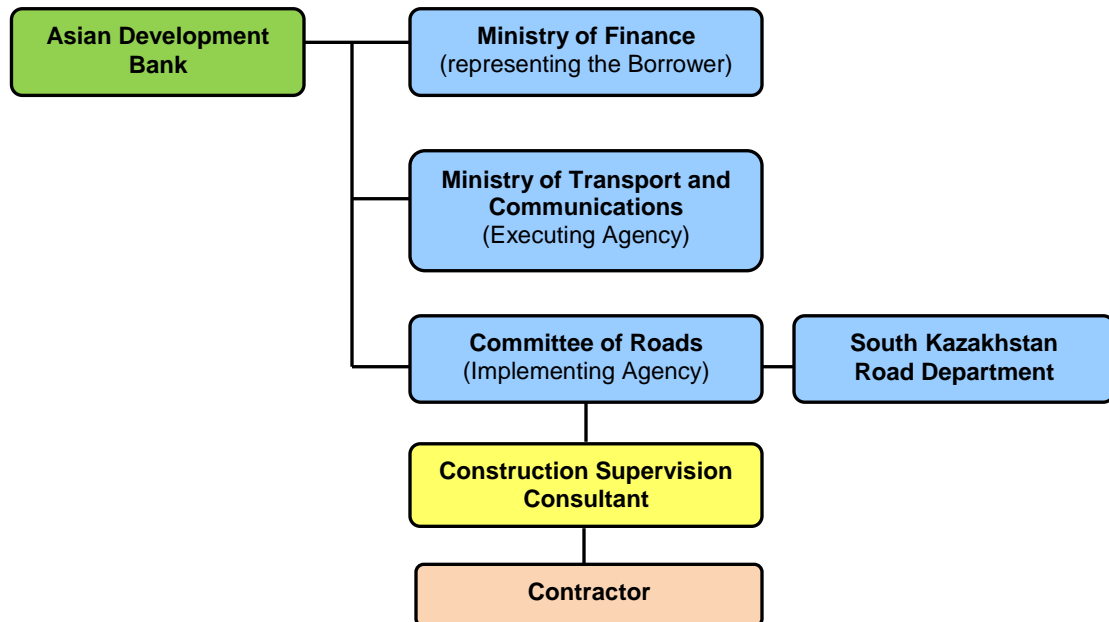
<sup>a</sup> Staff of the Committee of Roads appointed by MOTC.

<sup>b</sup> The Project Director will be assisted by staff from South Kazakhstan Road Department.

## B. Key Persons Involved in Implementation

Executing Agency	
Ministry of Transport and Communications (MOTC)	<p>Officer's Name: Askar Zhumagaliyev  Position: Minister  Telephone: +7 7172 240077  Fax: +7 7172 241419  Email address:  Office Address: 47 Kabanbay Batyr Avenue, Transport Tower, Astana, 473000, Kazakhstan</p>
Implementation Agency	
Committee of Roads (COR)	<p>Officer's Name: Zamir Saginov  Position: Chairman  Telephone: + 7 7172 243383  Fax: +7 7172 299065  Email:  Office Address: 47 Kabanbay Batyr Avenue, Transport Tower, Astana, 473000, Kazakhstan</p>
ADB	
Transport and Communications Division Central and West Asia Department	<p>Staff Name: Hong Wang  Position: Director  Telephone: +632 632 6765  Email address: hongwang@adb.org</p>
Mission Leader	<p>Staff Name: Sunil Mitra  Position: Principal Transport Specialist  Telephone: +632 632 6444  Email address: smitra@adb.org</p>

### C. Project Organization Structure



#### IV. COSTS AND FINANCING

##### A. Detailed Cost Estimates by Expenditure Category

**Table 1: Project Investment Plan  
(\$ millions)**

Item	Total Cost	% of Total Base Cost
<b>A. Investment Cost<sup>a</sup></b>		
1. Civil works	288.3	85.2%
2. Consultants		
a. Construction supervision and external safeguard monitoring	7.7	2.2%
b. Institutional development <sup>b</sup>	1.1	0.3%
3. Taxes and duties	41.4	12.2%
<b>Subtotal/Total Base Cost (A)</b>	<b>338.5</b>	
<b>B. Contingencies<sup>c</sup></b>		
1. Price	32.7	
<b>Subtotal (B)</b>	<b>32.7</b>	
<b>Total Project Cost (A+B)</b>	<b>371.2</b>	

<sup>a</sup> In mid-2012 prices.

<sup>b</sup> Only EBRD will finance this component.

<sup>c</sup> Contingencies for price escalation include reserve for possible changes in exchange rate from the current rate \$1 = KZT150. Physical contingencies are computed at 7% for civil works.

Sources: Ministry of Transport and Communications of the Republic of Kazakhstan and the Asian Development Bank estimates.

##### B. Allocation and Withdrawal of Loan Proceeds (ADB)

**Table 2: CAREC Corridor 3 (Shymkent-Tashkent Section) [Link to the Western Europe-Western People's Republic of China International Transit Corridor]  
Road Improvement Project**

CATEGORY			ADB FINANCING
Number	Item	Total Amount Allocated for ADB Financing (\$ million)	Percentage and Basis for Withdrawal from the Loan Account
1	Civil works	111.0	85% of total expenditure claimed
2	Consulting services	3.0	100% of total expenditure claimed*
3	Contingencies	11.0	
	<b>Total</b>	<b>125.0</b>	

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

### C. Detailed Cost Estimates by Financier (ADB)

Items	ADB	%	EBRD	%	Subtotal (ADB & EBRD)	%	Government Amount	%	Total
<b>Base Cost</b>									
<b>Civil works</b>					284.3		19.6**		303.9
Civil works (ADB)	111	85					19.6**	15	
Civil Works (EBRD)			173.3	100					
<b>Consulting services</b>					7.7	100			7.7
Consulting Services (ADB)*	3	100							
Construction supervision consultant (EBRD)			4.7	100					
<b>Institutional development (EBRD)</b>			1.1	100	1.1	100			1.1
<b>Taxes and duties(ADB)</b>							0.5***	100	0.5
<b>Taxes and duties(EBRD)</b>							25.3	100	25.3
<b>Sub total</b>	114		179.1		293.1		45.4		338.5
<b>Contingencies</b>					28.4				
Contingencies(ADB)	11						1.9		12.9
Contingencies(EBRD)			17.4				2.4		19.8
<b>Total Cost</b>	<b>125</b>		<b>196.5</b>		<b>321.5</b>		<b>49.7</b>		<b>371.2</b>

\* Includes construction supervision consultant and safeguards monitor.

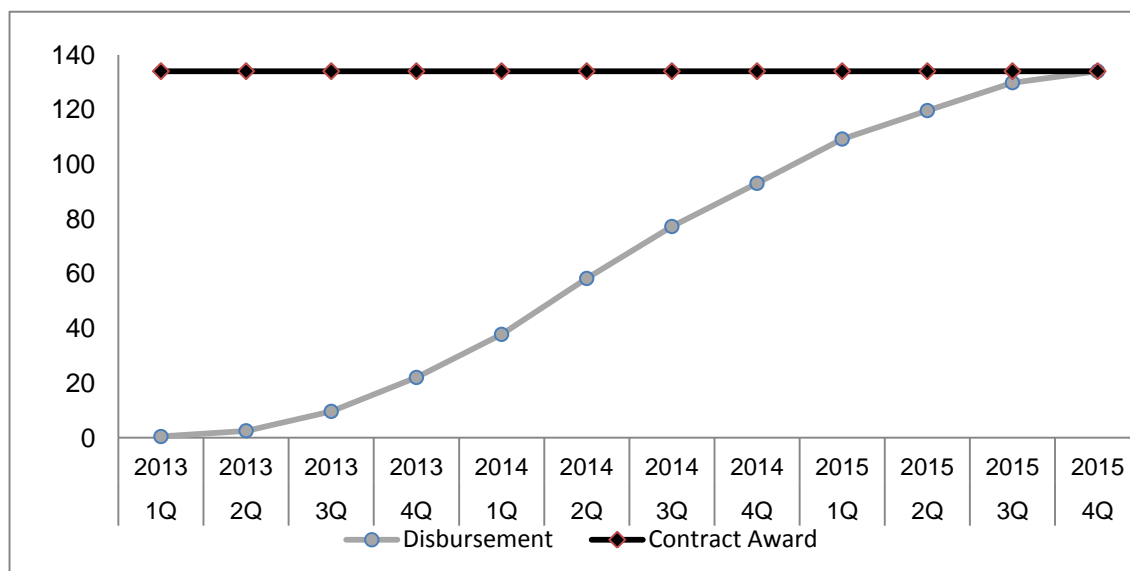
\*\* This amount includes taxes and duties of \$15.6m for Civil works (ADB).

\*\*\* This amount is only for taxes and duties for Consulting services (ADB).

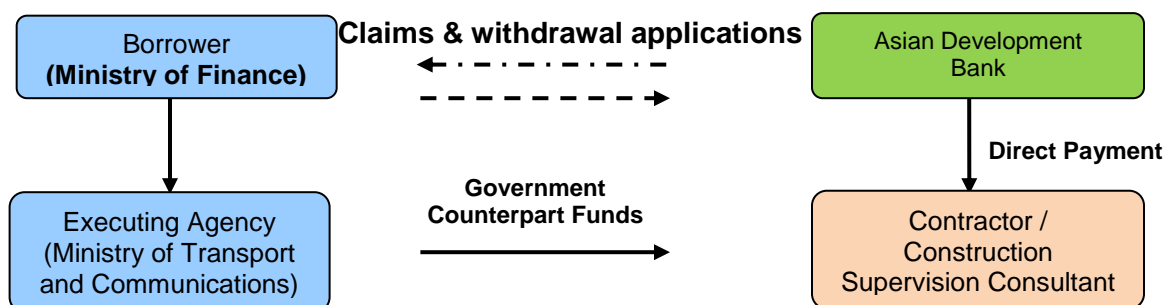
### D. Detailed Cost Estimates by Year (ADB)

Item	Total Cost	2013	2014	2015
<b>Base Costs<sup>a</sup></b>				
Civil works	130.5	21.0	69.5	40.0
Consulting services	3.5	1.0	1.5	1.0
<b>Total</b>	<b>134.0</b>	<b>22.0</b>	<b>71.0</b>	<b>41.0</b>

<sup>a</sup> In 2012 prices.



#### E. Fund Flow Diagram



#### V. FINANCIAL MANAGEMENT FINANCIAL MANAGEMENT ASSESSMENT

11. A financial management assessment (FMA) for the executing and implementing agencies will be conducted before the approval of the Project. The following draft financial management action plan will be updated after the conduct of FMA.

## Financial Management Action Plan

Activities	Timeline	Responsible	Status as of	Risks	Measures to Mitigate Risks
1. Assign project financial management functions to a nominated unit within MOTC's finance division, with suitably qualified staff to be supervised by the director of MOTC's accounting department	before project approval	MOTC			
2. Set up the financial management system for the project, by <ul style="list-style-type: none"> <li>• developing a manual of financial procedures</li> <li>• training project financial management staff</li> <li>• establishing an accounting system to record and report on an annual basis project transactions and generate interim financial reports.</li> </ul>	before the project effective date	MOTC		<ul style="list-style-type: none"> <li>• No MOTC staff members available for additional tasks</li> <li>• Fast turnover of staff members, requiring retraining of new staff to build and sustain capacity</li> <li>• Delays in implementing</li> </ul>	<ul style="list-style-type: none"> <li>• Provide better compensation to current staff to lower staff turnover ratio.</li> </ul>

MOTC = Ministry of Transport and Communications.

### A. Disbursement

12. ADB's Loan Disbursement Handbook<sup>8</sup> (2012, as amended from time to time), will guide the disbursement of loan proceeds for this project. The contracts for civil works and consulting services will use direct payment procedures. No imprest account will be required. All disbursements by ADB for this project will be by direct payment.
13. ADB funds may not be applied to the activities described on the ADB Prohibited Investment Activities List set forth at Appendix 5 of ADB's Safeguard Policy Statement<sup>9</sup> (SPS) (2009).
14. Before the submission of the first withdrawal application, MOF should submit to ADB sufficient evidence of the authority of the person(s) who will sign the withdrawal applications on behalf of the borrower, together with the authenticated specimen signatures of each authorized person.
15. The minimum value per withdrawal application is US\$100,000, unless otherwise approved by ADB. MOF will consolidate claims to meet this limit for reimbursement. Withdrawal applications and supporting documents will demonstrate, among other things that the goods, and/or services were produced in or from ADB members, and are eligible for ADB financing.
16. MOTC will submit the annual disbursement projections, including contract awards projections to ADB and will be responsible for requesting budgetary allocations for counterpart funds. MOF will make available all counterpart funds required for timely and effective implementation of the Project through annual budget allocations to MOTC.

<sup>8</sup> Available at: [http://www.adb.org/Documents/Handbooks/Loan\\_Disbursement/loan-disbursement-final.pdf](http://www.adb.org/Documents/Handbooks/Loan_Disbursement/loan-disbursement-final.pdf)

<sup>9</sup> Available at: <http://www.adb.org/Documents/Policies/Safeguards/Safeguard-Policy-Statement-June2009.pdf>

## **B. Accounting**

17. MOTC will maintain separate project accounts and records by funding source for all expenditures incurred on the Project. Project accounts will follow the Law of the Republic of Kazakhstan "On accounting and financial reporting" No. 234-III (2007), including the "Rules for conducting accounting" endorsed by Government Decree No. 1172 and the "Rules for execution of budget and its cash service" No. 220.

## **C. Auditing**

18. MOTC will cause the detailed consolidated project accounts to be audited in accordance with the Law of the Republic of Kazakhstan "On audit activity" No. 34 of 2008 (as amended in 2010 and 2012) by an independent auditor whose qualifications, experience and terms of reference are acceptable to ADB. As part of each such audit, the auditors will prepare a report (which includes the auditors' opinion on the use of the loan proceeds and a management letter (which sets out the deficiencies in the internal control of the project that were identified in the course of the audit, if any). Copies of such audited financial statements, audit report and management letter, all in the English language, and such other information concerning these documents and the audit thereof as ADB shall from time to time reasonably request, shall be furnished to ADB within 6 months of the end of the fiscal year by the executing agency. ADB shall disclose the annual audited 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 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. 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.

## **VI. PROCUREMENT AND CONSULTING SERVICES**

### **A. Advance Contracting**

19. Advance contracting for civil works and consultants will be undertaken, to be financed by ADB under the Project. Advance contracting will follow ADB's Procurement Guidelines<sup>10</sup> and ADB's Guidelines on the Use of Consultants (2010, as amended from time to time).<sup>11</sup> ADB will approve the issuance of invitations to bid, and advised MOF and MOTC that this does not commit ADB to finance the Project. Advance contracting activities will include (i) preparation of tender documents, and (ii) evaluation of bids. ADB will assist by providing a procurement consultant. The contracts will be awarded after loan effectiveness and the terms of reference is attached in attachment 2.

### **B. Procurement of Works and Consulting Services**

20. All procurement of works will follow ADB's Procurement Guidelines (2010, as amended from time to time) and the procurement plan to be developed for the project. Civil works contract over \$3 million will be procured through international competitive bidding (ICB) using post-qualification and single-stage one-envelope procedure. ADB's prior review procedures will be followed.
21. MOTC agreed to include the relevant sections of ADB's Anticorruption Policy (1998) in all bidding and contractual documents. MOTC will also (a) ensure that all Works contracts include a contractor's obligation to comply with road safety measures; and (b) monitor the accident rate and traffic volume during the operation of the Project Road.
22. The procurement plan indicating threshold and review procedures, and works contract packages (excluding consulting services requirements) is in Section C.
23. All consultants will be recruited according to ADB's Guidelines on the Use of Consultants.<sup>12</sup>
24. An estimated 100 person-months (47 international, 175 national) of consulting services are required to supervise the civil work. Consulting firms will be engaged using the quality- and cost-based selection (QCBS) method with a standard quality:cost ratio of 90:10.

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

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

<sup>12</sup> 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/>.



## C. Procurement Plan

### 1. Project Procurement Thresholds

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

Procurement of Works	
Method	Threshold
International Competitive Bidding (ICB) for Civil Works	> \$3,000,000

### 2. ADB Prior or Post Review

26. Except as ADB may otherwise agree, the following prior or post review requirements apply to the various procurement and consultant recruitment methods used for the project.

Procurement Method	Prior or Post	Comments
<b>Procurement of Works</b>		
International Competitive Bidding (ICB)	Prior	Financing by ADB and KAZ
<b>Construction Supervision Consultant and Safeguards Monitor</b>		
Quality- and Cost-Based Selection (QCBS)	Prior	Financing by ADB
Least Cost Selection (LCS)	Prior	Financing by ADB

ADB = Asian Development Bank, ICB = international competitive bidding, KAZ = Kazakhstan, QCBS = quality- and cost-based selection.

### 3. Works Contracts Estimated to Cost More Than \$1 Million

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

General Description	Contract Value (\$ million)	Procurement Method	Postqualification of Bidders	Advertisement Date	Comments
Civil Works	130.6	ICB	Yes	3rd Qtr / 2012	Financing by ADB and KAZ

ADB = Asian Development Bank, ICB = international competitive bidding, KAZ = Kazakhstan, Qtr = quarter.

#### 4. Consulting Services Contracts Estimated to Cost More Than \$100,000

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

General Description	Contract Value (\$)	Recruitment Method	Advertisement Date (quarter/year)	International or National Assignment	Comments
Construction Supervision Consultant	3.5 million	QCBS (90:10)	3rd Qtr / 2012	47 person-months (International) 175 person-months (National)	
Safeguards Monitor	10,000	LCS	3rd Qtr / 2012	3 person months	

ADB = Asian Development Bank, ICB = international competitive bidding, KAZ = Kazakhstan, QCBS = quality- and cost-based selection, Qtr = quarter.

#### 5. Indicative List of Packages Required Under the Project

29. The following table provides an indicative list of all procurement (goods, works and consulting services) over the life of the project. Contracts financed by the Borrower and others should also be indicated, with an appropriate notation in the comments section.

General Description	Estimated Value (cumulative) (\$ million)	Estimated Number of Contracts	Procurement Method	Domestic Preference Applicable	Comments
Civil Works	130.0	1	ICB	No	Financing by ADB and KAZ

General Description	Estimated Value (cumulative) (\$)	Estimated Number of Contracts	Recruitment Method	Type of Proposal	Comments
Consulting Services	3.5	1	QCBS	FTP	Financing by ADB
Safeguards Monitor	10,000	1	LCS	CV	Financing by ADB

ADB = Asian Development Bank, ICB = international competitive bidding, KAZ = Kazakhstan, QCBS = quality- and cost-based selection.

#### D. EA's Procurement Capacity

30. The EA's procurement capacity assessment was prepared in 2008 during the processing of the MFF for CAREC Transport Corridor 1 [Western Europe-Western People's Republic of

China International Transit Corridor] Investment Program. Since then, the EA's procurement capacity has been strengthened through externally-financed projects along the investment program and the subsequent projects. The EA has acquired sound knowledge and competences required for procuring works and services under ADB-funded projects. However, considering the recent increase of contracts, ADB observes that the EA needs more staff who have adequate knowledge and skills of working on the entire procurement procedure and contract administration as the number of projects has increased. ADB will provide a procurement specialist to assist with the procurement of contractor and the consulting supervision consulting firm.

#### **E. ADB's Review of Procurement Decisions**

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

## **VII. SAFEGUARDS**

### **A. Environment**

32. The Initial Environment Examination (IEE) for the Project was prepared, along with the Environmental Management Plan (EMP) (Attachment 3). The Project is classified as Environmental Category B.
33. MOTC will ensure (a) that the design, construction, operation and maintenance of the Project facilities are carried out in accordance with ADB's Safeguard Policy Statement (2009), and Kazakhstan's environmental laws and regulations; and (b) potential adverse environmental impacts arising from the Project are minimized by implementing all mitigation and monitoring measures as presented in the EMP.
34. MOTC will ensure that (a) the EMP is updated prior to award of the works contract; (b) sufficient resources are made available to implement, monitor, and record the implementation of the EMP; (c) semi-annual environmental monitoring reports (Attachment 4) are prepared and submitted to ADB within one month of the end of each period covered; (d) the reports include, inter alia, a review of implementation progress of the EMP, problems encountered and remedial measures taken; (e) detailed engineering design and the Works contracts under the Project incorporate applicable environmental measures identified in the IEE and the EMP; and (f) contractors are supervised to ensure compliance with the requirements of the IEE and EMP.

### **B. Land Acquisition and Resettlement**

35. The project is classified A for involuntary resettlement due to EBRD portion having resettlement impact. ADB portion of the road is classified as IR Category C as there are no expected major resettlement impacts. Notwithstanding, this project has a LARF prepared and disclosed. It requires that MOTC report to ADB any LAR issues identified upon full completion or update of the final design, or during implementation and obtain ADB's prior approval before execution.
36. LARP will be prepared in the event that there are any changes which may have resettlement impact. MOTC should assess any future design changes for resettlement impact and seek ADB clearance prior to implementing any design changes.

### **C. Indigenous People (IP)**

37. The project area (South Kazakhstan Oblast, particularly the outskirts of the city of Shymkent) is inhabited by an overwhelming Kazakh majority. No indigenous people are expected to suffer under the Project. None of the ethnic groups in the project area maintain cultural and social identities separate from the mainstream Kazakhstan's society fitting the ADB definition of Indigenous Peoples. They have full and equal access to institutions and economic opportunities as the rest of the population. Because of this, the project is classified as IP Category C.

#### **D. Execution of Contracts for Works**

38. MOTC will ensure that, subsequent to award of the Works contract, no notice to proceed is issued to contractor of this project until the applicable provisions of the IEE and the EMP have been complied with.

#### **VIII. GENDER AND SOCIAL DIMENSIONS**

39. The Project is expected to create positive impacts on labor creation, as well as, women and children's access to health services. However, risks related to human trafficking and HIV/Aids need to be addressed. MOTC will ensure that (a) Works contracts incorporate provisions to the effect that contractors shall (i) comply with applicable core labor standards, labor laws and incorporate applicable workplace occupational safety norms; (ii) not differentiate payment between men and women for work of equal value; (iii) not employ child labor in the construction and maintenance activities; and (iv) to the extent possible, maximize employment of local poor and disadvantaged persons for project construction purposes, provided that the requirements for job and efficiency are adequately met; and (b) disseminate information on the risks of sexually transmitted diseases to the employees of the Works contractors under the Project and to members of the local communities surrounding the Project. MOTC shall ensure that measures to detect and prevent illegal trafficking are fully implemented.

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

### A. Project Design and Monitoring Framework

#### DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks								
<b>Impact</b> Closer regional cooperation and increased trade along CAREC corridor 3	<b>By 2018</b> Volume of regional trade along CAREC Corridor 3 increased to \$350 million from \$150 million in 2012	Regional freight traffic data from MOTC	<b>Assumption</b> Government's continued commitment to increase regional trade								
<b>Outcome</b> Efficient transport network in the South Kazakhstan section of CAREC Corridor 3	<b>By 2015</b> Average traffic volume from Shymkent to Tashkent increased to 2,000 vpd from 1,000 vpd in 2011  Travel speed improved by 20 km/hour from 60 km/hour in 2011	MOTC traffic statistics including vehicular speed data	<b>Assumption</b> The EBRD-financed project completed on time and in good quality  <b>Risk</b> Insufficient budgetary allocation for maintenance of the project road								
<b>Output</b> A 37 km (km 705 to km 742) rehabilitated road section from Shymkent toward Tashkent	<b>By 2015</b> The project road section rehabilitated with IRI of less than 3 m/km from current IRI of 5 m/km  Seven million people will benefit from the project	MOTC's project completion report  MOTC's project completion report	<b>Assumptions</b> The government's timely provision of counterpart funding and support for the project  MOTC's continued commitment to comply with ADB's safeguards policy  <b>Risk</b> Delay in procurement of the civil works contract								
<b>Activities with Milestones</b> 1. Road rehabilitation 1.1 Civil works contract awarded by May 2013 1.2. Supervision consultant contract awarded by April 2013 1.3. Civil works completed by December 2015		<b>Inputs</b> 1. ADB (OCR): \$125 million 2. Government: 22 million  <b>Total \$147 million</b> <table><tr><th>Item</th><th>Amount (\$ million)</th></tr><tr><td>Civil work</td><td>130.60 million</td></tr><tr><td>Consulting services</td><td>3.50 million</td></tr><tr><td>Contingencies</td><td>12.90 million</td></tr></table>		Item	Amount (\$ million)	Civil work	130.60 million	Consulting services	3.50 million	Contingencies	12.90 million
Item	Amount (\$ million)										
Civil work	130.60 million										
Consulting services	3.50 million										
Contingencies	12.90 million										

ADB = Asian Development Bank, CAREC = Central Asia Regional Economic Cooperation, EBRD = European Bank for Reconstruction and Development, IRI = international roughness index, km = kilometer, m = meter, MOTC = Ministry of Transport and Communications, OCR = ordinary capital resources, vpd = vehicle per day.

Source: Asian Development Bank.

## B. Monitoring

40. **Project performance monitoring system.** MOTC will establish a project performance monitoring system (PPMS) within 2 months of the Effective Date and collect baseline data for performance monitoring. It will develop a Project Performance Monitoring System. The key indicators and assumptions outlined at the impact and outcome levels in the Project design and monitoring framework will be the primary data required for analysis. The PIU is responsible for daily monitoring, reporting, and evaluating the progress for implementing the Project, and maybe tasked to develop the PPMS.<sup>13</sup>
41. **Compliance monitoring.** The loan covenants on policy, legal, financial, economic, 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.
42. **Safeguards monitoring.** The monitoring and reporting of the activities identified in the environment and resettlement action plans is discussed in Section VII.
43. **Gender issues monitoring.** Monitoring of actions and progress in addressing gender-related aspects of the Project will be integrated into the Project Performance Monitoring. Indicators to be used include (a) maternal and children mortality rates in rural raions along the road corridor; (b) sex disaggregated information on employment and pay in Project activities; (c) number and type of activities conducted to disseminate information on HIV/Aids in workers' camps and nearby communities; and (d) number and type of activities conducted to detect and prevent illegal trafficking on the Project Road. LARP internal and external monitoring report will also include sex disaggregated reporting on involvement of DPs in LARP preparation and implementation activities.<sup>14</sup>

## C. Evaluation

44. ADB will field at least two review missions annually to discuss implementation progress and assess the project implementation, including procurement, civil works, financing status, and environmental and social safeguards based on quarterly progress reports.
45. A midterm review mission will be carried out 1.5 years after the loan becomes effective. The mid-term review will focus on (i) implementation progress; (ii) performance of consultants and contractors; (iii) status of compliance with the covenants in the loan agreement; and (iv) the need for any midcourse changes in the scope or schedule of the project to ensure full achievement of its impact.

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<sup>13</sup> ADB's project performance reporting system is available at: <http://www.adb.org/Documents/Slideshows/PPMS/default.asp?p=evaltool>

<sup>14</sup> ADB's *Handbook on Social Analysis: A Working Document*, is available at: <http://www.adb.org/Documents/Handbooks/social-analysis/default.asp>, *Staff Guide to Consultation and Participation*: <http://www.adb.org/participation/toolkit-staff-guide.asp>, and, *CSO Sourcebook: A Staff Guide to Cooperation with Civil Society Organizations*: <http://www.adb.org/Documents/Books/CSO-Staff-Guide/default.asp>

## D. Reporting

46. MOTC 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; (iii) midterm review report, and (iv) a project completion report<sup>15</sup> within 3-6 months of physical completion of the Project. Attachment 5 presents the templates for monthly report and quarterly progress report.
47. 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.
48. MOF will furnish to ADB, not later than six (6) months after the end of each related fiscal year, certified copies of such audited accounts and 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. Communication Strategy

Project Documents	Means of Communication	Party Responsible	Audience	Frequency
PID	ADB website	ADB	General Public	Quarterly updates
RRP	ADB website	ADB	General public	Posted at the Board Circulation; Always available online, subject to Government Concurrence.
Loan Agreement	ADB website	ADB	General public	Always available online, subject to Government concurrence.
Initial Environmental Examination Report (IEE)	ADB and EA websites, Public consultations and Brochures/leaflets for affected people	ADB, MOTC	General public, Affected people	Draft IEE to be posted on the websites before project loan approval; Documents always available online at ADB and EA websites; EMP updated regularly.
Due Diligence Report on social and resettlement.	ADB and EA websites, Public consultations and Brochures/leaflets	ADB, MOTC	General public, Affected	Document always available online at ADB and EA

<sup>15</sup> Project completion report format available at: <http://www.adb.org/Consulting/consultants-toolkits/PCR-Public-Sector-Landscape.rar>



Project Documents	Means of Communication	Party Responsible	Audience	Frequency
	for affected people		people	websites.
Procurement requirements	ADB website for procurement notice (ACN/ SPN), invitation for bids (IFB), Local newspaper advertisement	MOTC	General public, potential civil works contracting firms	Available online (current and archive).
Consulting services requirement	ADB website for recruitment notice (CSRN) for expression of interest	MOTC	General public, consulting firms	When required.
	ADB website for list of shortlisted firms	ADB	General public, consulting firms	Always available (current and archive).
	Request for proposals, public opening	MOTC	Potential consulting firms	
Annual Audited Project Accounts and Auditor Opinion	ADB website	ADB, MOTC	General public	Within 30 days of date of receipt by ADB from MOF.
Project Administration Manual	ADB website	ADB, MOTC	General public, project contractors and consultants	Document always available online; updated regularly, subject to Government Concurrence, as it contains financial information.

ADB=Asian Development Bank, ACN= advance contracting notice, CSRN = consulting services recruitment notice, EA=executing agency, IEE=Initial Environmental Examination, IFB = invitation for bids, MOF = Ministry of Finance, MOTC = Ministry of Transport and Communications, PID = project information document, RRP = Report and Recommendation of the President, SPN = specific procurement notice.

## X. ANTICORRUPTION POLICY

49. ADB reserves the right to investigate, directly or through its agents, any violations of the Anticorruption Policy relating to the Project.<sup>16</sup> All contracts financed by ADB shall include provisions specifying the right of ADB to audit and examine the records and accounts of the executing agency and all Project contractors, suppliers, consultants and other service providers. Individuals/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.<sup>17</sup>
50. To support these efforts, relevant provisions are included in the loan agreement and the bidding documents for the Project. MOTC will (a) conduct periodic inspections on the contractors' activities related to fund withdrawals and settlements; (b) ensure that the construction supervision consultant verifies the contractors' payment certificates in accordance with working drawings and contract specifications; and (c) ensure that the anticorruption action plan<sup>18</sup> developed for the Investment Program and agreed with ADB is implemented.

### Anticorruption Action Plan<sup>a</sup>

Item	Action Plans	Status as of
Training	Fiduciary staff training will start from project launch and periodically take place thereafter, customized to procedures and methods required for the next 12 months under World Bank assistance. On-the-job training and regional training offered by World Bank will be provided.	
Prior review	Intensive and close supervision will be provided by ADB staff. All contract amendments will be subject to prior approval by ADB.	
Publication of advertisements and contracts	All publications of advertisements and contract awards, including the results of the awards, will be done in accordance with ADB guidelines and published in the client connection system, on external websites.	
Debarred firms	Appropriate attention will be given to the need to ensure that debarred firms or individuals are not given opportunities to compete for ADB-financed contracts.	
Complaints	All complaints by bidders will be diligently addressed and monitored in consultation with ADB.	
Procurement committee	The World Bank will review and comment on the qualifications and experience of proposed members of the procurement committee(s), with a view to avoiding nomination of unqualified or biased candidates. All members will be required to sign a disclosure form.	

<sup>16</sup> Available at: <http://www.adb.org/Documents/Policies/Anticorruption-Integrity/Policies-Strategies.pdf>.

<sup>17</sup> ADB's Integrity Office web site is available at: <http://www.adb.org/integrity/unit.asp>.

<sup>18</sup> GACAP II Guidelines available at: <http://www.adb.org/Documents/Guidelines/GACAP-II-Guidelines.pdf>. See also Sourcebook: Diagnostics to Assist Preparation of Governance Risk Assessments: <http://www.adb.org/documents/books/Diagnostics-to-Assist-Preparation-of-GRAs/default.asp>.

Item	Action Plans	Status as of
Civil works supervision	A procurement committee will be established under the MOTC. Contractors carrying out reconstruction of road works contracts will be supervised by technically qualified supervisors, selected by the procurement committee, to ensure that the quality specified in the contract is delivered in a timely manner.	
Monitoring of contract awards	All contracts are required to be signed within the validity of the bids/proposals and, in case of prior review contracts, promptly after the no objection is issued. The procurement plan format shall include information on actual dates (of no objections and award) and will be monitored for cases of delay which will be reviewed on a case-by-case basis to identify the reasons.	
Monitoring of payments	All contracts shall include bank account information. The bank account shall be in the name of the same contractor/supplier/consultant that submitted the bid and awarded the contract. Payments to local contractors, suppliers, consultants shall be made in local currency only and paid to the accounts of banks located within the country.	
Monitoring of payment versus physical progress	The reports to ADB will be customized to include a form to monitor physical progress compared to payment installment to avoid upfront loaded payments.	
Timeliness of payments	Payment to contractors, suppliers, and consultants will be monitored through semiannual interim unaudited financial reports to ensure timely payments. The procurement committee will maintain a system/database to ensure that payments to the suppliers and contractors are paid without delay according to the conditions of the contract.	

ADB = Asian Development Bank, MOTC = Ministry of Transport and Communications.

<sup>a</sup> The international financial institutions will harmonize and consolidate their efforts in mitigating the risk of corruption. The measures above proposed by the World Bank will apply to the Investment Program.

## XI. ACCOUNTABILITY MECHANISM

51. The public may initially course their complaints or queries through their local self-government heads. In case the heads of the rural settlement cannot resolve or clarify the issue at their level within one week, they can then forward the case to the Grievance Focal Points at the raion Akimat. If the issue cannot be resolved in two weeks, the Akimat will then pass the complaint to the Grievance Focal Point at the SKRD. Issues requiring attention or action from the COR will be forwarded by the SKRD. If the case remains unsolved a complaint can be lodged to the court.
52. Alternatively, people with concerns about the Project may contact the COR Office in Astana for their concerns. The COR will designate a staff (Grievance Focal Point) who will receive, follow-up and report on a monthly basis all complaints, disputes or questions received about the Project. Likewise, the public may contact the ADB Resident Mission Office in Astana or the ADB Task Team Leader for the Project.
53. The following standards will be used in responding to or referring complaints received by the Project:

Levels/Stages	Responsibility	Steps In Complaint Handling
Village-level	Head of Local Government	Registers the complaint and attempts to solve it. If complaint is not resolved in one week, it is passed to the regional Akimat for resolution.
Regional-level	Vice Akim, Grievance Focal Point	Receives the complaint, registers it and attempts to resolve it. If there is no resolution in 2 weeks, it is passed to SKRD
SKRD	Deputy Director, SKRD	Receives the complaint and attempts to resolve it. If there is no resolution within 2 weeks, it will be passed to the appointed official at the COR
COR	Grievance Focal Point	Receives the complaint and coordinate with the concerned units or agencies to find timely solution. If there is no resolution within 2 weeks, the case will be presented to a Kazakh court and resolved according to Kazakh's legislation.
Court	Raion court	Hears the case and renders decision.

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

dissatisfied, should they approach the Accountability Mechanism.<sup>19</sup>

55. The complaints resolution process for the Project be disseminated through information brochures and posted to the offices of the rural village heads, the raion akimats and SKRD.<sup>20</sup> Complainants can go through the grievance redress mechanism.

## **XII. RECORD OF PAM CHANGES**

<b>FAM Version</b>	<b>Revision Date</b>	<b>Reasons</b>	<b>Affected Contents</b>

<sup>19</sup> For further information see: <http://www.adb.org/Accountability-Mechanism/default.asp>.

<sup>20</sup> For further information see: <http://compliance.adb.org/>.

Attachment 1

IMPLEMENTATION SCHEDULE

#	Task Name	2012				2013				2014				2015	
		Sep	Oct	Nov	Dec	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Jul
1	Board Approval (Sep 2012)	●													
2	Loan Signing (Dec 2012)				●										
3	Loan Effectiveness (Apr 2013)						●								
4	Preparation and Approval of Bidding Documents (Works and Consultants) (Sep-Oct 2012)	■	■												
5	Bidding for Construction Supervision Consultants (Nov 2012-May 2013)	■	■	■	■	■	■	■							
6	Mobilization of Construction Supervision Consultants (May 2013)							●							
7	Bidding for Civil Works (Oct 2012-Mar 2013)	■	■	■	■	■	■	■							
8	Mobilization of Contractor (May 2013)							●							
9	Civil Works (May 2013-Dec 2015)							■	■	■	■	■	■	■	■
10	Mid-term Review Mission (Dec 2013)												●		

## Attachment 2

### TERMS OF REFERENCE OF CONSTRUCTION SUPERVISION CONSULTANT (CSP-1)

#### A. Objective

1. The **Construction Supervision Consultant** (Consultant) will assist the Ministry of Transport and Communications (MOTC) in supervising the civil works of the above road sections to ensure quality and timely completion of construction works.

#### B. Scope of Services

2. The Consultant, designated as the Engineer for the Project, will
  - (i) administer the construction contracts following the International Federation of Consulting Engineers (FIDIC) contract conditions;
  - (ii) ensure that all works comply with the approved engineering designs and technical specifications, agreed schedule and budget, terms and conditions of the contracts, standard engineering practice, and ADB's safeguards policy;
  - (iii) provide general guidance and issue instructions to contractors;
  - (iv) make engineering decisions in consultation with the Project Director and Project Management Consultant (PMC); and
  - (v) advise the Project Director and PMC on work progress, quality control, and implementation issues, if any.
3. The specific tasks of the Consultant will include, but not be limited to the following:

##### 1. Design Review

- (i) Review the detailed engineering design for its correctness and safety prior to the start of civil works. Submit a report on the findings and propose modifications or corrections to any defects or omissions.

##### 2. 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 contractors 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" drawing is prepared by the contractors for all works as construction processes.
- (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.

- (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 contractors. Ensure timely submission of contractors' 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 contractors' claims and invoices.

### **3. Safeguards Compliance Monitoring**

- (i) Carry out the following duties related to environmental mitigation<sup>21</sup> during construction: (a) ensure that all the environmental mitigation measures required to be implemented are incorporated in the contract documents; (b) supervise and monitor the implementation of environmental mitigation plan (EMP); and (c) in case of unexpected environmental impacts, coordinate with the Project Director and PMC to recommend necessary mitigation measures to the Committee of Roads and ADB for implementation.
- (ii) Assist in monitoring and reporting of the land acquisition and resettlement plan (LARP) implementation.
- (iii) Monitor contractors' compliance with and performance of required actions regarding HIV/AIDS, human trafficking, and labor core standards in accordance with the contract documents, such as awareness and education of laborers and workers.
- (iv) 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.

### **4. 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 evaluation<sup>22</sup> 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 overtime 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 G – Deliverables 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.

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<sup>21</sup> With particular reference to the technical requirements of sound environmental standards on the basis of ADB's *Environmental Guidelines for Selected Infrastructure development Projects (Highways and Roads)* during construction.

<sup>22</sup> Following the project framework and ADB's *Project Performance Management System Handbook*.



4. The Project Director may require the Consultant to perform other tasks consistent with the above scope, including preparation of technical appraisals/additional contract documentation, and review and comment on the contractor's proposals.

5. The Project Director will authorize additional services that do not affect the scope of the supervision work, at the rates established in the construction supervision contract, or at the rates mutually agreed upon when the services require the use of specialists not listed in the contract.

#### **D. Staffing Inputs**

6. The MOTC will select an international firm, in association with national consultants, to carry out the tasks in this TOR. The procedure in recruiting the Consultant will follow *ADB's Guidelines on the Use of Consultants*.

7. Consulting services require a total of 106 person-months of international experts and 548 person-months of national experts, and will take place over 30 months, and additional work of relevant specialists during defects liability period.

8. The Consultant will provide highly qualified professionals and supporting staff, and all necessary services required for the cost effective and timely completion of the consulting services. The Consultant's representative will be a full-time professional resident engineer in the project area.

#### **Proposed Staffing**

<b>Position</b>	<b>No.</b>	<b>Person-Month</b>	<b>Position</b>	<b>No.</b>	<b>Person-Month</b>
Team leader/Resident engineer	1	24	Assistant resident engineer	2	48
Quality and material engineer	1	10	Quality and material engineer	1	24
Pavement and artificial constructions engineer	1	6	Quantity Surveyor	1	24
Contracts specialist	1	3	Site inspector	2	48
Road safety engineer	1	2	Road safety engineer	1	20
Environment specialist	1	1	Bridge engineer	1	6
Social development specialist	1	1	Environment specialist	1	3
			Social development specialist	1	2
<b>International Consultants</b>	<b>7</b>	<b>47</b>	<b>National Consultants</b>	<b>10</b>	<b>175</b>

Source: MOTC and ADB Staff estimates.

## **E. Detailed Terms of Reference of each Team Member**

### **1. International Consultants**

#### **a. Team Leader/Resident Engineer (1 international expert, 24 person-months)**

9. The Team Leader/ Resident Engineer (TL/RE) will be responsible for overall project management in performing the scope of work indicated in Section B of this TOR. The TL/RE will

- (i) prepare the following:
  - detailed work program and timetable of the activities to be implemented with terms of reference of each activity to be implemented,
  - final staffing schedule and terms of reference,
  - quality assurance system and procedures to supervise and monitor contractor performance and report progress and problems on time,
  - coordinating arrangements among team members, Project Director, PMC, and contractors,
  - disbursement schedule,
  - database system to store and retrieve record/data.
- (ii) lead the review of the detailed engineering design including technical specifications (including bill of quantities), drawings, and construction methods against Kazakhstan road standards. Propose modifications, if necessary.
- (iii) issue notice-to-proceed to contractors for respective road sections or parts of the road sections that have complied with the applicable provisions of the land acquisition and resettlement plan and environment management plan.
- (iv) review and approve contractor's work program, implementation schedule, methodology, and safety plan, and supervise the progress of construction works. Inform the Project Director of any delay or potential delays in the work schedule of the contract, and take necessary actions to prevent potential delays.
- (v) issue notices to the contractor on any non-compliance with road safety plan, environmental mitigation measures, and social safeguards, as set out in the contract documents.
- (vi) issue notices to contractors for defects or deficiencies, and issue instruction for the removal or submission of improper works.
- (vii) review, approve within his competency, and issue variation orders (scope, cost, materials, time).
- (viii) inspect project sites for work progress and quality.
- (ix) certify payments for the works against the relevant bill of quantities and issue the interim payment certificates, the final payment certificate and other certificates, including taking over certificate, as required under the civil works contract.
- (x) coordinate and supervise the work of field teams in supervising and certifying construction following contract conditions.
- (xi) prepare routine and periodic maintenance plan for the project road during their economic life.
- (xii) inspect jointly with MOTC the completed works and assist in formal taking over and review and approve or prepare as-built drawings and plans and provide reports confirming satisfactory completion of the contracts.
- (xiii) inspect the completed work periodically during the defect liability period within the terms covering the consultant's agreement, prepare lists of deficiencies (if any), and carry out supervision of the remedial works, and issue defects liability certificates after the rectification of the notified defects by the contractors.

- (xiv) advise the Project Director with the day-to-day coordination and supervision of civil works construction, including implementation status and issues, and preparation of regular progress reports.

10. The TL/RE is a licensed civil engineer, with 15 years of experience in highway engineering, and construction supervision of roads with asphalt concrete and cement concrete pavements. The TL/RE is familiar with various international standards for design and construction (FIDIC) including stage of works and method of construction such as temporary works, construction plans, schedules, construction method, assignments of equipment and personnel, testing and trials, and drawings. Experience in similar projects and geographic areas, proficiency in written and spoken English, and knowledge of locally spoken languages are an advantage.

**b. Quality and Material Engineer (1 international expert, 10 person-months)**

11. The Quality and Material Engineer (QME) will perform tasks or part of the tasks (ii), (iii), (iv), (vii) and (viii) in Section C of this TOR. Specifically, the QME will

- (i) review the asphalt mix designs proposed by contractors and approve/suggest modifications in the mix design, laying methods, sampling and testing procedure, and quality control measures to ensure required standard and consistency in quality at the commencement of items. Submit review findings and recommends to ARE and TL/RE.
- (ii) develop a quality assurance system of works, including, but not limited to, establishing testing frequencies and acceptance criteria for all construction activities based on best international practices.
- (iii) inspect contractor's construction equipment, project site facilities, laboratory, and offices to ensure that they are adequate and conform to the specifications.
- (iv) inspect constructor's personnel to ensure that they are properly trained, supervised and equipped with the necessary tools and equipment for their personal safety in the office, laboratory, construction project sites and in vehicles.
- (v) inspect and approve all materials and sources nominated by the Contractor, and ensure maximized use of resources and materials.
- (vi) supervise all quality control test work, including materials, earthworks, aggregate base course, and pavement to ensure that the number of tests and procedure taken is statistically sufficient. Assess test results and carry out independent tests, if necessary.
- (vii) inspect work performance as regards compliance with the specifications and all necessary testing required for acceptance of any item of work.
- (viii) advise the TL/RE and ARE on contractors' compliance or non-compliance to material specifications and testing, workplace requirement, and construction specifications.
- (ix) coordinate the work of field teams in supervising and certifying construction in that follow contract conditions including acceptance standards of materials, approval of source supply, and material testing methods.
- (x) maintain records of all test works, including cross referencing to items of work to which each test refers and location from which any samples were obtained for testing.

12. The QME is a licensed civil engineer, with a minimum of 12 years experience on quality control of road construction works, particularly on construction material testing. Strong experience in construction supervision of roads of asphalt concrete pavements is preferred. Experience in similar projects and geographic areas, proficiency in both written and spoken English, and knowledge of locally spoken languages are an advantage.

**c. Pavement and Artificial Constructions Engineer (1 international expert, 6 person-months)**

13. The Pavement and Artificial Constructions Engineer (PACE) will perform tasks or part of tasks (ii), (iv), and (vii) in Section C of this TOR. Specifically, the PACE will

- (i) review the pavement design, required equipment and materials, asphalt mixing methodology, safety protection, and required test work; and propose modifications or revise design, if necessary. As well as, review artificial constructions detailed design and technical specifications.
- (ii) review and analyze traffic load and vehicle configuration, in conjunction with the pavement design review. Submit report to ARE and TL/RE.
- (iii) develop quality assurance system and quality control plan for provisions of asphalt concrete pavement.
- (iv) supervise and direct pavement construction activities to ensure compliance with the technical specifications and contract provisions.
- (v) coordinate the work of field teams in supervising and certifying that construction follows contract conditions.
- (vi) advise the TL/RE and ARE on contractors' compliance or non-compliance to pavement design specifications and construction method.
- (vii) maintain records of pavement test works, and prepare report.
- (viii) supervise construction of bridges and culvers on the road sections.
- (ix) monitor contractors' work performance against technical specifications and schedules for production of bridge and culvert structures and parts.
- (x) prepare inspection reports.
- (xi) discuss with ARE any bridge design/construction issues and offer options.

14. The PACE is a licensed civil engineer, preferably a Post Graduate in Highway/ Geotechnical/Materials, with 15-year experience in flexible pavement designing and technical investigation, establishing QA/QC procedures, setting up laboratories, and mix designs and testing procedures. Experience in similar projects, particularly a 3-year experience of flexible pavement in international projects is preferred. Experience in similar geographic areas, proficiency in both written and spoken English, and knowledge of locally spoken languages are an advantage

**d. Contracts Specialist (1 international expert, 3 person-months)**

15. The Contracts Specialist (CS) will perform tasks or part of tasks (viii), (ix), and (x) in Section C of this TOR. Specifically, the CS will

- (i) review existing contract terms and conditions making sure that they comply with FIDIC contract conditions, Kazakhstan laws and regulations, and ADB policies; and recommend amendments, if necessary.
- (ii) assist team members, MOTC personnel, PMC staff, and contractors in interpreting contract terms and conditions.

- (iii) evaluate or monitor contract performance to determine necessity for amendments or extensions of contracts, and compliance to contractual obligations.
- (iv) review and endorse or reject requests for deviations from contract specifications and delivery schedules. Draft amendments to cover deviations, if needed.
- (v) arbitrate claims or complaints regarding terms, pricing or perceived breach occurring in performance of contracts.
- (vi) pay attention to claim/dispute resolution activities related to price escalation, as well as claims caused by delays related to right of way issues (if any), deficiencies in designs (if any), construction specifications and others.
- (vii) serve as liaison officer to ensure fulfillment of obligations by contractors.
- (viii) advise TL/RE and ARE on potential expected claims and management of actual claims.
- (ix) maintain and manage the database related to contract administration.

16. The CS is a well qualified professional contracts specialist with 15-year experience on contract management of projects funded by international organizations (e.g., Asian Development Bank or World Bank), including contractors' claims management, resolution of disputes, and arbitration proceedings of any project involving FIDIC. Experience in similar projects and geographic areas, proficiency in both written and spoken English, and knowledge of locally spoken languages are an advantage.

**e. Road Safety Engineer (1 international expert, 2 person-months)**

17. The Road Safety Engineer (RSE) will perform task (v) in Section C of this TOR. Specifically, the RSE will

- (i) develop and implement a traffic management and road safety plan with monitoring indicators for the Project.
- (ii) monitor contractors' compliance to the road safety plan to avoid damage or injury to persons or property at initial stage and during road construction.
- (iii) review traffic safety measures taken by contractors during the construction activities, and implement preventive and remedial measures against occurrence of road accidents.
- (iv) liaise with local and state government, contractors, and members of the community as regards implementation of the traffic management and road safety plan during road construction.
- (v) prepare and submit safety audit reports.

18. The RSE is a licensed civil engineer, with 10-year work experience in road traffic/safety design, audits, and construction supervision activities. Experience in similar projects and geographic areas, proficiency in both written and spoken English, and knowledge of locally spoken languages are an advantage.

**f. Environment Specialist (1 international expert, 1 person-month)**

19. The Environment Specialist (ES) will perform task (xi) in Section C of this TOR. Specifically, the ES will

- (i) manage and coordinate the update, implementation and monitoring of an Initial Environmental Examination or Environmental Impact Assessment (IEE/EIA) as required by the Financing Framework Agreement (FFA) and loan agreement.
- (ii) set-up internal monitoring system on the project's environmental issues and and conduct training for the contractor.
- (iii) coordinate with relevant parties, including civil society organizations, on environment requirements of the Project.
- (iv) closely monitor project sites against any unexpected environmental impacts.
- (v) monitor contractors' compliance to EMP.
- (vi) advise Project Director and PMC on environment problems and/or requirements, and recommend mitigating measures
- (vii) prepare report on EMP implementation and contractors' compliance.
- (viii) take part in project performance monitoring and evaluation activities, develop key indicators, and perform surveys.
- (ix) assess and prepare capacity building program on environmental issues

20. The ES is a well qualified professional environmental expert with a bachelor degree in environment sciences and a minimum of 8 years experience in assessing environmental impact, and monitoring environment safeguards of road projects. Familiarity with ADB environmental guidelines is preferred. Experience in similar projects and geographic areas, proficiency in both written and spoken English, and knowledge of locally spoken languages are an advantage.

**g. Social Development Specialist (1 international expert, 1 person-month)**

21. The Social Development Specialist (SDS) will perform tasks (xii), (xiii), and (xiv) in Section C of this TOR. Specifically, the SDS will

- (i) manage and coordinate the update, implementation and monitoring of the approved Land Acquisition and Resettlement Plan (LARP/s) as required by the FFA and loan agreement.
- (ii) set up internal monitoring system on the project's social and resettlement issues and requirements and conduct trainings.
- (iii) select and review an External Monitoring Agency (EMA) to be approved by the Program's Director.
- (iv) coordinate with relevant parties, including civil society organizations, on social/resettlement activities/ requirements of the project.
- (v) set up redress and grievance mechanism for project activities
- (vi) monitor contractors' compliance to (a) core labor standards, labor laws and incorporate applicable workplace occupational safety norms; (b) no differentiation of payment between men and women for work of equal value; (c) no child labor in the construction and maintenance activities; (d) no forced or compulsory labor; (e) discrimination in respect of employment; (f) freedom of association; (g) to the extent possible, maximize employment of local poor and disadvantaged persons for project construction purposes, provided that the requirements for job and efficiency are adequately met; and (h) land acquisition and resettlement framework and plans.
- (vii) follow-up actions based on findings and requirements of EMA reports
- (viii) advise MOTC on social safeguard/ resettlement problems/requirements, and recommend measures.
- (ix) prepare report on LARP implementation.



- (x) perform social impact monitoring surveys in project areas as part of project performance monitoring and evaluation.
- (xi) review the Poverty and Social Analysis (PSA) developed by national expert.
- (xii) assess and prepare capacity building program on social issues

22. The SDS is a well qualified professional social development expert with a bachelor degree in social development, and a minimum of 5-years experience in carrying out impact assessment, poverty and social analysis (PSA), and monitoring and evaluating compliance of road projects with social safeguards. Familiarity with ADB social safeguards guidelines is preferred. Experience in similar projects and geographic areas, proficiency in both written and spoken English, and knowledge of locally spoken languages are an advantage.

## **2. National Consultants**

### **a. Assistant Resident Engineer (2 national experts, 48 person-months)**

23. The national Assistant Resident Engineer (ARE) will assist the TL/RE to (i) coordinate and supervise road construction works in the field, (ii) monitor schedule and construction progress, (iii) supervise quality of construction work, (iv) prepare monthly certificates, (v) review and approve shop drawings and as-built-drawings, (vi) prepare reports.

24. The ARE has a bachelor degree in civil engineering with a minimum of 10 years experience in road construction, and is proficient in both written and spoken English. Work experience in similar internationally-funded projects is an advantage.

### **b. Quality and Material Engineer (1 national experts, 24 person-months)**

25. The national QME will assist the international QME to undertake day-to-day supervision of compliance to material specifications and testing, supervise the contractors work, and certify that construction follows contract conditions including acceptance standards of materials, approval of source supply, and material testing methods, among other tasks.

26. The national QME has a bachelor degree in civil engineering with a minimum of 8 years experience in major road construction works especially in material testing. Work experience in similar internationally-funded projects, and proficiency in both written and spoken English are an advantage.

### **c. Quantity Surveyor (1 national experts, 24 person-months)**

27. The quantity surveyor will assist ARE to (i) review the bill of quantities vis-à-vis the technical specifications provided by MOTC, and recommend modifications, if required; (ii) oversee and measure the quantity of materials and workers found at the construction site to minimize the amount of materials used, and make sure that the construction costs stay within budget; (iii) review contractors' interim and final payment certificates, and check quantities billed vis-à-vis measurements; (iv) prepare change orders and variation orders as required; (v) prepare and maintain quantity books, and up-to-date rates-list for materials and works; (vi) prepare and manage monthly financial reports; (vii) prepare disbursement schedule and maintain progress schedules and cash flow chart; and (viii) maintain current as-built drawings as the work progresses.

28. The quantity surveyor has a bachelor degree in civil engineering with minimum 8 years experience in quantity surveying, supervision and construction of major road projects. Work experience in similar internationally-funded projects, and proficiency in both written and spoken English are an advantage.

**d. Site Inspector (2 national experts, 48 person-months)**

29. Under the guidance of the ARE, the national site inspector will (i) prepare and implement on-site procedures for quality assurance and quality control and safety; (ii) perform daily site inspections to ensure compliance of works, procedures and materials with approved work plans, specifications, and contract provisions; (iii) monitor contractors' work and certify that construction follow contract conditions; (iv) prepare daily logs, photographs, reports, and maintain records of as-built drawings, item quantity files, material testing results, inspections made, tests performed and work executed; (v) prepare and submit daily reports to ARE; and (vi) do other tasks assigned by ARE.

30. The site inspector has a bachelor degree in civil engineering with a minimum of 8 years experience in major road construction works especially in workmanship, construction method, and construction supervision. Work experience in similar internationally-funded projects, and proficiency in both written and spoken English are an advantage.

**e. Road Safety Engineer (1 national expert, 20 person-months)**

31. The national RSE will assist the international RSE to (i) develop and monitor the road safety plan implementation, (ii) implement preventive and remedial schemes to avoid injury or damages, (iii) coordinate traffic re-routing schemes and safety measures with the local and state governments, contractors, and community members, and (iv) carry out safety audits, among others.

32. The national RSE is an experienced traffic engineer with a university degree or equivalent professional qualification and a minimum of 8 years experience of traffic analysis and forecasting and road safety analysis during and after construction works, and working on similar traffic or road safety improvement assignments. Work experience in similar internationally-funded projects, and proficiency in both written and spoken English are an advantage.

**f. Bridge Engineer (1 national expert, 6 person-months)**

33. The national Bridge Engineer (BE) will (i) review the bridge detailed design and technical specifications, (ii) supervise construction of bridges and culverts on the road sections, (iii) monitor contractors' work performance against technical specifications and schedules for production of bridge and culvert structures and parts, (iv) prepare inspection reports, and (v) discuss with ARE any bridge design/construction issues and offer options.

34. The national BE, preferably a post graduate in bridge and structure engineering, has at least 8 years of relevant experience on construction bridges, culverts and other structures. The Bridge Engineer has a thorough understanding with international standards and "best practices", experience of construction of bridges involving design standards, technical specifications, establishing QA/QC procedures, etc. Work experience in similar internationally-funded projects, and proficiency in both written and spoken English are an advantage.



**g. Environment Specialist (1 national expert, 3 person-months)**

35. The national ES will assist the international ES to (i) supervise and monitor EMP implementation, (ii) set-up internal monitoring system on environmental issues and measures, (iii) coordinate with key stakeholders in dealing and resolving environmental issues, and (iv) prepare environmental reports, among other tasks.

36. The national ES has a bachelor degree in environmental sciences with at least 5 years experience in monitoring and evaluating environmental impacts of road projects. Work experience in similar internationally-funded projects, and proficiency in both written and spoken English are an advantage.

**h. Social Development Specialist (1 national expert, 2 person-months)**

37. The national SDS will assist the international SDS to (i) supervise LARP implementation, (ii) monitor contractors' compliance to social safeguards (iii) coordinate with key stakeholders in dealing and resolving land acquisition and resettlement issues, and (iv) prepare social safeguards reports, among other tasks.

38. The national SDS has a bachelor degree in social development with at least 5 years experience in monitoring social safeguards, and evaluating social impacts of road projects. Work experience in similar internationally-funded projects, and proficiency in both written and spoken English are an advantage.

**F. Implementation Arrangements**

39. The MOTC is the executing agency for the Investment Program. The Committee of Roads together with its structural Divisions under MOTC is the implementing agency.

40. The Deputy Chairman of the Committee of Roads is the Project Director, who has the overall responsibility for implementation of the Investment Program including the project preparation, project implementation, as well as project monitoring and reporting. The PMC will assist the Project Director in implementing the Project. The Consultant will report to the Project Director and PMC.

41. The Consultant will maintain a central office in Aktau, Mangystau Oblast, for the duration of the Project. The Consultant's staff will be based in the locality of the road sections.

**G. Deliverables**

42. The Consultant will prepare and submit the following reports in a format and content agreed with the MOTC and ADB:

- (i) a report on the design review within 1 month after commencement,
- (ii) an inception report<sup>23</sup> within 2 months after commencement,
- (iii) a traffic management and road safety plan within 2 months after commencement,
- (iv) brief monthly progress reports by 10<sup>th</sup> day of each following month,

<sup>23</sup> The inception report includes methodology, performance indicators with assumptions and risks, detailed work plan and timetable of the activities to be implemented, terms of reference specific to each individual activity, staffing and final terms of reference, supervision and monitoring procedure, and coordination arrangement among team members, contractors, Project Director, and PMC.

- (v) detailed quarterly progress reports by 15<sup>th</sup> day of each following quarter,
- (vi) semi-annual environmental reports,
- (vii) performance monitoring and evaluation reports as required under the Loan Agreement, and
- (viii) 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.

## **H. Support Provided to the Consultant by the EA**

43. The MOTC will provide (i) visa supporting letters, and (ii) data and documents relevant for the Project.

44. The Consultant will rent offices with support facilities in project areas (4 offices); and cover all operating costs, including land transport rental for supervision activities (six full time all-wheel drive cars for 350 vehicle/month including the defects liability period of the Contractor), and communications and other costs as necessary to perform project duties.

## ENVIRONMENTAL MANAGEMENT PLAN

## Attachment 3

### Mitigation Measures for Identified Potential Impacts

A.1 PRE-CONSTRUCTION PHASE						
Environmental Impact/ Issue	Mitigation Measures	Location	Time Frame	Responsibility		Costs / Budget
					Supervision	
<b>A.1.1</b> Bid documents prepared without access to or use of the IEE and particularly this EMP in a translated version	No bid documents will be prepared without the authors having incorporated a (Kazakh/Russian) copy of the mitigation and monitoring plan EMP, which shall be included in the safeguard clauses of the Technical Specifications in the contracts.	Shymkent, availability of documents at RC	Before bid documents are completed	Detailed Design Consultant and RC	MOTC and PMU with advice from MOEP	Included in the Project Costs
<b>A.1.2</b> Poor landscape aesthetics due to Design	Consider aesthetical roadside plantations as much as environmental conditions (e.g. water supply and availability of plants) allow	Near existing grade separated interchange at km 732+963	At early design stage	Detailed Design Consultant	MOTC and RC	Included in the Project Costs
<b>A.1.3</b> Site selection for large construction camps, near or within existing settlements. Impact on public health and sociological setting	Proper site selection, observing criteria which primarily protect the public general. Observe a minimum distance (buffer zone) between camp site and nearest residential area. Observe local wind conditions to reduce nuisances. Work safety and environmental protection measures to be specified by the Contractor in a Site Management Plan (SS EMP). Planning for independent water and electric supply network and a medical service station at the site.	At selected camp site locations, wherever these are in close vicinity to settlements (especially Shymkent, Aktas, Akzhar, Rabat, Mambetov)	At early design stage	Designer	MOTC and RC	Included in the Project Costs
<b>A.1.4</b> Planning for structure demolishing and removal of utilities for widening the RoW	Provide for adequate and safe removal of demolished structures in certified dump sites. Plan for timely and fully functional substitution for any public utility that needs to be removed. Obtain certificates from local authorities.	At all locations where utilities need to be removed and substituted	At early design stage	Detailed Design Consultant	Local Authorities responsible for utilities	Included in the Project Costs

Environmental Impact/ Issue	Mitigation Measures	Location	Time Frame	Responsibility		Costs / Budget
					Supervision	
<b>A.1.5</b> Road safety issues associated with pedestrian crossing	Planning for safe and adequate pedestrian crossing facilities that can be in most cases over passages equipped with ramps and structures that allow the use of wheelchairs, pushcarts, bicycles and prams. Planning for public awareness meetings	Near all close located settlements (especially Shymkent, Aktas, Akzhar, Rabat, Mambetov), bus stops and rehabilitated grade separated interchange	At early design stage shortly before works start	Detailed Design Consultant	MOTC and RC	Included in the Project Costs
<b>A.1.6</b> Road Accidents with livestock animals	Planning for suitable protective measures, as 1. Pre-consult with local people, to identify spots where mitigation measures are needed 2. Plan for animal (under-)passages, sufficiently dimensioned, taking into account specific behavioural aspects to allow safe use by different livestock species 3. Plan for strong animal fences along each side of an animal passage 4. Provide adequate length and strength of animal fences along the two established /planned protected areas	At 4 locations of existing cattle passages combined with agricultural machinery passages	Before the bid documents are completed	Detailed Design team – following field inspection and stakeholder consultation, and in consultation with the Environmental Department Units in Shymkent	MOTC and MOE, and CHF	Included in the Project Costs / Civil Works

## A.2 CONSTRUCTION PHASE

Environmental Impact/ Issue	Mitigation Measures	Location	Time Frame	Responsibility		Costs / Budget
					Supervision	
<b>A.2.1</b> Contractor fails to retain a ecological expert to prepare the SS EMP and to implement all mitigation and monitoring measures as specified in the EMP	As specified by law, contractor will be required to employ a licensed expert to prepare the SS EMP and obtain all relevant permits. The contractor will not be permitted to mobilize workers without an approved SS EMP and the appropriate permits in place.	Entire road section for which the SS EMP will be prepared	Prior to the start of the construction work.	Contractor	MOTC and PMU, Environmental Supervision Engineer	To be included in the Project Costs
<b>A.2.2</b> Common issues related to operation of camp sites (environmental, social, security, public health, workers safety, sanitary, and waste concerns)	The contractor will be required to employ a licensed expert to prepare the SS EMP which will address all potential impacts identified in the IEE. Focal aspects are medical care, insurances, social welfare, work safety, good housekeeping practices, work hours, security, crime prevention, electricity and water supply, waste management, awareness training, grievance relief.	- as above -	- as above -	Contractor	MOTC and PMU, Environmental Supervision Engineer	To be included in the Project Costs
<b>A.2.3</b> Large water extraction volumes for construction purposes and camps may lead to conflicts with local water users	Contractor/sub-Contractors must submit a plan for type, location and quantity of both drinking and technical water extraction. The plan needs to be approved and monitored by the responsible authorities. Prevent any illegal fishing in local rivers which would involve labourers.	At all locations where water extraction is planned (possible source is Badam river)	Throughout construction works.	Contractor (and all sub-contractors)	Local Water Authorities, RE, Environmental Supervision Engineer	To be included in the Project Costs

Environmental Impact/ Issue	Mitigation Measures	Location	Time Frame	Responsibility		Costs / Budget
					Supervision	
<b>A.2.4</b> Contractor undertakes excessive, unauthorized or unnecessary tree removal or causes damages to ecologically vital vegetation at construction sites	The contractor is required to develop a sketch map of the location number and species of trees along the roadside that he intends to cut. Such plan needs to be screened by the Supervision Consultant and approved by the RE. The Contractor must develop a plan for replacing any removed tree or important vegetation, and engage the CHF in the intended replanting scheme, describing: species selection, minimum size, number of young trees per cut tree, maintenance for a specified time, replacement of unsuccessful replantation.	Along any section of the road where trees are subject to the Contractor's discretion for removal.	Prior to any clearing taking place.	Contractor, with advice from the Oblast CHF	PMU, Environmental Supervision Engineer	To be included in the Project Costs / Civil Works
<b>A.2.5</b> Sourcing of materials; Side borrow operations leading possibly to erosion, landslide and landscape deterioration. Impacts associated with stockpiling	Materials may only be excavated in authorized borrow pits. Contractors shall develop a borrow pit site management plan to ensure all precautions for avoiding environmental impacts. While not strictly forbidden, the practice of taking fill material from the side of the road, creating a landscape of craters shall not be acceptable unless complete landscaping and erosion control follows. Any such borrow areas should not intrude visually on the road, meaning it should be out of eyesight from the road with proper site re-contouring and replacement of topsoil. Provide adequate fencing to prevent unauthorized access to borrow sites. Provide for proper decommissioning plan for each borrow site.	At all rehabilitation sections where additional material is required from borrow pits; impact zones requiring special protection include the hauling roads.	Throughout the construction period.	Contractor	MOTC and PMU, RE, Environmental Supervision Engineer	To be included in the Project Costs / Civil Works
<b>A.2.6</b> Potential Impacts associated with the Asphalt Mixing Plant (AMP)	Choose operation site for AMP (as for crushers) at least 2 km away from the next human settlement, and always on leeward side with respect to prevailing winds.	At all construction sites nearby settlements (especially Shymkent, Aktas, Akzhar, Rabat, Mambetov).	Throughout the construction period.	Contractor	RE, Environmental Supervision Engineer	Included in the Project Costs

Environmental Impact/ Issue	Mitigation Measures	Location	Time Frame	Responsibility		Costs / Budget
					Supervision	
<b>A.2.7</b> Potential impacts associated with bitumen works	Avoid, all time, contact of bitumen with water and dust; Bitumen and solvents shall not be spilled on ground, ditches or water courses. If this happens, spills need to be removed immediately and disposed in a safe site that is protected from public access. No waste material shall be burned in connection with hot bitumen. All manual works while handling bitumen require special protective clothing (shoes and gloves). Bitumen works shall not be carried out in winter, rainy or stormy weather conditions. Trucks used for hauling asphalt mixture shall be adequately equipped. Surfacing works should not occupy more than one single traffic lane at a time.	At all construction sites	Throughout the construction period	Contractor	RE, Environmental Supervision Engineer	Included in the Project Costs
<b>A.2.8</b> Potential Impacts associated with concrete works	Avoid concrete works during windy, icy or very hot conditions. Aim at pre-cast solutions. Dust development at site can be managed by suitable covers (canvas) and/or water spraying. While working in streams casting concrete structures utilize cofferdams. Use spray waters for slowly curing and make all precautions to avoid contamination of adjacent surface or groundwater resources. Cover newly cast concrete surface with waterproof sheet material or sand to prevent moisture losses, and accelerate the curing process by using steam or radiant heating. While working with additives (e.g. anti-corrosive mixtures) special care needs to be applied, following the general and specific precaution prescriptions described in the Contractor's work safety guidelines.	At all construction sites	Throughout the construction period	Contractor	RE, Environmental Supervision Engineer	Included in the Project Costs



Environmental Impact/ Issue	Mitigation Measures	Location	Time Frame	Responsibility		Costs / Budget
					Supervision	
<b>A.2.9</b> Improper management of earthworks; transport and storage procedures, impacts caused by any activity generating dust and air pollution	<p>Large volumes of quarry rock, aggregate and sand will be transported and stored to work site. Hauling roads (dirt roads) need regular water spraying to contain dust development.</p> <ol style="list-style-type: none"> <li>1. Ensuring that the contractor's fleet of vehicles and diesel generators are properly maintained and tuned to prevent excessive pollution; inspection reports are submitted to the RE</li> <li>2. Observance and control of specified haul loads; as and if necessary, upgrade the haul roads into all-weather road;</li> <li>3. Documentation that the Contractor uses specified fuel for his fleet;</li> <li>4. Use of dust suppressants (regular watering)</li> <li>5. Vehicle operators must make provisions to cover trucks, particularly during windy conditions.</li> <li>5. Truck and excavator operators must strictly observe specified speed limits being 30 km/hr near (100 m) or within settlements.</li> <li>4. Vehicle idling time must not exceed 2 min.</li> </ol> <p>All topsoil needs to be collected, stored in appropriate stacks, protected from wind and rain, and be fully re-used to rehabilitate/revegetate the areas disturbed and as specified by the RE.</p>	Anywhere where material is excavated and transported to/from sites of construction	Throughout the construction period	Contractor (being responsible for local sub-contractors)	MOTC and PMU / RE, Environmental Supervision Engineer	To be included in the Project Costs / Civil Works

Environmental Impact/ Issue	Mitigation Measures	Location	Time Frame	Responsibility		Costs / Budget
					Supervision	
<b>A.2.10</b> Improper management of petroleum products such as fuel, lubricants and bitumen, leading to spill and contamination.	<p>The Contractor/Sub-contractor will be required to have the following spill prevention measures in place at all work sites:</p> <ol style="list-style-type: none"> <li>1. All fuelling to be done on a concrete surface pro-voided with spill catch tank that can be cleaned and all spilled fuel recovered and recycled based on discussions with fuel supplier.</li> <li>2. All repair and maintenance work must either be done on a concrete surface with oil spill catch basin or oil catch pans must be provided at all service areas and training provided to all mechanics.</li> <li>3. All fuel use areas where spills and leakage is possible, e.g. the generator, must have drip basins installed to pre-vent leakage. All recovered materials must be recycled.</li> <li>4. A fuelling areas must be equipped with proper fuel nozzles and means for preventing accidental spills.</li> <li>5. All bitumen handling must not permit any material from leaking to the ground, including transfer areas and any areas where bitumen is transported in drums.</li> <li>6. Bitumen drums must be stored in a dry covered secure place where no leakage to water or ground is possible. Drums must be recycled at least once/yr.</li> <li>7. Any spills must be cleaned up according to GoK norms and standards within 24 hours of the occurrence, with contaminated soils and water treated according to GoK norms and standards. Records must be handed over without delay to the RE.</li> </ol>	At all construction sites, and within camps and storage facilities established	Throughout construction works, including decommissioning phase.	Contractor (and all sub-contractors)	MOTC and PMU, RE, Environmental Supervision Engineer	To be included in the Project Costs / Civil Works

Environmental Impact/ Issue	Mitigation Measures	Location	Time Frame	Responsibility		Costs / Budget
					Supervision	
<b>A.2.11</b> Noise and vibration impacts, generated by construction activities, leading to health impacts and damages to structures	Contractor shall take all necessary steps to: 1. Selection of modern and well-serviced equipment and plants with reduced noise level ensured by suitable in-built techniques and appropriate silencing devices; .2. Confining excessively noisy work and movement of heavy machinery to specified daytime working hours (this relates especially to stone crushers, percussion hammers and pneumatic drills); 3. Work hours need observe special restrictions near residential and sensitive areas; 4. Providing the construction workers with suitable hearing protection (ear muffs); 5. Avoid vehicle idling. 6. Timely public announcements of works	At all construction sites, especially those located nearby settlements (especially Shymkent, Aktas, Akzhar, Rabat, Mambetov)	Throughout the construction period	Contractor	MOTC and PMU, RE, Environmental Supervision Engineer	To be included in the Project Costs / Civil Works
<b>A.2.12</b> Failure to adhere to construction related good housekeeping practices, including solid and sanitary waste management	Contractors will adhere to standard good house-keeping practices as defined in the contract Terms & Conditions and Contract Specifications: 1. Management of construction waste and water 2. Equipment lubricants and fuel, including management and collection of waste oils and fuel particularly related to refuelling depots, maintenance areas and diesel generator sets 3. Sewage will require latrines or chemical toilets with complete clean up after the construction is complete. 4. Garbage will be collected and properly disposed, in accordance with GOK norms and codes 5. The contractor shall orient all construction workers and on the specific hazards of their work and will need to certify to that effect at the start of the construction period. 6. Once the site is no longer needed the contractor must fully decommission it, with emphasis on waste removal /clean up of any spills or hazardous materials plus any necessary revegetation.	All work camps, construction maintenance yards and any other areas operated by the contractor and involved in the project	Throughout the construction period	Contractor (including sub-contractors)	MOTC and PMU	To be included in the Project Costs / Civil Works

<b>A.3 OPERATION PHASE</b>						
<b>Environmental Impact/ Issue</b>	<b>Mitigation Measures</b>	<b>Location</b>	<b>Time Frame</b>	<b>Responsibility</b>		<b>Costs / Budget</b>
					<b>Supervision</b>	
<b>A.3.1</b> General traffic safety	Appropriate road signage, traffic monitoring and control, human capacity development, review of the driving license issuing system and a wise application of penalties seem to be the most likely responses. The installation of an early warning electronic and radio system in case of bad road conditions ahead may also considerably contribute to improve the road safety. Evaluate the introduction of publicly accessible, well-marked posts containing both an emergency (pay-free) telephone and a first-aid box with medical supplies, stretchers, bandages and other means for first assistance to road victims. To avoid misuses, these boxes shall be equipped with an electronic lock that can only be opened by prior telephone contacting to a nearby police station.	Emergency phone posts at bus stop/ rest areas and in the vicinity of the Kazygurt pass.	At the start of operations	RC, in collaboration with local Traffic police and local medical services	MOTC and Traffic Police	TBD
<b>A.3.2</b> Increased risk of pedestrian accidents within settlement areas due to improved roads, faster speeds and greater traffic volume	To manage these problems the operator will enforce speed limits through increased 'radar' surveillance, better and more frequent signage and increased speeding fines. In villages at crossing the owner will improve the signage and include amber lights were possible. As many town bypasses as possible are planned and should reduce project generated traffic through towns and villages.	Close to the close located settlements (especially Shymkent, Aktas, Akzhar, Rabat, Mambetov) and grade separated interchange	At the start of operations at defined schedule	RC, in collaboration with local Traffic police and Environmental Agencies	MOTC and MOE	TBD
<b>A.3.3</b> Inadequate management of traffic-generated air pollution	Adequate signage and awareness measures forwarded by Traffic Police, to improve the flow of traffic, reduce deceleration- acceleration cycles and idling periods, all measures that will lead to the overall reduction in the emission levels, despite the predicted increase in the overall traffic volume. Consider air pollution test program.	Where applicable and required, nearby human settlements (especially Shymkent, Aktas, Akzhar, Rabat, Mambetov)	TBD	RC, in collaboration with Environmental Agencies	MOTC	MOTC

Environmental Impact/ Issue	Mitigation Measures	Location	Time Frame	Responsibility		Costs / Budget
					Supervision	
<b>A.3.4</b> Traffic-related noise development, affecting nearby human settlements.	Identify feasible and effective measures to enforce suggested speed limits. Within settlement areas, where soil and soil humidity conditions would allow, consider the establishment of natural noise barriers (hedges), based on a specific monitoring program	Before and after Kazygurt pass and all close located settling areas (especially Shymkent, Aktas, Akzhar, Rabat, Mambetov)	TBD	RC, in collaboration with Environmental Agencies	MOTC	MOTC
<b>A.3.5</b> Increased risk of hazardous material spills due to increased traffic volume and provision of larger capacity bridges and stronger road surfaces, inviting large trucks to use the road.	Although the risk is extremely small since most such materials are transported by rail, the road operator will: 1. Insure that all trucks carrying hazardous materials are marked according to GoK norms 2. Enforce traffic controls 3. Set speed limits for trucks carrying hazardous material to max. 85kph or according the GoK norms and codes. 4. Assist South Kazakhstan region to prepare a rapid spill response and clean up protocol so that in the event of a spill the appropriate people and equipment are quickly notified and action can be taken.	Close to the close located settlements (especially Shymkent, Aktas, Akzhar, Rabat, Mambetov)	Within the first year of the road being in operation	Road Operator, Traffic Police  MOTC to arrange for District Contingency Plan	MOTC and MOE	MOTC
<b>A.3.6</b> Potential spread of STDs and human trafficking	Commendable actions to curtail such impacts are: 1. Public awareness campaigns to address risks associated with human trafficking; 2. Increased controls on highway sections where girl traffickers are reported to operate 3. Seeking assistance of locally operating NGOs.	Especially in the Shymkent, Aktas, Akzhar, Rabat, Mambetov	Continual activity, as required by records of incidences	SES, Traffic Police	SES	SES own budget

## Environmental Management Plan

### **PART B: Environmental Monitoring**

<b>B.1 PRE-CONSTRUCTION PERIOD</b>				
<b>Monitoring Aspect</b>	<b>Monitoring Activity / Details / Outputs</b>	<b>Timing</b>	<b>Executing Unit</b>	<b>Reporting Responsibility</b>
<b>B.1.1</b> No provision for translation of IEE and related documents for use by Oblast Inspectors, and for use in Bid documents ( at least this EMP)	Confirm that Kazakh/Russian version of IEE and EMP are with the Oblast Inspectors Confirm that bid documents contain environmental clauses tailored to the project conditions as well as a copy of the precautionary measures outlined in this EMP	During Detailed Design Period, at the time of preparing the bid documents	MOTC/ RC	MOTC
<b>B.1.2</b> Failure of designers to include design measures that will prevent later impacts such as: livestock crossing management, poor traffic management and excessive tree removal	Confirm by reviewing design documents and discussion with design team that 1. livestock crossings in Section 3 have been addressed 2. a plan to protect roadside trees as much as possible has been prepared; 3. there is step-by-step protocol for traffic management during construction ( as opposed to ad hoc, hap hazard existing system); and 4. an environmentally friendly bridge and culvert replacement guide has been prepared	During Detailed Design Period, at the time of preparing the bid documents	Detailed Design Team under the direction of MOTC/ RC	MOTC
<b>B.1.3</b> Lack of capacity to understand and implement environmental mitigation measures, in particular the compliance monitoring procedure	Collect and review written material and expertise indicating that MOTC has provided instructions for the contractors to use to better use the IEE output Prepare environmental compliance forms together with Contractors and Sub-Contractors to secure acceptance	During Detailed Design Period, at the time of contract awards	Environmental Supervision Engineer MOTC/ RC	MOTC

<b>B.2 CONSTRUCTION PERIOD</b>				
<b>Monitoring Aspect</b>	<b>Monitoring Activity / Details / Outputs</b>	<b>Timing</b>	<b>Executing Unit</b>	<b>Reporting Responsibility</b>
<b>B.2.1</b> Availability of ecological expertise to prepare the SS EMP and to implement all mitigation and monitoring measures with contractor	Confirm ecological expertise is with contractor at start of construction period: check CV and license certificate(s). Discuss with contractors/sub-contractors the management implications of all measures included in EMP.	At time of each contractor appointment	PMU	MOTC
<b>B.2.2</b> Lack of good housekeeping practices at both camp sites and work sites, including solid and sanitary waste management	Using agreed monitoring checklists, confirm that the items as listed in the SS EMP and in the Technical Specifications are fully implemented.	Throughout construction period, monthly	PMU	PMU and MOTC
<b>B.2.3</b> Tree removal program damaging the old trees and shelter belt plantings along roadsides kept to an absolute minimum.	Inspection of cutting plan and confirmation of consultation with CFH, then review and record re-planting/revegetation efforts.	Throughout the construction period, spot checks	PMU Monitor with the CFH of the Oblast and Rayon were cutting is foreseen	PMU and MOTC
<b>B.2.4</b> Side borrow operations leading to erosion, landslide and destruction of landscape	Undertake inspections to determine the type of borrow operations the contractor is applying and ensure that roadside borrowing is not taking place and is always out of the visual field from the road.	Throughout the construction period and monthly	PMU	PMU and MOTC
<b>B.2.5</b> Earthworks - transport and storage; managing of dust, noise	Undertake, as part of the construction inspection, regular confirmation that earthworks are handled in an environmentally acceptable manner and dust control is undertaken at all time, including the use of tarpaulins by trucks hauling fine materials, as well as watering along the haul road sections passing near/thru villages, and that a speed has to be decreased. Haulage through roadside villages and settlements is restricted.	Every day, throughout the construction period	PMU	PMU and MOTC

Monitoring Aspect	Monitoring Activity / Details / Outputs	Timing	Executing Unit	Reporting Responsibility
<b>B.2.6</b> Potential bitumen/asphalt and concrete production spills and pollution.	Confirm that sighting specification for both asphalt and concrete plants are according to norms and codes but also that are at least as far away from settlement areas as defined in the mitigation table. Bitumen storage and handling is done without spillage	Throughout construction period and monthly	PMU	PMU and MOTC
<b>B.2.7</b> Management of petroleum products such as fuel, lubricants and bitumen, without spills and contamination being practiced by contractor and all subcontractors.	Using the monitoring checklist the 8 specific spill of Mitigation table will be assessed and reported on. Unannounced (spot) inspections at all work sites, work camps, diesel generators, technical workshops, maintenance yards and fuel storage facilities. Any non-compliance will be rectified immediately	Quarterly inspections, unannounced	PMU Monitor	PMU and MOTC
<b>B.2.8</b> Potential deficiencies of surface drainage at construction areas	The PMU will inspect and verify that adequate consideration and drainage works and protection have been provided.	4X during the construction period, and 2X during each rainy season	PMU	PMU and MOTC
<b>B.2.9</b> Construction-related air pollution	Using a monitoring checklist confirm that the six mitigate actions defined in A.2.9 of the Mitigation Table are being implemented	Ongoing throughout the project as part of the construction inspection	PMU	PMU and MOTC



<b>B.3 OPERATION PERIOD</b>				
<b>Monitoring Aspect</b>	<b>Monitoring Activity / Details / Outputs</b>	<b>Timing</b>	<b>Executing Unit</b>	<b>Reporting Responsibility</b>
<b>B.3.1</b> Post construction operational audit, 1-year after road completion	The owner of the road shall organize and undertake a complete environmental audit of the project. This audit is to be undertaken by the Oblast-level DOEP. Findings must be reported within 15 days of completion of the field inspection and actions to repair any non-compliance conditions started within 5 days of notification by the Inspection Department. All actions must be completed within 30 days.	No more than 13 months after the operating period has fully started.	MOTC, and MOEP	MOTC and Oblast-level Department of Env. Inspection Unit.
<b>B.3.2</b> Management of traffic-generated air pollution	As traffic growth is projected to reach 7%/year, a site-specific monitoring at roadside settlements will be required. Parameters to be monitored are in line with the norms and codes of the national environmental legislation. Monitoring Report.	Monitoring 1X/year for two continuous 24 hour period during the non-winter season at t.b.d. sites	MOTC in cooperation with KAZHYDRO-MET or other approved agency	MOTC
<b>B.3.3</b> Management of traffic-generated noise	Noise impacts are expected to marginally affect human settlements due to the remoteness. Near or at settlements (bypasses) noise levels need to be tested to confirm or modify the measures taken. Parameters to be monitored are in line with the norms and codes of the national environmental legislation. Monitoring Report.	Monitoring will take place 1X/year during peak traffic periods over two 24 hour monitoring periods at t.b.d. sites	MOTC in cooperation with Ministry of Health's Sanitary and Epidemiological Service	MOTC
<b>B.3.4</b> Risk of road accidents with pedestrians and domestic animals due to improved roads, faster speeds and greater traffic volume.	Report on the effectiveness of proposed measures for pedestrian and animal crossing structures, and make further recommendations to improve road safety with respect to these aspects. Modify, as applicable, speed limit signage, pedestrian use zones, and provide more cross walk lighting. Reconsider, as necessary, strengthening and extension of animal fences along road. Accident Monitoring Report.	Undertake annual safety check and review statistics of pedestrian-vehicle accidents and address areas where problems occur	MOTC working with Oblast and Rayon level authorities	MOTC

Monitoring Aspect	Monitoring Activity / Details / Outputs	Timing	Executing Unit	Reporting Responsibility
<b>B.3.5</b> Risk of hazardous materials spills due to increased traffic volume	Elaboration of a contingency plan in case of major emergencies, and plan responsibilities for different scenarios.	after one year of operation	MOTC working with Oblast and Rayon level authorities	MOTC

#### Abbreviations used in the EMP:

SS EMP	-	Site-specific Environmental Management Plan
CFH	-	Committee for Forestry and Hunting, under the Ministry of Agriculture
GoK	-	Government of Kazakhstan
MOEP	-	Ministry of Environmental Protection
MOTC	-	Ministry of Transport and Communication
PMU	-	Projects Management Unit, Team of consultants working closely with the Implementing Agency, the South-Kazakhstan region Road Committee (RC)
RC	-	(South-Kazakhstan) Road Committee, under the MOTC
RE	-	Resident Engineer
SES	-	Sanitary and Epidemiological Services, under the Ministry of Health
TBD	-	to be determined



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# Bi-annual Environmental Monitoring Report

Project Number: {XXXXXX}  
{Month Year}

{Full Country Name}: {Project Title}  
{(Financed by the <source of funding>)}

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

For {Executing agency}  
{Implementing agency}

This report does not necessarily reflect the views of ADB or the Government concerned, and ADB and the Government cannot be held liable for its contents.

Asian Development Bank

## TABLE OF CONTENTS

### Part I Introduction

- Construction activities and Project Progress during previous 6 months
- Changes in project organization and Environmental management team
- Relationships with Contractors, owner, lender, etc.

### Part II Environmental Monitoring

Environmental monitoring summary – summarise the previous six months monitoring data and provide explanations of any instances where environmental standards or guidelines are exceeded. Typically this will cover:

- Noise and Vibration
- Water Quality
- Air Quality
- Flora and fauna monitoring

Recommendations are required to show how any exceedences will be prevented in the future.

Graphs can be used in this section to show trends, however large tables of data or multiple graphs should be attached as an appendix.

### Part III Environmental Management

- EMS, SSEMP and work plans. Report on delivery of documents, required amendments etc.
- Site Inspections and audits – summarise the number and type of site visits
- Non-compliance notices – summarise the details on the number of notices given out and the issues covered. Summarise the ranking of issues.
- Corrective action plans - report on timeliness of preparation and completion
- Consultation and complaints – report on any consultation undertaken and list any complaints received.

### Annexes

- Monitoring data
- Photographs
- Implementation report on EIA/IEE mitigation requirements

Reference	Requirement	Action to Date	Action Required/Comment

**Attachment 5**

**PROGRESS REPORT TEMPLATES**

- A. Monthly Progress Report**
- B. Quarterly Progress Report**

Monthly Project Progress Report  
LXXX-KAZ:

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**I. Summary**

- Overall implementation progress of the project

**II. Civil Works**

**A. Package 1: XXXX**

- Provide update on procurement activities
- Indicate progress in civil works vis-à-vis work program
- Specify outputs and assess quality and timely completion
- Assess efficiency of coordination arrangement with Construction Supervision Consultant (CSC)
- Provide update on payments and disbursements
- Identify issues/problems including safeguards and implementation arrangements, and indicate measures planned/undertaken to solve issues

**III. Consultants**

**IV. Other Matters**

## Quarterly Project Progress Report

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Loan Number:

Reporting Period: Quarter \_\_\_\_ 20\_\_

Republic of Kazakhstan: CAREC Corridor 3 (Shymkent-Tashkent Section) [Link to the Western Europe-Western People's Republic of China International Transit Corridor] Road Improvement Project

Prepared by:

Ministry of Transport and Communications of Republic of the Kazakhstan

This report is a quarterly update to the project implementation progress. It is designed for ready use by the project executing agencies to provide direct input into ADB's internal Project Progress and Project Completion Reports.

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II. MANAGEMENT AND OPERATIONS	
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VII. SECTOR REFORM AND ANTICORRUPTION POLICY IMPLEMENTATION	
A. Sector Reform	
B. Anticorruption Policy Implementation	
VIII. OTHERS	

### Attachments

1. Progress of Project Outputs
2. Financial Management Action Plan
3. Updated Environmental Management Plan
4. Anticorruption Action Plan



## BASIC DATA

### Loan Identification

Loan Number	XXXX
Project Title	CAREC Corridor 3 (Shymkent-Tashkent Section) [Link to the Western Europe-Western People's Republic of China International Transit Corridor] Road Improvement Project
Borrower	Republic of Kazakhstan
Executing Agency	Ministry of Transport and Communications (MOTC)
Implementing Agency	Committee of Roads
Amount of Loan	US\$ 125 million

### Loan Data

Loan Negotiations	
Board Approval	
Loan Agreement Signing	
Loan effectiveness	
– In Loan Agreement	
– Actual	
Loan Closing	
– In Loan Agreement	
– Actual	
Terms of Loan	
– Interest Rate	
– Maturity (number of years)	
– Grace Period	

### Project Components, Costs, and Financing Plan (million US dollars)

Project Components	Project Costs and Financing Plan		
	ADB	Gov't	Total
Civil Works	125	25	150
Total	125	25	150

km = kilometer, pm = person-month.

## **I. SUMMARY: IMPLEMENTATION PROGRESS**

Summarize the project implementation status as detailed in subsequent sections. It should analyze original and revised schedules and actual achievements/shortfalls in terms of physical and financial targets and accomplishments for the quarter (preferably in terms of broad components or identifiable physical elements). It would also contain conclusions about the viability of the original or earlier revised cost estimates and expected date of completion of the Project.

## **II. MANAGEMENT AND OPERATIONS**

### **A. Implementation Arrangements**

- (i) Assess the adequacy of implementation arrangements (such as establishment, staffing, and funding of the project implementing office) to deliver project outputs for the quarter.
- (ii) Discuss any major changes in the arrangements, and the effects on project implementation progress.
- (iii) Provide the status of compliance to the following loan covenants on implementation arrangements. Indicate which of the following covenants were (i) complied with, (ii) late complied with, (iii) ongoing, or (iv) not complied with. If compliance was delayed or breached, discuss the reasons and impact, and whether the covenant was realistic. Discuss the impact of partial or noncompliance of covenants on project performance. Recommend ways to achieve compliance. Indicate if any covenant has been modified, suspended, or waived, and the justification for such action.
  - The Borrower shall make available, promptly as needed, the funds, facilities, services, land and other resources which are required, in addition to the proceeds of the Loan, for the carrying out of the Project and for the operation and maintenance of the Project facilities.
  - The Borrower shall ensure that the activities of its departments and agencies with respect to the carrying out of the Project and operation of the Project facilities are conducted and coordinated in accordance with sound administrative policies and procedures.
  - MOTC will be designated as the EA, which is responsible for the overall Project implementation and liaising with ADB. MOTC will designate COR as the Project implementation agency. MOTC will appoint a Project Director from its qualified staff with experience in project management acceptable to ADB. The Project Director will be responsible for the day-to-day implementation of the Project including the project preparation, implementation, monitoring and reporting.
  - MOTC will ensure that the Project Director is adequately assisted throughout the Project implementation period by MOTC staff responsible for road engineering, financial, legal and procurement matters.
  - MOTC will ensure that the Project Director is supported by the PMC in implementing the Project.

### **B. Performance of Contractors, Consultants, Borrower, MOTC, and ADB**

#### **Contractors and Consultants**

- (i) Describe the performance of contractors and consultants for the quarter under reporting.

If they did not perform exceptionally well, describe the effects on the delivery and quality of the outputs, schedule, and/or costs.

### **Borrower, MOTC, and COR**

- (ii) Summarize the performance of the borrower, MOTC and COR in meeting the responsibilities assigned in the implementation plan, and discuss any strengths/weaknesses in performance for the quarter under reporting.
- (iii) Assess the present institutional capacity and development of the MOTC and COR, including specific strengths and weaknesses, and whether the institutional development measures envisaged at appraisal were adequate or successful. Assess how the project preparatory TA helped improved institutional capacity.

### **ADB**

- (iv) Review ADB's part in project implementation for the quarter (e.g., approvals, disbursements, and monitoring) to determine whether any ADB failure to act promptly, or disagreements with the borrower or EA on terms of reference, bid documents, awards, or other matters affected the implementation procedures, project costs, or implementation schedule.

### **C. Implementation Schedule**

# Land Acquisition and Resettlement Framework

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P46145-KAZ  
July 2012  
(Russian)

## KAZ: CAREC Corridor 3 (Shymkent-Tashkent Section) [Link to the Western Europe-Western People's Republic of China International Transit Corridor] Road Investment Program

Prepared under Project Preparatory Technical Assistance PPTA-8068 (46145-02): Preparing the CAREC Corridor 3 (Shymkent–Tashkent Road) Rehabilitation Project for Asian Development Bank.

(Assess the progress in implementing the overall project to date in comparison with the original implementation schedule. Explain the causes of significant delays, if any. Discuss any changes in the original/revised plans and schedules or deviations - both actual or expected - except that any such change requiring ADB approval should be reported to ADB immediately and subsequently mentioned in the quarterly report.

#### **D. Project Monitoring, Review and Reporting**

Provide the status of compliance to the following loan covenants. Indicate which of the following covenants were (i) complied with, (ii) late complied with, (iii) ongoing, or (iv) not complied with. If compliance was delayed or breached, discuss the reasons and impact, and whether the covenant was realistic. Discuss the impact of partial or noncompliance of covenants on project performance. Recommend ways to achieve compliance. Indicate if any covenant has been modified, suspended, or waived, and the justification for such action.

- (i) MOTC will establish a Project Performance Monitoring System within six (6) months of the Effective Date and collect baseline data for performance monitoring. Performance and monitoring reports should be submitted to ADB on a semiannual basis.
- (ii) MOTC will submit quarterly progress reports within 2 weeks of the end of each quarter covered. A joint mid-term review will be carried out 2 years after the effective date.

### **III. PROCUREMENT AND CONSULTING SERVICES**

- (i) Indicate the status of procurement and consultant recruitment activities. Describe whether, or not the activities are on schedule. If there are delays, provide the reasons; and discuss the planned/undertaken options to resolve them. If there are remaining civil works to be procured or consultants to be recruited, provide the schedule for monitoring the procurement or recruitment activities.
- (ii) Discuss arrangements for consultant recruitment, any deviations from agreed-upon procedures, and the causes of disagreements between the borrower or EA and ADB on consultant selection. State how the differences were resolved, or will be resolved.
- (iii) Discuss any changes in the original/revised procurement plan, including mode of procurement. Describe any significant problems (e.g., misprocurement) encountered in packaging contracts, preparing tender documents, and evaluating bids. State how they were resolved, or will be resolved.

Note: Once procurement and consultant recruitment activities are completed, this section could be excluded from the next quarterly progress reports.

### **IV. TECHNICAL**

#### **A. Project Outputs**

- (i) Analyze the progress of each component during the quarter under reporting. Give reasons for any changes, deviations, or delays, and indicate whether these affected project costs, time schedules, expected benefits, or other measures of efficiency. Compare the actual progress with that of the original forecast as of this date.
  - physical works accomplished for the three civil works contracts (i.e., km-length of roads reconstructed; preparation made).
  - system developed for road operation and maintenance
- (ii) Describe the expected progress to be achieved in the next quarter.

- (iii) Discuss any difficulties or unusual occurrences affecting the progress of the project components. Discuss any risks, and measures to mitigate risks.
- (iv) State the measures taken or planned to correct the factors responsible for delay during the quarter or which are likely to affect physical progress in the future.
- (v) Indicate the expected date of completion of major components (physical and non-physical elements) of the project
- (vi) Assess the validity of key assumptions and risks in achieving the targeted outputs.
- (vii) Update table on Attachment 1.

Note: Construction progress should be supported by drawings, bar charts, simplified CPM or PERT diagrams. Likewise, useful photographs with proper identification and dates should be used to reflect project progress or explain difficulties.

## **B. Project Performance and Quality**

Provide the status of compliance to the following loan covenants. Indicate which of the following covenants were (i) complied with, (ii) late complied with, (iii) ongoing, or (iv) note complied with. If compliance was delayed or breached, discuss the reasons and impact, and whether the covenant was realistic. Discuss the impact of partial or noncompliance of covenants on project performance. Recommend ways to achieve compliance. Indicate if any covenant has been modified, suspended, or waived, and the justification for such action.

- (i) The Project is carried out in accordance with the applicable technical specifications and design, and that the construction supervision, quality control and Project management are performed in accordance with applicable standards and best international practices.
- (ii) All Works contracts include a contractor's obligation to comply with road safety measures; and the accident rate and traffic volume is monitored during the operation of the Project Road.

## **V. FINANCIAL**

### **A. Financial Plan**

Discuss the financial achievements of the annual financing plan for the Project during the quarter. The details should at least cover the following: (a) amount requested by the MOTC for allocation in the annual budget, (b) amount allocated under the annual budget, (c) adequacy of allocation in terms of physical targets and latest cost estimate, (d) utilization during the quarter under reporting, (e) utilization in the next quarter, (f) forecast on utilization during the next quarter, (g) difficulties in getting the allocated amount released due to budgetary or other procedure, etc. if applicable.

### **B. Project Costs, and Fund Utilization**

- (i) Discuss viability of the original or revised cost estimates. Explain significant overruns or underruns, if any, or whether an overall project cost overrun or underrun is likely. State the reasons for cost changes (status of contract awards, change on exchange rates, change in source of procurement/specifications, design inadequacy, external factors, delays, etc. and their likely effect on the project's economic and financial rates of return. Assess the need to reestimate costs to completion, or reallocate costs within ADB loan categories. Update project cost and financing plan, if necessary.
- (ii) Analyze and compare contract awards achievements (cumulative, annual, and quarterly) with projections. Adjust projected amount for succeeding quarters with justification, if necessary.

- (iii) Analyze and compare disbursements achievements (cumulative, annual, and quarterly) with projections. Adjust projected amount for succeeding quarters with justification.
- (iv) Discuss any issues/problems in submitting withdrawals, and measures planned/ undertaken to resolve issues.
- (v) Provide an update on monitoring and reporting of withdrawal applications processing every 15<sup>th</sup> of the month.

### **C. Financial Management**

- (i) Assess financial management capacity of the executing and implementing agencies.
- (ii) Assess whether ADB funds were not applied to the activities described on the ADB Prohibited Investment Activities List in Appendix 5 of the Safeguard Policy Statement (SPS) (2009).
- (iii) Provide the status of compliance to the following loan covenants on finance. Indicate which of the following covenants were (i) complied with, (ii) late complied with, (iii) ongoing, or (iv) note complied with. If compliance was delayed or breached, discuss the reasons and impact, and whether the covenant was realistic. Discuss the impact of partial or noncompliance of covenants on project performance. Recommend ways to achieve compliance. Indicate if any covenant has been modified, suspended, or waived, and the justification for such action.
  - All required counterpart funds should be available for timely and effective implementation of the Project through annual budget allocations to MOTC, and the resources are releases on time.
  - The Borrower will maintain separate project accounts and records by funding source for all expenditures incurred on the Project. Project accounts will follow Government's accounting laws and regulations.
  - The Borrower will submit certified copies of the audited accounts and financial statements and the report of the auditors relating thereto in the English language within 6 months of the end of the fiscal year.
  - The Borrower will discuss with ADB (upon ADB's request) the Borrower's financial statements of the project and its financial affairs related to the Project.
  - MOTC will submit a certification that the PMC has been adequately staffed, including appointment of Project Director, and become operational before withdrawals can be made.
  - MOTC will implement the financial management action plan. Update the progress of implementing the financial management action plan in Attachment 2.
  - MOTC will allocate routine maintenance budget in accordance with the Road Development Program.

## **VI. SAFEGUARDS**

### **A. Environment**

- (i) Assess the progress of environmental management including measures for the mitigation of adverse environmental impacts in accordance with the environmental impact assessment; and update of environment management plan in Attachment 3.
- (ii) Provide the status of compliance with the loan covenants on environment. Indicate which of the following covenants were (i) complied with, (ii) late complied with, (iii) ongoing, or (iv) note complied with. If compliance was delayed or breached, discuss the reasons and impact, and whether the covenant was realistic. Discuss the impact of partial or

noncompliance of covenants on project performance. Recommend ways to achieve compliance. Indicate if any covenant has been modified, suspended, or waived, and the justification for such action.

- The EMP is updated prior to award of the works contract
- No notice to proceed (subsequent to contract awards) is issued to contractors for the respective sections or parts of the Project Road until the applicable provisions of the IEE and EMP have been complied with.
- The design, construction, and operation and maintenance of the Project facilities are carried out in accordance with ADB's Safeguard Policy Statement (2009), the Kazakhstan's environmental laws and regulations, , and the IEE and potential adverse environmental impacts arising from the Project are minimized by implementing all mitigation and monitoring measures as presented in the EMP.
- The detailed engineering design and the Works contracts under the Project incorporate applicable environmental measures identified in the IEE and the EMP; and contractors are supervised to ensure compliance with the requirements of the IEE and the EMP.
- Sufficient resources are made available to implement, monitor, and record the implementation of the EMP.
- Semi-annual environmental reports are prepared and submitted to ADB within one (1) month of the end of each period covered. The reports include, inter alia, a review of progress made on the implementation of the EMP, problems encountered and remedial measures taken.

## **B. Resettlement**

- (i) Assess progress of implementation of the resettlement plan, including salient achievements and problems faced and how these have been resolved.
- (ii) Provide status of compliance with the following resettlement loan covenants. Indicate which of the following covenants were (i) complied with, (ii) late complied with, (iii) ongoing, or (iv) not complied with. If compliance was delayed or breached, discuss the reasons and impact, and whether the covenant was realistic. Discuss the impact of partial or noncompliance of covenants on project performance. Recommend ways to achieve compliance. Indicate if any covenant has been modified, suspended, or waived, and the justification for such action.
  - No contract is awarded for works under the project until a final/implementable LARP has been prepared by the Borrower, if so required based on detailed design, and cleared by ADB in accordance with paragraph 11 of Schedule 5 of the Loan Agreement.
  - No notice to proceed (subsequent to contract awards) is issued to contractors for the respective sections or parts of the Project Road until the applicable provisions of the LARP (including, in particular, the provision on the timely payment of compensations to displaced persons and review of monitoring reports) have been complied with.
  - The Project is carried out in accordance with the Borrower's applicable laws and regulations, ADB's Safeguard Policy Statement (2009), and the LARP including, inter alia, the following provisions: (a) the LARP shall be disclosed to displaced persons in accordance with the LARP; (b) the LARP shall be submitted to ADB for review and clearance prior to award of any works contract; (c) all land and rights of way required by the project shall be acquired and made available in a timely manner; (d) all compensation and resettlement assistance shall be provided to displaced persons prior to their displacement and dispossession and the compensation program of the LARP shall be fully implemented prior to issuing any notice to proceed to civil works



implementation; (e) efficient grievance redressal mechanisms shall be in place to assist displaced persons resolve queries and complaints if any, in a timely manner; (f) adequate staff and resources shall be made available for supervising and monitoring the implementation of the LARP. Monitoring and evaluation of the LARP shall be conducted and reported to ADB at the start and completion of the LARP implementation process; and (g) if during implementation of the LARP, any changes to the location, land alignment of roads, or additional environmental and/or resettlement impacts are identified, the LARP shall be updated and prior approval by ADB and the relevant government agencies shall be obtained before further implementation of the LARP.

### **C. Labor, Gender, Health, and Social Protection**

Provide status of compliance with the following resettlement loan covenants. Indicate which of the following covenants were (i) complied with, (ii) late complied with, (iii) ongoing, or (iv) not complied with. If compliance was delayed or breached, discuss the reasons and impact, and whether the covenant was realistic. Discuss the impact of partial or noncompliance of covenants on project performance. Recommend ways to achieve compliance. Indicate if any covenant has been modified, suspended, or waived, and the justification for such action.

- Specific provisions are included in the bidding documents and contracts requiring that civil works contractors (i) comply with applicable core labor standards, labor laws and incorporate applicable workplace occupational safety norms; (ii) do not differentiate payment between men and women for work of equal value; (iii) do not employ child labor in the construction and maintenance activities; and (iv) 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.
- Appropriate entities involved in disseminating information on the risks of sexually transmitted diseases, including HIV/AIDS, to the employees of civil works contractors under the Project and to members of the local communities surrounding the Project Road.

## **VII. SECTOR REFORM AND ANTICORRUPTION POLICY IMPLEMENTATION**

### **A. Sector Reform**

Indicate status of compliance with the sector Roadmap which identifies the institutional development actions as set out in Table 1 of Schedule 1 in the Road Development Program 2006-2012 and Transport Strategy for the Republic of Kazakhstan); and inform ADB of any changes to and progress in implementing the Project and the financing plan.

### **B. Anticorruption Policy**

- (i) Assess the status of implementation of the Anticorruption Action Plan (see Attachment 4)
- (ii) Indicate the status of compliance with the loan covenant relating to anticorruption policy of ADB. If compliance was delayed or breached, discuss the reasons and impact, and whether the covenant was realistic. Discuss the impact of partial or noncompliance of covenants on project performance. Recommend ways to achieve compliance. Indicate if any covenant has been modified, suspended, or waived, and the justification for such action.

- The Borrower agrees (a) that ADB has the right to investigate any alleged corrupt, fraudulent, collusive or coercive practices relating to the Project; and (b) to cooperate and assist fully with any such investigation for the satisfactory completion of any such investigation.
- The Borrower shall (a) conduct periodic inspections on the contractors' activities related to fund withdrawals and settlements; (b) ensure that all contracts financed by ADB in connection with the Project include provisions specifying the right of ADB to audit and examine the records and accounts of all contractors, suppliers, consultants, and other service providers as they relate to the Project; (c) ensure that the construction supervision consultant verifies the contractors' payment certificates in accordance with working drawings and contract specifications; and (d) ensure that the anticorruption action plan agreed with ADB is implemented).