# Document of The World Bank

# FOR OFFICIAL USE ONLY

Report No: 44068-KZ

# PROJECT APPRAISAL DOCUMENT

ON A

#### PROPOSED LOAN

IN THE AMOUNT OF US\$2.125 BILLION

TO THE

THE REPUBLIC OF KAZAKHSTAN

FOR A

SOUTH WEST ROADS PROJECT: WESTERN EUROPE – WESTERN CHINA INTERNATIONAL TRANSIT CORRIDOR (CAREC-1b & 6b)

April 7, 2009

Sustainable Development Department Central Asia Country Unit Europe and Central Asia Region

This document has a restricted distribution and may be used by recipients only in the performance of their official duties. Its contents may not otherwise be disclosed without World Bank authorization.

# **CURRENCY EQUIVALENTS**

(Exchange Rate Effective: January 30, 2009)

Currency Unit = Kazakhstan Tenge (KZT)

KZT 120.00 = US\$1.00 US\$1.00 = KZT 0.0083

# FISCAL YEAR

January 1 – December 31

# ABBREVIATIONS AND ACRONYMS

ADB	Asian Development Bank	IMF	International Monetary Fund
APL	Adaptable Programmatic Loan	<b>IPSAS</b>	International Public Sector Accounting
BEEPS	Business Environment and Enterprise		Standards
	Performance Survey	ISA	International Standards on Auditing
BP	Bank Procedure	JERP	Joint Economic Research Program
CAREC	Central Asia Regional Economic	JICA	Japan International Cooperation Agency
	Cooperation	MoF	Ministry of Finance
CIS	Commonwealth of Independent States	MoTC	Ministry of Transport and Communications
CPS	Country Partnership Strategy	MOU	Memorandum of Understanding
CPI	Corruption Perception Index	NCB	National Competitive Bidding
DPL	Development Policy Loan	NFRK	National Fund of the Republic of
EARF	Environmental Assessment Review		Kazakhstan
	Framework	NPV	Net Present Value
<b>EBRD</b>	European Bank for Reconstruction and	OP	Operation Policy (of the World Bank)
	Development	PCR	Physical Cultural Resources
EIA	Environmental Impact Assessment	PMC	Project Management Consultants
<b>EMP</b>	Environment Management Plan	POM	Project Operations Manual
ERR	Economic Rate of Return	PPP	Public Private Partnership
<b>ESIA</b>	Environmental and Social Impact	RAP	Resettlement Action Plan
	Assessment	RMS	Road Management System
FSU	Former Soviet Union	ROSC	Reports on Observance of Standards &
GAC	Governance and Anti-Corruption		Codes
GDP	Gross Domestic Product	RPF	Resettlement Policy Framework
GPN	General Procurement Notice	RSDP	Road Sector Development Program
GRSF	Global Road Safety Facility	RTRP	Road Transport Restructuring Project
HDM4	Highway Development and Management	SBD	Standard Bidding Document
	Model (fourth version)	SIL	Specific Investment Loans
IBRD	International Bank for Reconstruction and	SNIP	Technical Standards and Regulations of the
	Development		Former Soviet Union
ICB	International Competitive Bidding	SOE	Statement of Expenditure
IDB	Islamic Development Bank	TOR	Terms of Reference
IDF	Institutional Development Fund	<b>TSDS</b>	Transport Sector Development Strategy
IFIs	International Financial Institutions	UNDB	United Nations Development Business
IFR	Interim Financial Report	WBI	World Bank Institute
IFRS	International Financial Reporting	WE-WC	Western Europe – Western China
	Standards		

Vice President: Country Director / Manager: Sector Director:	Shigeo Katsu, ECAVP Motoo Konishi / Sergei I. Shatalov, ECCU8 Peter D. Thomson, ECSSD
(Acting) Sector Manager:	Henry G. R. Kerali, ECSSD
Task Team Leader:	Henry G. R. Kerali / Jacques Buré, ECSSD

# KAZAKHSTAN SOUTH WEST ROADS PROJECT

# **CONTENTS**

		Page
A. S	STRATEGIC CONTEXT AND RATIONALE	1
1.	Country issues	1
2.	Trade and transport sector issues	3
3.	Rationale for Bank involvement	5
4.	Higher level objectives to which the Project contributes	6
В. 1	PROJECT DESCRIPTION	7
1.	Lending instrument	7
2.	Program objective and phases	7
3.	Project development objective and key indicators	8
4.	Project components	9
5.	Lessons learned and reflected in the project design	11
6.	Alternatives considered and reasons for rejection	12
C. 1	IMPLEMENTATION	13
1.	Partnership arrangements	13
2.	Institutional and implementation arrangements	14
3.	Monitoring and evaluation of outcomes/results	15
4.	Sustainability	16
5.	Critical risks and possible controversial aspects	16
6.	Loan/credit conditions and covenants	20
<b>D.</b> A	APPRAISAL SUMMARY	22
1.	Economic and financial analyses	22
2.	Technical	23
3.	Governance and anti-corruption action plan	24
4.	Fiduciary	25
5.	Social	26
6.	Environment	29
7.	Safeguard policies	30
8.	Policy Exceptions and Readiness	33

Annex 1. Country and Sector or Program Background	34
Annex 2. Major Related Projects Financed by the Bank and/or other Agencies	43
Annex 3. Results Framework and Monitoring	44
Annex 4. Detailed Project Description	47
Annex 5. Project Costs	56
Annex 6. Implementation Arrangements	57
Annex 7. Financial Management and Disbursement Arrangements	66
Annex 8. Procurement Arrangements	76
Annex 9. Economic and Financial Analysis	83
Annex 10. Safeguard Policy Issues	91
Annex 11. Governance and Anti-Corruption Action Plan	102
Annex 12. Project Preparation and Supervision	108
Annex 13. Documents in the Project File	109
Annex 14. Statement of Loans and Credits	110
Annex 15. Country at a Glance	111
Annex 16. Mans - IBRD 36239 and 36538	113

#### **KAZAKHSTAN**

#### SOUTH WEST ROADS PROJECT

#### PROJECT APPRAISAL DOCUMENT

#### EUROPE AND CENTRAL ASIA

#### **ECSSD**

Date: April 7, 2009 Team Leader: Henry G. R. Kerali/Jacques Buré

Country Director: Motoo Konishi
Sectors: Roads and highways (100%)
Sector Director: Peter D. Thomson
Country Manager: Sergei I. Shatalov
Themes: Regional integration (P); Trade facilitation and market access (S); Other rural

Sector Manager: Henry G. R. Kerali (Acting) development (S)

Project ID: P099270 Environmental screening category: Full

assessment (Category-A)

Lending Instrument: Specific Investment Loan

(SIL)

# **Project Financing Data**

[X] Loan [] Credit [] Grant [] Guarantee [] Other:

For Loans/Credits/Others:

Total Bank financing (US\$ million): 2,125.00

Proposed terms: Variable-spread Loan in US\$, Commitment Linked, Level repayment, 5-year

grace period, and 25 years to maturity.

Financing Plan (US\$ million)					
Source	Local	Foreign	Total		
Borrower	259.00	116.00	375.00		
IBRD	1,470.00	655.00	2,125.00		
TOTAL	1,729.00	771.00	2,500.00		

#### Borrower:

Republic of Kazakhstan

# **Responsible Agency:**

Committee for Roads

Ministry of Transport and Communications

Astana, Kazakhstan

Estimated disbursements (Bank FY/US\$ million)								
FY	2009	2010	2011	2012	2013	2014		
Annual	107.4	574.3	679.0	381.8	191.3	191.2		
Cumulative	107.4	681.7	1,360.7	1,742.5	1,933.8	2,125.0		

Project implementation period: Start: July 1, 2009 End: September 30, 2013

Expected effectiveness date: July 1, 2009
Expected closing date: December 31, 2013

Does the Project depart from the CAS in content or other significant respects?	[ ]Yes [X] No
<i>Ref. PAD A.3.</i>	
Does the Project require any exceptions from Bank policies?	[X]Yes [ ] No
<i>Ref. PAD D.7.</i>	
Have these been approved by Bank management?	[X]Yes [ ] No
Is approval for any policy exception sought from the Board?	[X]Yes [ ] No
Does the Project include any critical risks rated "substantial" or "high"?	[V]Voc [ ] No
Ref. PAD C.5.	[X]Yes [ ] No
Does the Project meet the Regional criteria for readiness for implementation?	[X]Yes [ ] No
Ref. PAD D.7.	[A] Tes [ ] NO

# Project development objective Ref. PAD B.3., Technical Annex 3

The proposed Project Development Objective (PDO) is to increase transport efficiency on the road sections between Aktobe/Kyzylorda oblast border and Shymkent, and to improve road management and traffic safety in Kazakhstan.

# Project description Ref. PAD B.4., Technical Annex 4

The PDO will be achieved through upgrading 1,062 km of road sections along the Western Europe to Western China (WE-WC) Corridor, strengthening the capacity of the implementing agencies, assisting Kazakhstan in articulating strategies on increasing road safety and road services:

Component 1 – Upgrade and reconstruction of road sections along the Corridor within Kyzylorda oblast, excluding Kyzylorda bypass, with an estimated loan amount of US\$1,134.3 million equivalent, excluding consulting services for supervision of the construction and all contingencies.

**Component 2** – Upgrade and reconstruction of road sections along the Corridor within South Kazakhstan oblast from Kyzylorda oblast border to Shymkent, including the by passes to Kyzylorda and Shymkent, at an estimated loan amount of US\$747.2 million equivalent, excluding consulting services for supervision of the construction and all contingencies.

Component 3 – Project Management Consultants (PMC) to assist the Committee for Roads with the management of Project implementation, at an estimated loan amount of US\$5.5 million,

**Component 4** – Institutional Development and preparation of action plans to improve road safety and road services for an estimated loan amount of US\$3.0 million, including consulting services to review options for strengthening the Committee for Roads and improving the overall condition of the road network, improving road safety and road services.

**Component 5** – Consulting services for supervision of civil works under Components 1 and 2 with an estimated loan amount of US\$46.8 million.

The total Project cost of US\$2.5 billion includes US\$221.4 million for physical and price contingencies. The Government will finance 15 percent of the total Project cost, excluding the costs of land acquisition and compensation for involuntary resettlement, which will be paid for separately from the government budget (estimated at US\$5.2 million equivalent).

Overall progress in implementation of the Project will be monitored through: (i) reduction in transport costs; (ii) improvement in the capacity of the project implementing entities; (iii) adoption of action plans for improving road safety and road services along the corridor; and (iv) implementation of improved road management concepts, particularly the recommendations made in the technical studies.

Which safeguard policies are triggered, if any? Ref. PAD D.4., Technical Annex 10

The following safeguard policies are triggered: Environmental Assessment (OP/BP 4.01); and Involuntary Resettlement (OP/BP 4.12).

Preparation of this Project did not fully comply with the requirements under the Bank's Operational Policy OP 4.01 (Environmental Assessment) and OP 4.12 (Involuntary Resettlement), which require environmental assessment and resettlement plans to be prepared and disclosed prior to appraisal of a Specific Investment Loan (SIL). During the initial stages of preparation, the Project was designed to be implemented as separate phases of an APL. However, to respond to the Government's requirement that the entire Loan be committed upfront, as was done for other sections financed by other IFIs, the proposed financing instrument was changed from an APL to a SIL. Accordingly, the Project was reclassified after appraisal and placed in environmental screening Category A involving involuntary resettlement, which requires the environmental assessment and resettlement plans to be disclosed prior to appraisal. Senior Bank management agreed that a waiver should be sought from the Board of Executive Directors concurrently with the approval of this Project for the requirement to have disclosed these safeguards documents prior to appraisal. Except for the timing, the requirements under OP 4.01 and OP 4.12 have been met as the requisite EA report and the resettlement policy framework were disclosed both in Kazakhstan and at the Bank's InfoShop in February 2009 and March 2009, respectively.

Significant, non-standard conditions, if any, for:

# Ref. PAD C.6.

Additional Condition of Effectiveness

- The MoTC has entered into an agreement, in form and substance satisfactory to the Bank, with the PMC for the purposes of carrying out activities under the Project.
- The Borrower, through MoTC, has adopted the Governance and Anti-Corruption (GAC) Action Plan, satisfactory to the Bank.

# Dated Covenants:

- Not later than December 31, 2010, and annually thereafter, the Borrower, through the MoTC, shall carry out jointly with the Bank, annual reviews of the progress made in carrying out the Project (hereinafter referred to as the Annual Reviews). The Annual Reviews shall cover, amongst other things: (a) progress made in meeting the Project's objectives; and (b) overall Project performance against Project performance indicators.
- The Borrower, through the Committee for Roads, shall prepare at least four (4) weeks prior to the Annual Reviews, and furnish to the Bank, a separate report describing the status of implementation of each component of the Project and a summary report of Project implementation generally.

# Covenants applicable to Project implementation:

- The Borrower shall ensure that the Project is carried out in accordance with the provisions of the Anti-Corruption Guidelines.
- The Borrower, through the MoTC, with the assistance of the PMC shall carry out the Project in accordance with the requirements, criteria, organizational arrangements and operational procedures set forth in the Project Operational Manual, the GAC Action Plan, the Resettlement Policy Framework and the Environmental Impact Assessment, and shall not assign, amend, abrogate or waive any provisions of the Project Operational Manual, the GAC Action Plan, the Resettlement Policy Framework, or the Environmental Impact Assessment without prior approval of the Bank.

- The Borrower, through the MoTC, shall: (i) take all necessary measures, including ensuring access to all relevant information related to the Project, to facilitate an independent procurement audit; and (ii) act promptly upon the findings and recommendations of such audit under terms of reference acceptable to the Bank.
- The Borrower, through the MoTC:
  - (a) shall prepare, prior to the commencement of any works under the Project, Resettlement Actions Plans, satisfactory to the Bank, in accordance with the Resettlement Policy Framework; and
  - (b) shall carry out the Project in accordance with the respective Resettlement Actions Plans; and
  - (c) shall not amend, suspend or abrogate any of the provisions of the respective Resettlement Action Plans without the prior agreement of the Bank.
- The Borrower, through the MoTC:
  - (a) shall prepare, prior to the commencement of any works under the Project, Environmental Management Plans, satisfactory to the Bank, in accordance with the Environmental Impact Assessment;
  - (b) shall carry out the Project in accordance with the respective Environmental Management Plans; and
  - (c) shall not amend, suspend or abrogate any of the provisions of the respective Environmental Management Plans without the prior agreement of the Bank.
- At all times during the implementation of the Project, the Borrower shall ensure that the PMC is maintained with a composition, resources and terms of reference satisfactory to the Bank
- The Borrower shall monitor and evaluate the progress of the Project and prepare Project Reports in accordance with the provisions of Section 5.08 of the General Conditions and on the basis of indicators agreed with the Bank. Each Project Report shall cover the period of one calendar quarter, and shall be furnished to the Bank not later than forty five (45) days after the end of the period covered by such report.

#### Financial covenants:

- The Borrower shall maintain or cause to be maintained a financial management system in accordance with the provisions of Section 5.09 of the General Conditions.
- The Borrower shall prepare and furnish to the Bank not later than forty five (45) days after the end of each calendar quarter, interim unaudited financial reports for the Project covering the quarter, in form and substance satisfactory to the Bank.
- The Borrower shall have its Financial Statements audited in accordance with the provisions of Section 5.09 (b) of the General Conditions. Each audit of the Financial Statements shall cover the period of one fiscal year of the Borrower. The audited Financial Statements for each such period shall be furnished to the Bank not later than six months after the end of such period.

## Withdrawal Conditions:

• No withdrawal shall be made: (a) from the Loan Account until the Bank has received payment in full of the Front-End Fee; (b) for expenditures under Category (2) until the Borrower has carried out a study that reviews options for strengthening the Committee for Roads and improving the overall condition of the road network, and has agreed with the Bank on a framework of actions to strengthen the Committee for Roads and improve the overall condition of the road network, taking into account the outcomes of the study; and (c) for payments made prior to the date of the Loan Agreement.

#### A. STRATEGIC CONTEXT AND RATIONALE

# 1. Country issues

- Kazakhstan enjoyed strong economic performance from 2000 to 2007, with average real GDP growth of 10 percent. The Government maintained a healthy fiscal surplus during that period, accumulating over US\$27 billion (about 21 percent of GDP) by end-2008 in the National Fund of the Republic of Kazakhstan (NFRK). However, the economy is highly resource-dependent, with manufacturing accounting for only 11 percent and agriculture 5 percent of GDP in 2008. In contrast, minerals, oil and gas, accounted for 73 percent of exports, amounting to around 39 percent of GDP. Consequently, the Government has made diversification of the economy a development priority. Trade expanded rapidly from 2004 to 2008 with external trade orientation gradually changing towards China and other markets outside the Former Soviet Union (FSU) although Russia remains the largest single trading partner. The rapid economic growth up to 2008 facilitated a sharp increase in income per capita, which reached US\$6,200 in 2008 (GNI per capita by Atlas methodology). With a population of 15.7 million in 2008 and an annual population growth rate of about 1.2 percent, income per capita is expected to rise. Despite this, the overall poverty headcount ratio was estimated at 13 percent of the population, indicating some inequalities in income, particularly for the population living in rural areas.
- 2. Despite the strong overall economic trends in Kazakhstan, a spiral of growth in commercial lending and foreign borrowing from 2005 until mid-2007 set the stage for difficulties in the financial and construction sectors after August 2007. The banking sector had built up a substantial foreign debt burden of US\$46 billion, primarily from early 2005 to mid-2007. However, since mid-2007, problems in the global financial markets significantly reduced access of the local banks to cheap external financing. The National Bank of Kazakhstan spent about US\$6 billion or 25 percent of its foreign reserves (not including the NFRK) to support the Kazakhstan Tenge (KZT) between August and October 2007. Kazakhstan's sovereign rating was subsequently downgraded in October 2007. The Government and the National Bank succeeded in stabilizing expectations about the exchange rate in late 2007 and 2008, and received a major boost from a strengthening of oil and other commodities export price, which brought the current account into surplus. Gross reserves of the National Bank increased in January-June 2008 by US\$3.6 billion.
- 3. The deepening of the world economic crisis since September 2008 has had very negative repercussions in Kazakhstan. Sharp declines in commodity export prices since the fourth quarter of 2008 hit Kazakhstan with a major terms-of-trade shock and tighter financial markets have prevented commercial banks from rolling over their sizeable debt repayment obligations. As a result, most regions and sectors of the Kazakhstan economy were in recession by early 2009. Pressures for devaluation became insurmountable in early February 2009, leading to a 20 percent devaluation of the KZT. Kazakhstan faces major

- 1 -

<sup>&</sup>lt;sup>1</sup> NFRK is a sovereign stabilization and savings oil fund established in August 2000. The National Bank of Kazakhstan serves as NFRK trustee.

challenges over the short run for sustaining economic growth, managing the state budget, and regulating the financial sector. Economic growth in Kazakhstan remained positive in 2008, but decelerated steadily during the course of the year. Preliminary estimates place annual GDP growth for 2008 at 3.2 percent. A further negative shock to domestic income from substantially lower export prices since October 2008 could lead to recession in 2009. The outlook for 2009 is therefore gloomy with GDP growth expected to be close to zero.

- 4. The primary risk in the banking sector is a rapid deterioration in the quality of bank assets. This deterioration already began with the sharp declines of real estate prices in 2008. Over 40 percent of bank loans are collateralized by real estate, with a large share of lending in 2005-2007 made to construction and real estate, which is now in a depressed state. The recent devaluation of the KZT will also contribute to asset deterioration, as more than 40 percent of all loans in Kazakhstan are denominated in foreign currency, and domestic debtors with incomes in KZT will have more trouble servicing these loans. However, the level of distress is very uneven across the banking sector, with the majority of problems concentrated in the two largest banks—BTA and Alliance (see Annex 1 for further discussion on this), which have debt of about US\$ 14 billion and US\$3 billion, respectively. The Government is in the process of negotiating a restructuring of this debt with foreign creditors without taking on the full extent of the contingent liability.
- 5. The overall financial position of the Kazakhstan Government remains fairly strong, but is likely to weaken somewhat in the near future. International monetary and National Fund reserves of the country still amounted to US\$42 billion in February 2009 and explicit sovereign indebtedness is only US\$1.4 billion. A decision to defend the new exchange rate of 150 KZT to the US\$ could lead to the further depletion of reserves. The Government has now issued explicit guarantees for private pension funds that comprise about 8 percent of GDP. These funds have experienced considerable losses in recent months, and are now being encouraged to engage in essentially quasi-fiscal activities in support of the Anti-Crisis Program. There is uncertainty about what the Government will do if the recapitalization package for the banking sector proves insufficient. The nationalization of two large banks with substantial foreign debts has increased expectations that the Government will convert a good share of that debt into sovereign debt.
- 6. Kazakhstan continues to attract Foreign Direct Investment, particularly for the large off-shore Kashagan oil project, which will allow the country virtually to double oil production in 10-15 years. This together with the probable recovery of commodity prices along with the world economy in a few years, implies that the medium and longer term picture for Kazakhstan looks promising. The challenge will be getting through the current difficult period with minimal damage to living standards, infrastructure, and the National Fund fiscal reserves of the country. In the context of tighter conditions for Kazakhstan on international financial markets, the Government is now considering large scale sovereign borrowing from International Financial Institutions (IFIs), particularly for infrastructure.
- 7. The Government is counting on substantial capital inflows associated with the construction of infrastructure not only to support investment activity during the time of budgetary difficulties, but also to provide balance of payments support and employment at a time of rising layoffs. Kazakhstan needs strong capital inflows to compensate for substantial

outflows associated with foreign debt payment obligations in the range of US\$14 billion in order to relieve balance of payments pressures. Part of this will come from the Kashagan oilfields in addition to the expected expansion in Government borrowing from IFIs.

8. The economic and financial crisis lends additional importance to this Project and to public investments in infrastructure in general. First, public infrastructure spending is generally thought to have higher multiplier effects than public consumption spending, in particular un-targeted transfers. Second, by channeling public resources into areas that alleviate constraints on long-term growth, the authorities can stimulate domestic demand and create jobs without causing economic distortions. Third, the project will improve critical infrastructure at a time of reduced financing from commercial sources. It is for these reasons that the Government has given high priority to this Project as part of its stimulus package.

# 2. Trade and transport sector issues

- 9. The Government's strategic vision for economic development is based on diversification and integration of the economy into the global market. In March 2006, the President of Kazakhstan set the goal to join the group of fifty most competitive nations in the medium term. This will require both investment in the economic sectors and improvements in the investment climate. Kazakhstan's "Doing Business" ranking improved in 2008 to seventy-first, but it is still ranked one hundred and thirty-third in the Trade Logistics Perception Index. Key development challenges for Kazakhstan therefore go beyond maintaining prudent macro policies—it needs to improve its investment climate and quality of governance. Overall, governance ratings suggest that corruption and non-transparent corporate governance are issues that limit the attractiveness of the country as an investment destination.
- 10. The geography, population, economy and trade flows of Central Asia have an important bearing on transportation challenges in Kazakhstan. Within the region, distances are substantial (2,000 km from the Kyrgyz Republic to Russia) and access to major markets involves very long travel distances. There are also significant non-physical barriers to trade, including inefficiencies at border crossings, unofficial payments, and the lack of harmonization of basic transit documents and regulations, all of which have been subjects of discussion at the Central Asia Regional Economic Cooperation (CAREC). For the region, trade with Russia continues to be important mainly due to historical reasons with much of this trade transiting through Kazakhstan due to the availability of transport infrastructure. China is growing in importance as a trading partner for Central Asia, with Kazakhstan taking the largest share. Other significant trading partners of the CAREC countries include Japan, Korea, Turkey, and increasingly, the EU countries.
- 11. The CAREC countries have designated six major transport corridors, four of which transit through Kazakhstan. Although current trade movements are relatively low, the trade directions indicate significant potential for trade with Europe, China and South

- 3 -

<sup>&</sup>lt;sup>2</sup> CAREC comprises: Afghanistan, Azerbaijan, People's Republic of China (focusing on Xinjiang Uygur Autonomous Region), Kazakhstan, Kyrgyz Republic, Mongolia, Tajikistan and Uzbekistan.

Asia in addition to current trade with Russia. This perceived trade potential is the main reason for the establishment of the six CAREC corridors. While rail transport accounts for more than 75 percent of the combined ton-km of freight carried in Kazakhstan, past trends show a 10 percent increase in road freight per annum since 2002.

- 12. The short- to medium-term objectives for transport in Kazakhstan are identified in the Government's Transport Sector Development Strategy 2006-2015 (TSDS) and the Road Sector Development Program 2006-2012 (RSDP). These Government documents define investment programs that include rehabilitation of the Republican (National) road network and the provision of selected additional infrastructure, particularly along the CAREC corridors, totaling 8,290 km. This includes the corridor linking Europe and Russia to China through Kazakhstan, which is the focus of this Project. Rail transport is the other significant land transport mode in Kazakhstan, carrying the majority of long-distance bulk cargo. However, there are no direct rail links with Tajikistan and the Kyrgyz Republic, and hence road transport dominates transit traffic to/from these countries. The transport strategies also aim to harmonize current legislation with international norms and standards and the promotion of innovative technologies. Lastly, they include as an objective, the provision of services to users along the corridors including improvements in road safety.
- 13. Roads are a key element of the Kazakhstan transport system, playing an important role in the provision of basic access to rural areas, and providing essential transit corridors for trade. Kazakhstan has three classes of road networks, each the responsibility of different levels of government and their respective road organizations: (i) the Republican road network (including international transit roads) totaling 21,000 km is the responsibility of the Ministry of Transport and Communications (MoTC) and is managed by the Committee for Roads (the Committee); (ii) Local roads (totaling 65,400 km) are the responsibility of the oblasts (regions) and Rayons (districts); and (iii) urban roads are the responsibility of municipalities or city authorities. Much of the road network was constructed during the Soviet era and has significantly deteriorated due to lack of adequate maintenance. While financing for the road sector has significantly increased over the past decade, the main reasons for poor performance of the roads are the lack of proper planning, insufficient institutional capacity and a rapid growth in motorization. In January 2008, the previous Committee for Transport Infrastructure Development was renamed the Committee for Roads with some functions moved to the Administration Department of the MoTC. The administrative structure of the Committee comprises one central organization based in Astana with 14 regional departments, one in each oblast. The state-owned enterprise, Kazakhavtodor, provides most of the road maintenance services, including routine and winter maintenance works and some periodic and capital works carried out contract.
- 14. The key issues facing the management of the Republican road network are: (a) outdated organizational structure and weak institutional capacity to plan and manage the road network, mainly because the Committee has few trained personnel; (b) inefficient allocation of funds; (c) poor condition of the network, with over 50 percent of roads requiring major maintenance or full rehabilitation; (d) inappropriate maintenance practices that are reactive rather than preventive (i.e., repairs are done once defects appear), resulting in higher costs; (e) poor quality of construction; (f) very poor road safety record, with indications that this will increase; (g) unsatisfactory condition of local road networks,

thereby limiting access for rural communities to essential social services and work opportunities; (h) lack of services to transporters along the transit corridors; and (i) non-physical barriers in the form of unofficial payments and unscheduled inspections for transit traffic.

15. Poor driver behavior, combined with high vehicle speeds, has resulted in a poor road safety record. Road accident rates increased by 53 percent over the period 2000 to 2003, with a fatality rate reported to be 15 deaths per 10,000 vehicles in 2005. These figures are well in excess of the rates in Europe and in many Asian countries. The fatality rate is expected to rise due to the significant increase in road traffic, greater vehicle ownership, access to higher performance vehicles, and lack of effective enforcement. If the present trend continues, annual fatalities could reach 10,000 with 50,000 injuries making road traffic crashes one of the top three health problems in Kazakhstan by 2020.

#### 3. Rationale for Bank involvement

- 16. Reforming the administrative structure for managing roads in Kazakhstan will require careful planning and implementation. The experience of the Bank from other similar countries shows that changes cannot be imposed from outside; they must be home grown. The proposed Project will review options with the government for the extent and type of institutional reforms in the roads sector that would be sustainable in the context of Kazakhstan. The Bank has significant experience in implementing similar institutional reforms that will guide the development of policy reforms tailored to Kazakhstan.
- 17. The Bank is well placed to play the convening role coordinating the participation of the IFIs in undertaking the large investment required to develop the Western Europe to Western China (WE-WC) transit corridor through Kazakhstan. This will ensure that: (i) parallel financing for the corridor will be synchronized; (ii) uniform technical standards will be applied; (iii) there is a common framework for environmental and social safeguards; and (iv) appropriate technical assistance will complement the investments and institutional strengthening. The very large program of proposed investments for the corridor (comprising approximately US\$7.5 billion) will take several years to implement and will require the integration of the fiduciary and safeguards standards of Kazakhstan with that of the IFIs.
- 18. Governance and accountability in the transport sector are a major concern for the Government. The Committee has instituted new regulations to improve the supervision and quality control of construction. Improving governance and accountability requires effective oversight, strict quality control, transparency, and civil society participation in monitoring project implementation. The wealth of accumulated experience within the Bank to design appropriate mechanisms for project implementation and monitoring will be harnessed to improve governance and accountability. A Governance and Anti-Corruption (GAC) Action Plan is incorporated in design for this Project (see Annex 11).
- 19. The Bank and the World Health Organization have taken the leading role to improve road safety in all countries. The Bank hosts the Global Road Safety Facility (GRSF) that has been utilized in several countries to conduct road safety management capacity reviews and to prepare second generation road safety projects. The GRSF is

financing a road safety capacity review in Kazakhstan aimed at reaching consensus with the Government on a multi-sectoral strategy and action plan for improving road safety. The outcome of this review will be presented and discussed with the Government in order to agree on the action plan for improving road safety.

20. Over the past years, the Bank has assisted the Government with the implementation of the transport sector development programs. The Bank financed Road Transport Restructuring Project (RTRP) (Loan 4437-KZ), which closed in December 2007, was instrumental in restructuring road maintenance practices, and introduced private sector provision of major road maintenance works. However, routine maintenance is still carried out under contract by the state owned enterprise, Kazakhavtodor. The Bank has also financed analytical work to monitor the performance of the major trade corridors in Central Asia, particularly through Kazakhstan.

# 4. Higher level objectives to which the Project contributes

- 21. The proposed Project is part of the Government's strategy to stimulate economic growth and reduce poverty, by improving access to markets, as well as providing employment in the construction sector and related services. The Project will provide an efficient transport link for the poorest regions of Kazakhstan, and for other countries in the region, particularly Tajikistan and the Kyrgyz Republic. The condition of the existing roads in western Kazakhstan is among the worst in the country. The upgrading of the corridor will facilitate more efficient movements of goods and people and will improve road safety. It will also facilitate industrial, agricultural, and commercial activities, with improved trade and service along the road and in adjacent towns and cities.
- 22. The Project aims to improve the efficiency of budget utilization. Road investments are increasing, but resource allocations for maintenance are still insufficient, representing only about 30 percent of the road budget in 2005. The RSDP includes planned budget allocations for road maintenance that will increase annually by 10 percent over the period 2006–2012. However, the Government budget rules do not allow line ministries to reallocate between budget headings, for example to use resources allocated for new construction towards maintenance and vice versa. A more efficient utilization of the budget is required in order to reduce the current maintenance backlog, which is one of the Government's main objectives. This will require improvement in the capacity of the Committee to plan road maintenance. The proposed Project includes a review of options for institutional changes that will enable the Committee to attract and retain qualified and experienced staff.
- 23. The government has set as an objective the development of the local construction industry in Kazakhstan. The contracts for civil works under the proposed WE-WC Corridor development program are designed to provide opportunities for both local and international contractors to participate, ranging from the supply of construction materials and equipment, contracts for road construction and concessions for road maintenance.
- 24. Involvement of the IFIs in the development of the WE-WC Corridor will ensure higher fiduciary standards. With the fiscal surplus accumulated over the past decade, the Government could finance the development of the entire WE-WC Corridor using its own

resources. However, the involvement of the IFIs in the financing of the corridor development program will ensure the application of stringent fiduciary standards that are essential for the oversight and implementation of such a large program. In addition, the Bank and other IFIs will require the application of modern technical standards for road design and construction that may not be available in Kazakhstan at present.

25. The Project is consistent with the Country Partnership Strategy (CPS) for Kazakhstan. The CPS was designed to ensure strong Bank support for the government's program, and to allow the Government and the Bank to adjust that program to changing government priorities and country circumstances, and thereby to maximize the Bank's contribution to Kazakhstan's development. The CPS is based on the Bank's recognition that it needs to adapt its business model to Kazakhstan's development agenda, with details of the Bank's program to be agreed each year. The CPS puts much emphasis on promoting competitiveness by strengthening the government's capacity to identify and reduce barriers to businesses and private investors, and on investing in human capital and basic infrastructure. The Bank is undertaking a participatory Portfolio Review with the Government, focusing on increasing the use of country systems and aligning them with international best practices. A CPS Progress Report was approved by the Board of Executive Directors in May 2008 with an indicative lending envelope of US\$320 million per year over the period 2008-2010, which would be annually adjusted in agreement with the Government. Although the proposed Project was included in the CPS Progress Report, details of the Project scope and financing requirements were confirmed in June 2008 after presentation of the Progress Report to the Board.

#### **B.** PROJECT DESCRIPTION

#### 1. Lending instrument

26. The proposed Project will be financed through a US\$2.125 billion Specific Investment Loan (SIL) for the construction of approximately 1,062 km of road sections between the Aktobe/Kyzylorda oblast border and Shymkent (including a northern bypass to the city). The Borrower is the Republic of Kazakhstan, and the representative of the Borrower is the Ministry of Finance (MoF). The Project implementation entity is the Committee for Roads within the MoTC. The Borrower has selected a Variable-Spread Loan (VSL) in US Dollars, commitment linked, level repayment, 5-year grace period, and 25 years to maturity. This choice was made by the Borrower taking into account the loan amount and the structure of the accumulated national debt as well as the capability to use Loan conversion options in order to manage the risk of external borrowing and debt.

# 2. Program objective and phases

27. The proposed Project is part of the Government's program to upgrade and improve the 2,840 km road corridor linking Europe and Russia to China through Kazakhstan. The overall objective of the Government's WE-WC Corridor development program is to improve transport efficiency and safety, and promote development along one of Kazakhstan's main strategic road transport corridors. Transport and trade efficiency will be improved through provision of better infrastructure and services along the entire corridor

to reduce transport costs, and through gradual reform of the entities responsible for all categories of roads. The Government has requested the IFIs to finance about 63 percent of the total investment costs required to develop the WE-WC Corridor, estimated at US\$7.5 billion for the 2,840 km Corridor (see Map in Annex 16). The IFIs and the Government will co-finance separate projects as follows:

- The European Bank for Reconstruction and Development (EBRD) will finance road sections between the Russian Federation border to Martuk in Aktobe oblast (102 km) at an estimated total cost of US\$212.5 million equivalent. This Loan was approved in November 2008. In addition, EBRD technical cooperation funds may be used to finance: (i) preparation of a concession project model; and (ii) the tendering procedure for a concession pilot project;
- The Asian Development Bank (ADB) jointly with the Japan International Cooperation Agency (JICA) will finance road sections between Taraz and Korday within Zhambyl oblast (about 321 km) at an estimated total cost of US\$939 million. The first phase Loan for this was approved in November 2008;
- The Islamic Development Bank (IDB) will finance 159 km of road sections between the border of South Kazakhstan oblast and Taraz at an estimated total cost of US\$487 million. This Loan was approved in February 2009;
- The World Bank (IBRD) to finance sections of the Corridor in the South-West regions of Kazakhstan between Shymkent and Aktobe oblast border (approx 1,062 km) at an estimated total cost of US\$2.5 billion; and
- The Government is financing the remaining sections of the Corridor. This includes construction of 273 km of roads in Aktobe oblast (Aktobe Karabutak Irgiz) completed in 2006, plus 205 km of the Almaty-Bishkek road completed in 2005 with ADB and EBRD loans. In addition, the Government is financing ongoing construction of 215 km of roads in Aktobe oblast (Karabutak to the Kyzylorda oblast border) at an estimated total cost of US\$177 million equivalent, and the road section from Shymkent to the border with Uzbekistan. The total cost of these projects was estimated to be KZT 230 billion (approximately US\$1.9 billion equivalent).

# 3. Project development objective and key indicators

- 28. The project development objective (PDO) is to increase transport efficiency along the road sections between Aktobe/Kyzylorda oblast border and Shymkent and to improve road management and traffic safety in Kazakhstan. This will be achieved through:
  - Upgrading and reconstruction of 1,062 km of road sections within South Kazakhstan and Kyzylorda oblasts along the WE-WC Corridor from Aktobe / Kyzylorda oblast border to Shymkent (including the northern bypass to Shymkent city);
  - Strengthening the capacity of the Committee and implementing a road management system for planning and budgeting of road maintenance, rehabilitation and construction on the Republican road network;

- Increasing the capacity of MoTC and Committee staff to monitor and supervise project implementation with particular emphasis on procurement, financial management and safeguards; and
- Improving road safety and facilitating the provision of services along the WE-WC Corridor.
- 29. The Project will lead to more efficient and safer transport, lower road user costs and improved road safety and road services along the WE-WC Corridor. For the Project objectives to be fully achieved it will be necessary to strengthen the planning and management capacity of the Committee in order to improve the efficiency of project implementation and the utilization of resources allocated to the sector, and hence lower the economic costs of transport nationally and particularly along the South-West road sections of the WE-WC Corridor. The Project will also assist in developing plans for improving road safety and road services. This will lead to lower social costs stemming from reduced road traffic injuries and improved movement of goods and passengers.
- 30. Overall progress in implementation of the Project will be monitored through: (i) reduction in transport costs; (ii) improvement in the capacity of the project implementing entities; (iii) adoption of action plans for improving road safety and road services along the Corridor; and (iv) implementation of improved road management concepts, particularly the recommendations made in the technical studies (see Annex 3 for details). The World Bank Institute (WBI) will participate in the monitoring and evaluation of this Project. The MoTC has already introduced changes to construction contracts to extend warranties in an attempt to improve quality of road works. The Project will formalize this through the introduction of short term (5 year) maintenance concessions awarded to contractors at the outset.

# 4. Project components

- 31. **Component 1:** Upgrade and reconstruction of road sections within Kyzylorda oblast (excluding the bypass to Kyzylorda), estimated at a total cost of US\$1,334.5 million equivalent, excludeing physical and price contingencies, and the costs of consulting services for supervision of the construction. About 788.5 km of road sections in Kyzylorda oblast will be rehabilitated or upgraded with modern structural design to lower the life-cycle cost of the road asset, including road safety features and road services. Land acquisition and road design costs will be financed by the Borrower's own funds.
- 32. Component 2: Upgrade and reconstruction of road sections within South Kazakhstan oblast from Kyzylorda oblast border to Shymkent, including the bypasses to Kyzylorda and Shymkent, at an estimated cost of US\$879.1 million equivalent, excluding physical and price contingencies, and the costs of consulting services for construction supervision. About 273.4 km of road sections, all of which will be dual carriageways with 4 lanes, will be reconstructed or upgraded to include road safety features and road services. Land acquisition, and road design costs will be financed through the Borrower's own funds.
- 33. **Component 3:** Project Management Consultants (PMC) estimated at US\$6.5 million equivalent. The consultant services will assist the Committee with the management of all activities associated with the IFI projects, including the supervision of all safeguards and

fiduciary aspects, as part of a joint effort by all IFIs and the Government to ensure efficient and transparent implementation of the WE-WC Corridor program. Additional financing towards the full PMC costs will be made by the other participating IFIs, estimated at another US\$6 million. The main beneficiaries will be the Committee as well as the MoTC due to improved efficiency in project implementation and management of the road network.

- 34. **Component 4:** Institutional Development and preparation of action plans to improve road safety and road services estimated at US\$3.5 million equivalent. The component comprises consulting services for: (i) a study to review options for strengthening the Committee for Roads and improving the overall condition of the road network; (ii) a training program to enhance capacity of Committee staff in project management, with particular emphasis on fiduciary and safeguards aspects. A grant from the Bank's Institutional Development Fund (IDF) will finance activities to enhance Project monitoring and evaluation; (iii) development and implementation of a road management system (RMS) comprising a computerized database system for planning and scheduling road interventions. Implementation of the RMS will be piloted at the Committee headquarters and in two oblasts within the first two years of the Project. The component also includes the provision of goods and equipment for the RMS (see details in Annex 4); and (iv) preparation of plans for improving road safety and road services along the Project road sections. Public sector investments along the Corridor, such as improvements of links to local roads, construction of bus terminals, road/rail terminals, etc., will be financed through Components 1 and 2.
- 35. **Component 5**: This will finance consulting services for supervision of civil works under Components 1 and 2 estimated at US\$55.0 million. This will also include review of detailed engineering designs and supervision of the implementation of Environment Management Plans prepared for each road section.
- 36. *Unallocated*: The total Project cost includes \$221.4 million for physical and price contingencies during implementation (about 8.9 percent of the total cost of civil works). The contingency amount could also be utilized for additional costs resulting from the redesign of any road section to mitigate social and/or environmental impacts.

Table 1 - Summary of Project Costs by Component (US\$ millions)

	Project	World	
Component	Total	Bank	Borrower
1. Upgrade and reconstruction of road sections within Kyzylorda			
oblast (excluding the bypass to Kyzylorda) (total 788.5 km)	1,334.5	1,134.3	200.2
2. Upgrade and reconstruction of roads sections within South			
Kazakhstan oblast, including Kyzylorda bypass (total 273.4 km)	879.1	747.2	131.9
3. Consultant services for Project Management (PMC)	6.5	5.5	1.0
4. Consultant services for Institutional Development, Road Safety			
and Road Services	3.5	3.0	0.5
5. Consultant services for supervision of civil works	55.0	46.8	8.2
Unallocated amount for physical and price contingencies	221.4	188.2	33.2
TOTAL FINANCING	2,500.0	2,125.0	375.0

# 5. Lessons learned and reflected in the project design

- 37. The main lessons identified in the Implementation Completion Report for the RTRP (Loan 4437-KZ), which closed in December 2007, include the following:
  - Large transport investments require significant institutional capacity and incentives
    for staff in relevant departments to support Project implementation and to monitor
    Project impact. Institutional development is a process that requires buy-in from the
    affected institutional leaders, the scope of which should be limited to concerned
    organizations.
  - Weak institutional capacity affects Project implementation and jeopardizes fiduciary control. The Committee is a unit within the civil service structures of the MoTC and has not been able to attract and retain qualified staff with the necessary experience to manage large projects and complex fiduciary processes. Disbursements under the previous RTRP Loan were delayed on several occasions due to poor record keeping and lack of staff with the skills required for Bank fiduciary standards.
  - Supervision was weak due to the shortage of experienced engineers within the Committee. Some of the rehabilitation works carried out under the RTRP were of poor quality, due to insufficient supervision of the contractors. There is need for close oversight of supervising engineers by the Committee, who will be assisted by the PMC. It is proposed to introduce longer term defect liability (warranty) periods for road construction, from the present 2 years to 5 years, during which the construction company would be responsible for maintenance activities.
  - Road construction costs are very high in Kazakhstan, demonstrating the lack of a
    competitive construction industry both in the country and the region as a whole. It is
    therefore important to encourage more effective and efficient contracting practices,
    including widespread use of international bidding, use of local sub-contractors, and
    exposing the state owned enterprise Kazakhkavtodor to competition.
  - The rapid economic growth in Kazakhstan over the past two decades led to very high rates in traffic growth, with consequent high rates of road traffic fatalities and injuries. The rapid increase in traffic will require longer term planning of development projects and improvements in the technical design standards for roads and bridges. The Soviet SNIP<sup>3</sup> standards are not suitable for the modern fleet of heavy vehicles that now use the Republican road network.
  - Concerns with poor governance and corruption in the construction industry require special attention to be paid to fiduciary management. This Project incorporates a GAC action plan, implementation of which has been discussed and agreed with the MoTC and the Committee (see Annex 11.)
- 38. Most of the weakness identified above can be attributed to the small number of qualified and experienced staff within the Committee, which has not been able to recruit and retain trained and experienced staff for several mid-level technical positions, such as

\_

<sup>&</sup>lt;sup>3</sup> Technical Standards and Regulations of the Former Soviet Union.

engineers, planners, economists, financial management and procurement staff, primarily due to the low remuneration levels compared to the private sector. The short-term remedy for this will be the use of consultants, particularly to manage the implementation of the WE-WC Corridor development program. The Project will also assist the MoTC through a study to identify options for improving the structure and remuneration that the Committee can offer to attract and retain qualified and experienced staff, with recommendations on modern methods for planning and management of the Republican road network. This is essential for the medium to long term capacity development and modernization of the Committee.

Table 2 – Proposed remedies to identified weaknesses

Lessons learned	Proposed remedy
Weak	- The first year of the Project includes a study to review options for
institutional	strengthening the Committee and for improving the overall condition of
capacity	Republican roads.
	- The MoTC should select the preferred option in the second year and begin implementation to improve capacity of the Committee.
Insufficient	- In the short term, the PMC will assist the Committee with oversight of all
supervision of	consultants hired to supervise construction of the WE-WC Corridor.
consultants	- In the short to medium term, the PMC will train new staff of the Committee
	to undertake similar tasks for the entire Republican network.
Poor quality of	- The Committee will introduce 5 year performance based maintenance
construction	concessions as part of new construction and rehabilitation contracts.
High cost of	- The WE-WC Corridor program will widely advertise construction contracts
construction	in order to attract bids from qualified local and international contractors,
	thereby ensuring highly competitive and transparent bidding for contracts.
Inappropriate	- The consulting services for supervision include review and update of
design standards	technical designs prior to the start of construction.
Problems with	- The Project incorporates a GAC action plan that has been discussed and
governance and	agreed with the MoTC and the Committee.
corruption	- An international firm will be hired by the Bank to audit project
	implementation and procurement activities.
	- The PMC will review technical inspections reported by the oblast Roads
	Laboratories and report the results to the Bank.
	- The Bank will provide additional resources for supervision of the fiduciary,
	safeguards and technical aspects of the Project.

# 6. Alternatives considered and reasons for rejection

39. The Government plans to develop the WE-WC Corridor through a combination of budget financing, IFI loans and Public-Private Partnerships. Initially, the Government had considered PPP financing for the entire Corridor, but this was rejected because it would have required significant budget support. The Government approached the Bank to finance the road sections in Kyzylorda and South Kazakhstan oblasts and to coordinate the IFI financing for the entire program. A series of three SILs was initially considered at the Project concept stage. Following initial safeguards screening, the first SIL operation was designed to include road sections placed in environmental screening category B. The second

SIL would have financed category A road sections, but with minimal land acquisition, and the third SIL would finance the remaining road sections in category A and involving significant land acquisition. However, the government then made a specific request to expedite Project preparation so that financing requirements for the entire WE-WC Corridor could be submitted to the Parliament in one batch, including the projects proposed to be financed by other IFIs. Consequently, the three SIL operations would not meet the Government's timetable to develop the entire Corridor within a period of four to five years, with the total IBRD loan amount agreed at the outset.

40. The proposed loan was then structured as an Adaptable Program Loan (APL) with two phases. The first APL operation would specify the envisaged total loan amount for the Program without committing either the Bank or the Government to subsequent phases. However, this was also rejected on the grounds that: (i) the implementation period planned between the APL phases would have to be very short, with significant overlap between the APL phases; (ii) the proposed triggers for the APL phases could not be substantive because the Project does not encompass any significant policy changes; and (iii) the envisaged institutional reforms would need a significant amount of time to implement and therefore could not be achieved within the short period of time between Phases 1 and 2 of the APL. In addition, since the total financing package for the Corridor exceeded the statutory limits on sovereign borrowing, the Government plans to present the entire package of loans from all IFIs for approval by Parliament in one batch. In order to do so, the Government requested the Bank to structure the IBRD financing as a single SIL.

#### C. IMPLEMENTATION

## 1. Partnership arrangements

41. During Project preparation, the Bank discussed and agreed with the Government and with the other IFIs on the use of Project Management Consultants to assist the Committee for Roads with the management and implementation of the WE-WC Corridor development program. The PMC will support the Committee with the implementation of all IFI financed projects under the Government's WE-WC Corridor development program, and will facilitate the transfer of skills to the staff of the Committee. The Committee will effectively outsource some of its functions to the PMC, who will assist with the coordination and implementation of the entire WE-WC Corridor program. The PMC will undertake quality control of road works, monitor safeguards implementation and oversee the work of supervising engineers employed under separate consulting services contracts. The objective is to establish a road management environment consisting of the Committee as the Employer, the PMC as an arm of the Employer, with supervision consultants and civil works contractors as suppliers/service providers. The PMC will be jointly funded by the participating IFIs through the corresponding project loans. The proposed Bank Loan will finance the core PMC team, including the overall PMC team leader, deputy manager, and a specialists unit. In order to formalize this collaboration, a Memorandum of Understanding (MOU) was signed by the MoTC and the IFIs. The MOU specifies the mechanisms for collaboration, an outline of the financing, joint Project implementation arrangements, and the commitment to uniform design standards, based on the following principles that will apply to all Projects (see Annex 6 for details):

- (i) The Committee on behalf of the MoTC, will have full authority to implement the Corridor development Program and the various Projects. All Projects will be implemented independently, but will be managed by the Committee;
- (ii) A reputable international firm will be hired as the PMC to support the Committee and coordinate Program implementation;
- (iii) The PMC will issue quarterly reports to all IFIs focusing on the coordination between the various projects and the outputs;
- (iv) The responsibility for Project performance monitoring will remain with the Committee, but most of the activities related to this will be managed by the PMC;
- (v) The Committee and the IFIs will share information relevant to the Program and to the Projects; and
- (vi) Safeguards aspects of the Program will be implemented in accordance with the policies of the IFIs agreed to by all parties.

## 2. Institutional and implementation arrangements

- 42. During Project preparation, the MoTC requested the Bank to advise on options for restructuring the Committee, including: (i) re-establishment of a Project Implementation Unit within the Committee; (ii) outsourcing some of the Committee's functions to consultants to assist with management of projects; (iii) transformation of the Committee into a semi-autonomous Road Agency that can hire staff at market remuneration rates; and (iv) transformation of the Committee into a State Owned Enterprise with defined income and administrative autonomy. The MoTC selected option (ii) above as an initial step, and hence the concept of the PMC was agreed for the WE-WC Corridor development program. The proposed Project will finance a study to determine whether options (iii) and (iv) would be viable in the context of Kazakhstan, and will recommend to the MoTC how the preferred option could be implemented.
- 43. The Committee has designated one Deputy Chairman as the Project Director to oversee the implementation of all WE-WC Corridor projects. The PMC will comprise teams dedicated to each IFI project under the overall management of a PMC team leader who will report to the Project Director. In addition, the PMC will employ a core team of specialists who will work with all IFI project teams in areas of procurement, financial management, safeguards, and public relations. Thus, the total PMC staff complement could comprise up to 14 international consultants working with about 24 local consultants to cover the entire corridor financed by all IFIs. Supervision of civil works will be carried out by separate consultants who will be hired as resident engineers for the duration of the construction contracts. Procurement of consulting services for the PMC should be completed early in order to assist the Committee with the preparation of the first set of bidding documents for civil works (see Annex 4 and Annex 6).
- 44. The PMC will assist the Committee through the provision of technical support for management and reporting during implementation. The PMC will be responsible for the preparation of bidding documents, bid evaluation reports, quality control reports, and other

progress reports for the entire WE-WC Corridor. In the first years of the Project, the primary role of the PMC will be to assist with management of the Project, while towards the end, the PMC role will be mainly to provide on-the-job training to MoTC staff. In addition to the transfer of skills through training and day-to-day operations, the PMC interaction with the Committee will lead to better control of the implementation schedule and will provide quality assurance for the executed works. Financial management support for the WE-WC Corridor development program will be provided by the Finance Department of the MoTC. The planning division within the Finance Department will be strengthened to enhance its capacity in project budgeting, accounting, disbursements and reporting. The PMC and Finance Department will collaborate to ensure that Project resources are managed with due attention to economy, efficiency and effectiveness, and that Project funds are used only towards the realization of Project objectives.

45. The Government plans to implement the upgrade of the entire Corridor within the period 2009–2014. This will entail significant time pressure on the procurement of civil works contracts. The detailed design, preparation of tender documents and the first prequalification for civil works are expected to be completed in March 2009. In addition, as most of the activities on the critical path relate to the procurement of civil works, the packaging of the works has been designed to address this constraint with few contracts in order to minimize the procurement process, but with several bidding lots in order to promote competition.

# 3. Monitoring and evaluation of outcomes/results

- 46. Project monitoring during implementation will be carried out by the Committee with support from the PMC. Project monitoring will entail close supervision of the civil works and technical studies, and monitoring of Project performance indicators for the duration of the project (see Annex 3.) Two types of indicators have been proposed: (i) outcome indicators to measure the extent of benefits from the Project; and (ii) output indicators that will measure physical progress of the civil works, technical studies and Project management. The indicators were selected to ensure that the required data will be collected as part of the routine activities of the Committee, the PMC, the contractors and the consultants. Baseline data collection is not expected to consume substantial resources, as most baseline data are available from the feasibility study report. The Committee through the PMC will be asked to prepare quarterly Project reports and to submit them to the Bank for review.
- 47. The Project will be implemented from 2009 to 2013, with a Loan closing date of December 31, 2013. Instead of a Mid-Term Review, Annual Reviews will be carried out, on or about December each year from 2010, jointly by the Borrower and the Bank together with other participating IFIs. The Annual Reviews will cover, amongst others: (i) progress made in meeting the Project objectives; and (ii) overall Project performance against agreed performance targets. The Committee together with the PMC, shall prepare at least four (4) weeks prior to the Annual Reviews, and furnish to the Bank and other IFIs, a separate report describing the status of implementation of each component of the Project together with a summary of progress.

# 4. Sustainability

48. The Transport Sector Development Strategy for 2006-2015 and the Road Sector Development Program for 2006-2012 provides strong evidence of the Government's commitment to the WE-WC Corridor development program, and to the Bank financed Project within this. These strategies include indications of long-term financing to the roads sector with the objective of attaining acceptable levels of service along the corridor and throughout the Republican road network. The budget foreseen for this purpose is forecast until the year 2012 incorporating an 8-10 percent increase each year, with the maintenance of the six CAREC road corridors assigned the highest priority. The Project is designed to support the implementation of the RSDP through Component 4, which will finance a review of design standards, introduction of modern road management systems, and the training of MoTC staff. Participation of the PMC in the implementation of the WE-WC Corridor development program represents a significant step towards sustainability of Project outcomes as it is expected that most PMC local staff will join the Committee or the successor organization following its reform, thereby ensuring transfer of knowledge to MoTC.

# 5. Critical risks and possible controversial aspects

- 49. The overall risk rating of the Project is assessed as substantial before mitigation in light of the macroeconomic vulnerabilities (see Section A) and other Project related risks. The Bank reviewed the potentially high level of commitments under this Project in addition to the US\$320 million per year included in the updated CPS program. In view of the current level of Bank exposure of US\$438 million, IBRD estimates that it is able to support the proposed loan amount of US\$2.125 billion for this project. However, supporting the overall lending program to Kazakhstan is also a function of the Bank's capital position relative to current estimates of demand for IBRD loans from other IBRD-eligible countries. This means that Bank financing of future projects in Kazakhstan may be severely limited.
- 50. The primary macroeconomic risks in Kazakhstan remain uncertainty about the balance of payments and the financial sector. If oil prices remain at US\$ 40 a barrel and foreign debt repayments are made according to schedule in 2009 without rollovers or restructuring, Kazakhstan would need an import contraction of about 30 percent to bring the balance of payments to a credible position, thus relieving pressure on the exchange rate and preventing a possible melt down in the financial sector should the depreciation of the KZT become "excessive." Kazakhstan should experience a significant import decline as a result of the economic slowdown and the 20 percent devaluation, although it is not yet clear if the import contraction will be of significant enough magnitude to relieve pressure on the KZT. However, the probability that some decision will be reached to reschedule and/or restructure Kazakhstan foreign debt is fairly high. If Kazakhstan can hold the exchange rate at or close to KZT 150 to the US\$, it should be able to manage the situation in the financial sector.
- 51. The probability that Kazakhstan will request an IMF program or DPL from the Bank in the near future remains uncertain. The Government and the National Bank currently do not entertain any such plans unless reserves become severely depleted. This will depend to a large extent on the price of oil in the short-medium term, the domestic

macroeconomic performance and further claims on the national reserves. The risk of the latter is associated with the balance of payments position and the degree of Government assistance to the commercial banks. At present, the Government appears determined to manage on its own, and plans to limit assistance from the Bank and other IFIs to investment lending for targeted sectors, particularly the construction industry in the hope that this will have significant multiplier effects.

- 52. Lower oil prices could drive the current account into deficit, and tighter external finance constraints could pressure the Government to underwrite the banking sector risks, thereby worsening the external government debt position. Continued policy dialogue with the Government on the macroeconomic environment will provide advice to adopt a more balanced approach that leaves a good share of the risks and losses with creditors and shareholders. The Project also faces limited macroeconomic risks from aggregate demand with \$7.5 billion to be spent over a relatively short period of time, which could drive up prices in the construction sector. This risk is somewhat mitigated by the slow down in the real estate and construction sectors since mid-2007.
- There are further risks due to high perceived corruption, weaknesses in the 53. capacity of the implementing agency, lack of staff with adequate financial management and procurement skills, and concerns about systemic corruption. The project is designed to mitigate risks related to corruption, particularly from collusion between public officials and contractors/suppliers of goods and services. Opportunity for this type of corruption generally increases with the size of contracts under the control of public officials. In order to minimize the risks for emergence and perpetuation of corruption, implementation of the Project will apply a clear set of procurement rules based on World Bank guidelines, combined with strong supervision and management support provided by the PMC assisting the Committee and independent oversight by civil society. The PMC will include international specialists on safeguards, financial management and procurement who will be required to monitor all aspects of the Project. In addition, an independent technical audit firm will be hired by the Bank under grant financing to audit the internal control and procurement process under all IFI Projects. This is intended to assure the transparency and integrity of all contracts and the procurement process.
- 54. There is generally weak environmental and social safeguards capacity within Government departments, local institutes and among consultants, leading to a low degree of safeguards integration into Project structures and budgeting. For example, the preliminary Environmental Assessment prepared by consultants as part of the Feasibility Study for the WE-WC Corridor program was not satisfactory to the IFIs and needed to be enhanced to meet internationally accepted requirements. Enforcement practice and empowerment of regional/local environmental authorities is also limited, leading to potential difficulties in issuing construction permits and supervising construction. Management of the interface between technical designers and safeguards consultants needs to improve as should the

\_

<sup>&</sup>lt;sup>4</sup> According to Transparency International, the Corruption Perception Index (CPI) indicates a perception of high corruption in Kazakhstan, with the country ranked 150 (CPI of 2.1) in 2007, and rank 147 (CPI of 2.2) in 2008.

experience of contractors in implementing environmental safeguards. Lastly, there is a risk that property owners may file court cases, delaying Project implementation. To mitigate these risks, experienced safeguards consultants within the PMC will assist the Committee with the implementation of safeguards requirements. The Committee will organize training workshops for central, regional and local authorities engaged in land acquisition and resettlement to ensure that national laws and international standards are fully adhered to in preparing and implementing Resettlement Action Plans. Training workshops will be organized for staff of the Committee, and of central and regional environmental authorities. Provisions specified in the Environment Management Plans (EMPs) will be integrated in all civil works contracts as quotable Bill of Quantities positions with penalty clauses for noncompliance with environmental requirements.

55. The Bank is aware of steps taken by the Government to improve governance and accountability. In 2004, as a result of the poor quality of road construction in general, the Committee for Construction within the Ministry of Industry and Trade and the Committee for Roads issued regulations to improve quality control.<sup>5</sup> The new regulations established a unified procedure for supervision of all road works and for acceptance of all types of construction, reconstruction, rehabilitation, overhaul/repair and maintenance activities on the road network. The regulations draw from ISO 9000 management system standards, i.e., they describe the principles for quality management, client satisfaction and performance improvement. They are designed to clarify the role and responsibilities of the design supervision team, the employer, independent engineers and the contractors. Furthermore, to enhance road quality, in 2005 the Committee established fourteen roads laboratories, one in each oblast, with up-to-date equipment to undertake tests of materials used for road construction, geometric parameters, evenness and pavement quality. The standard contracts for reconstruction, medium repair and major overhaul were revised in 2006 to extend the contractors' warranty period to five years for reconstruction, three years for major overhaul and two years for medium repairs. Finally, the Government already has a project assessment unit within the Ministry of Finance that performs random procurement audits reporting the results to the Office of the President of Kazakhstan.

56. The Project includes a GAC Action Plan that has been discussed and agreed with the MoTC and the Committee to address the above issues (see Annex 11). The Project will be implemented in accordance with the Bank's Anti-Corruption Guidelines. To mitigate the identified risks, the Bank will provide additional resources for advisory services, and for close supervision and monitoring of Project implementation. The Bank has a Lead economist based in Kazakhstan who will maintain close dialogue with the Government on macroeconomic issues. Field based fiduciary and technical staff will supervise the Project on a regular basis. Senior Bank staff specializing in road management, safeguards and fiduciary management will continue to be assigned to the Project and will undertake supervision missions to Kazakhstan as necessary.

<sup>5</sup> Instruction Order of the Committee on Construction, Ministry of Industry and Trade, Order 235, May 2004.

<sup>&</sup>lt;sup>6</sup> "Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants", dated October 15, 2006.

 $Table \ 3-Critical \ project-related \ risk \ ratings$ 

Risks	Before Mitigatio	Risk Mitigation Measures	After Mitigatio
MSKS	n	Kisk Mitigation Measures	n
To PDO			
Reversal of Government	M	Continuous policy dialogue with	M
commitment for improving		Government during Project	
investment climate and good		implementation to reinforce benefits of	
governance in Kazakhstan.		improved governance.	
Serious risks in the banking sector	Н	Continued policy dialogue with the	H
could cause macroeconomic		Government to adopt a more balanced	
instability. In addition the Project		approach in managing the foreign debt of	
faces risks from aggregate demand		the commercial banks. The aggregate	
with \$7.5 billion to be spent over a		demand risk is mitigated by the slow	
relatively short period of time.		down in the real estate sector/construction	
		sector since mid-2007.	
Changes in Project management	Н	Government to agree to maintain the PMC	S
structure (the Committee and the		for the Project duration. The Committee to	
PMC) slow down Project		select investments on a strict priority basis	
implementation and raise concerns		using results of economic analysis.	
about sector priorities.			
To Project Component Results			
Capacity of local contractors is	M	Use of International Competitive Bidding	M
limited with little knowledge of road		to attract international contractors. Project	
safety practices.		will develop a road safety plan that will	
		address the issues related to design.	
Delayed Project implementation and	Н	Committee will hire and maintain	S
non-compliance with fiduciary		adequately staffed PMC, and train staff in	
requirements due to weak		procurement and financial management;	
procurement and financial		and financial management system to be	
management capacity.		strengthened.	
Misuse of funds due to poor	S	Enhanced Bank supervision and support	M
corporate governance and/or lack of		by field-based procurement and financial	
procurement capacity.		management staff. Oversight by NGOs	
		and local communities. The Project will	
		not use a designated account.	
Weak capacity in oversight of	M	Strengthening capacity of the Committee	M
environmental and social safeguards		and other government agencies to oversee	
leading to low degree of safeguards		safeguards implementation. EMPs to be	
integration into Project structure.		included in construction contracts. PMC	
-		to monitor implementation of safeguards.	
Overall Risk Rating	S		S
Note: Risk Ratings: H=High Risk, S=	Substantial R	Risk, M=Modest Risk, N=Negligible or Low	Risk.

#### 6. Loan/credit conditions and covenants

#### 57. Additional Condition of Effectiveness:

- The MoTC has entered into an agreement, in form and substance satisfactory to the Bank, with the PMC for the purposes of carrying out activities under the Project.
- The Borrower, through MoTC, has adopted the GAC Action Plan, satisfactory to the Bank.

#### 58. Dated covenants:

- Not later than December 31, 2010, and annually thereafter, the Borrower, through the MoTC, shall carry out jointly with the Bank, annual reviews of the progress made in carrying out the Project (hereinafter referred to as the Annual Reviews). The Annual Reviews shall cover, amongst other things: (a) progress made in meeting the Project's objectives; and (b) overall Project performance against Project performance indicators.
- The Borrower, through the Committee for Roads, shall prepare at least four (4) weeks prior to the Annual Reviews, and furnish to the Bank, a separate report describing the status of implementation of each component of the Project and a summary report of Project implementation generally.

# 59. Covenants applicable to Project implementation:

- The Borrower shall ensure that the Project is carried out in accordance with the provisions of the Anti-Corruption Guidelines.
- The Borrower, through the MoTC, with the assistance of the PMC shall carry out the Project in accordance with the requirements, criteria, organizational arrangements and operational procedures set forth in the Project Operational Manual, the GAC Action Plan, the Resettlement Policy Framework and the EIA, and shall not assign, amend, abrogate or waive any provisions of the Project Operational Manual, the GAC Action Plan, the Resettlement Policy Framework, or the EIA without prior approval of the Bank.
- The Borrower, through the MoTC, shall: (i) take all necessary measures, including ensuring access to all relevant information related to the Project, to facilitate an independent procurement audit; and (ii) act promptly upon the findings and recommendations of such audit under terms of reference acceptable to the Bank.
- The Borrower, through the MoTC:
  - (a) shall prepare, prior to the commencement of any works under the Project, Resettlement Actions Plans, satisfactory to the Bank, in accordance with the Resettlement Policy Framework; and
  - (b) shall carry out the Project in accordance with the respective Resettlement Actions Plans; and

(c) shall not amend, suspend or abrogate any of the provisions of the respective Resettlement Action Plans without the prior agreement of the Bank.

# • The Borrower, through the MoTC:

- (a) shall prepare, prior to the commencement of any works under the Project, Environmental Management Plans, satisfactory to the Bank, in accordance with the EIA; and
- (b) shall carry out the Project in accordance with the respective Environmental Management Plans; and
- (c) shall not amend, suspend or abrogate any of the provisions of the respective Environmental Management Plans without the prior agreement of the Bank.
- At all times during the implementation of the Project, the Borrower shall ensure that the PMC is maintained with a composition, resources and terms of reference satisfactory to the Bank
- The Borrower shall monitor and evaluate the progress of the Project and prepare Project Reports in accordance with the provisions of Section 5.08 of the General Conditions and on the basis of indicators agreed with the Bank. Each Project Report shall cover the period of one calendar quarter, and shall be furnished to the Bank not later than forty five (45) days after the end of the period covered by such report.

#### 60. Financial covenants:

- The Borrower shall maintain or cause to be maintained a financial management system in accordance with the provisions of Section 5.09 of the General Conditions.
- The Borrower shall prepare and furnish to the Bank not later than forty five (45) days after the end of each calendar quarter, interim unaudited financial reports for the Project covering the quarter, in form and substance satisfactory to the Bank.
- The Borrower shall have its Financial Statements audited in accordance with the provisions of Section 5.09 (b) of the General Conditions. Each audit of the Financial Statements shall cover the period of one fiscal year of the Borrower. The audited Financial Statements for each such period shall be furnished to the Bank not later than six months after the end of such period.

#### 61. Withdrawal conditions:

• No withdrawal shall be made: (a) from the Loan Account until the Bank has received payment in full of the Front-End Fee; (b) for expenditures under Category (2) until the Borrower has carried out a study that reviews options for strengthening the Committee for Roads and improving the overall condition of the road network, and has agreed with the Bank on a framework of actions to strengthen the Committee for Roads and improve the overall condition of the road network, taking into account the outcomes of the study; and (c) for payments made prior to the date of the Loan Agreement.

#### D. APPRAISAL SUMMARY

# 1. Economic and financial analyses

- The former institute for road design, KazDorProekt prepared a feasibility study in 62. December 2007 for the entire WE-WC Corridor. The feasibility study assessed the economic viability of the corridor, including preliminary road designs from which estimates were made of the construction costs, land acquisition and compensation for resettlement. The Bank reviewed the economic analysis that was carried out using traditional cost-benefit analysis methods to assess the viability of the proposed upgrade on the road sections to be financed under this Project. The analysis used the Highway Development and Management (HDM-4) model, which simulates life-cycle conditions and costs and provides economic decision criteria for road construction and maintenance. The results show an aggregate Net Present Value (NPV) of US\$157 million (discounted to 2007 at 12 percent) for the Bank financed Project, with an Economic Rate of Return (ERR) of 13 percent. While the ERR for the proposed Project is above the 12 percent cut-off rate, two out of the seven analyzed road sections are shown to be marginal (see Annex 9). This is mainly a consequence of the high construction cost estimates for some road sections combined with low traffic observed on these sections. The analysis also shows that the proposed investments are economically viable and will complement anticipated macroeconomic benefits of the WE-WC Corridor. The proposed Project would be self-sustainable—the investment would remain robust even if other investments along the corridor are not completed. This is mainly due to the very poor condition of the existing road, particularly north of Kyzylorda.
- 63. It should be noted that the unit costs used in the analyses are relatively high; actual costs might be lower in bids received depending on the techniques to be used for construction. With lower unit costs expected through use of more appropriate design standards and competitive bidding of construction contracts, the estimated economic returns for the two road sections with low traffic that were marginal at appraisal would be higher. The same HDM-4 analysis shows that the proposed upgrade and reconstruction works will decrease road user costs on the South-West road sections of the WE-WC Corridor by an average 10 percent.
- 64. A sensitivity analysis was undertaken to assess the robustness of the above results to possible variations in key Project parameters, which in this case, were identified as construction costs and the forecast traffic growth rate. The analysis tested the impact on the economic returns of a 25 percent upward and downward variation in the construction costs, as well as a 25 percent upward and downward variation in the traffic growth rates on the Project road sections. The results of the sensitivity analysis show that the Project is sensitive to variations in these key parameters, with the overall ERR dropping to 11 percent, under the two scenarios of increased construction cost or reduced traffic growth rate. Nevertheless, and as discussed above, the base traffic growth rate and cost assumptions in this analysis are quite conservative, and therefore it is reasonable to expect the Project ERR to remain above

<sup>&</sup>lt;sup>7</sup> KazDorProekt carried out the study with the assistance of Saty-Invest Ltd (Kazakhstan), Asia Megatransit (Kazakhstan), TASC (Israel) and BCEOM (France).

the 12 percent threshold. The above sensitivity analysis for the low traffic growth rate also simulates the unlikely event that other IFIs do not proceed with the financing of the southern road sections from Shymkent through Almaty to the border with China at Khorgos. It is assumed that without the other IFI investments, traffic growth would be low, corresponding to an estimated 25 percent decrease from the with-project scenario. The resulting ERR would be reduced to 11 percent from 13 percent for the Bank financed road sections. A detailed discussion of the economic analysis is included in Annex 9.

#### 2. Technical

65. The preliminary designs carried out for the feasibility study were based on the assumption that all road sections carrying more than 7,000 vehicles per day will be upgraded from SNIP category II to category I, and from category III to category II for the rest of the corridor. A detailed review of construction costs carried out by the ADB indicated that the estimated costs in the feasibility study report for category II roads (ranging between US\$1.8 and US\$2.5 million per km) were 50 to 100 percent higher than observed bid prices in the region (see Annex 4). The estimates for category I road sections (ranging between US\$3 million and US\$5 million per km) were closer to observed prices. Costs per kilometer were subsequently revised by the Committee and approved by the State Expertise. Nevertheless, they remain high compared to the average costs observed within the region. The reason lies in a series of logistic and technical challenges that will have to be addressed during construction (e.g., the lack of suitable materials, long material haulage distances, long winters, etc.). The revised costs are in line with those of ongoing major works within Kazakhstan, e.g., Astana to Makinsk road.

66. The Committee reviewed the feasibility study prepared by KazDorProekt and, in accordance with national legislation, launched a round of consultations to get it approved by various government bodies. The study was submitted to the State Expertise and to other Ministries and government organizations in accordance with Kazakh regulations. The study was subsequently submitted to the Ministry of Economy and Budget Planning and to the Ministry of Trade and Industry for final approval, which was obtained in July 2008. The Committee then hired a number of local consultants to prepare the detailed design documents, which were subsequently completed in February 2009 incorporating the results of public consultations. <sup>10</sup>

67. The packaging of road works was discussed with the Committee. There will be 21 contracts for civil works for road sections ranging in length from 28 to 182 km. International Competitive Bidding (ICB) will be carried out for all road works contracts. Local construction contractors would be able to qualify as the main contractors for the small to medium size contracts (up to about US\$85 million). Large contracts and international competition will also reduce the risk of collusion through wider competition for bids.

<sup>8</sup> Category I corresponds to a dual carriageway with a 27.5 meter wide road platform. Category II corresponds to a carriageway with a 15 meter wide platform (category III design requires a 13 meter wide platform).

<sup>&</sup>lt;sup>9</sup> National Standards Authority of Kazakhstan.

<sup>&</sup>lt;sup>10</sup> Although the designs were completed, one section is subject to re-design due to public opposition, and three alternatives are being considered for this (see Annex 10 for details).

# 3. Governance and anti-corruption action plan

- 68. Kazakhstan needs to improve its business environment and quality of governance. Surveys carried out by international organizations<sup>11</sup> conclude that weak governance and systemic corruption pose a serious development challenge. These weaknesses can be addressed either through sustainable systemic change or through narrower ring fencing of fiduciary procedures. The GAC Action Plan for this Project is designed to initiate systemic changes in the procurement and financial management systems and procedures used by the MoTC, with specific actions to protect the Project. The GAC Action Plan builds on experience from similar Bank financed projects as well other projects funded by IFIs in Kazakhstan. Based on the capacity assessment of the procurement units within MoTC, several strengths, weaknesses, and remedial measures were identified.
- 69. While there have been some improvements in MoTC capacity, especially in procurement processing and the use of competitive bidding for large contracts, there remain significant vulnerabilities in the bid evaluation and approval processes that limit competition. These often result in overpricing of contracts through bid collusion and external influence on bid evaluation. Past financial audit reports have also highlighted internal control weaknesses, including a fragmented approach to budget allocation without clear rules for prioritization of competing needs. The GAC Action Plan aims to reduce possible corruption in the Project through the application of transparent and well documented procedures based on the analysis of risks and the governance environment. These will be supported by improved financial management controls incorporated in Project implementation, as summarized below:
  - Reputable international consultants will be hired as the PMC to support the MoTC and the Committee to apply transparent procedures for administering the Project;
  - Procurement audits and controls to be financed through Bank grant funds to ensure the reliability of cost estimates, detect over-pricing through bid analysis, supervision control over contract variations and dissemination of the complaints handling mechanism in bidding documents;
  - Adoption of better business processes such as computerized procurement systems to improve the efficiency of transaction processing and to promote transparency;
  - Independent oversight by civil society through a coalition of citizens and road user groups, and implementation of an effective system of complaint handling, with transparent investigation and reporting of the results;
  - Support to the MoTC and the Committee to apply transparent procedures for monitoring expenditures with more efficient, equitable and needs-based investment programs;
  - Enhanced supervision by the Bank through field-based fiduciary, safeguards and technical staff, with frequent missions by senior staff from headquarters.

- 24 -

<sup>&</sup>lt;sup>11</sup> EBRD/World Bank BEEPS & Doing Business surveys and the CPI by Transparency International.

# 4. Fiduciary

- **Procurement** under the project will be implemented by the Committee in accordance 70. with the relevant Bank guidelines. 12 A procurement capacity assessment of the Committee was carried out prior to appraisal. The environment for conducting procurement under the Project was assessed as high risk. The main risks concern the lack of experience with international procurement procedures, weak procurement guidelines, apparent interference in the procurement process, poor verification of road designs and technical specifications. A comprehensive plan to mitigate the procurement risks and strengthen implementation capacity has been agreed with the MoTC including hiring an international firm as the PMC to support the Committee. A reputable international firm will be hired though Bank grant funds to review the internal controls and procurement processes applied under all IFI financed projects. This will include a requirement to build the capacity of the project assessment unit within the MoF. In addition, the oblast roads laboratories, under the supervision of the PMC, will conduct random on-site technical inspections of on-going construction. Civil society organizations will be encouraged to monitor physical progress and the quality of civil works. These and broader aspects to enhancing institutional integrity are described in detail in Annexes 8 and 11.
- 71. **Financial Management:** The Committee has experience in implementing a number of investment projects, including the Bank financed RTRP Loan. Recent restructuring within the MoTC resulted in a number of changes in fiduciary arrangements, with all financial management functions transferred to the Finance Department of the MoTC. The capacity of the Finance Department was assessed in April 2008 to determine whether the department could provide financial management support for the WE-WC Corridor development program. The Bank had earlier carried out a fiduciary review in August 2007, which highlighted significant weaknesses in financial management, disbursement and procurement procedures. A set of actions was therefore developed to strengthen the fiduciary framework.
- 72. The capacity assessment carried out in April 2008 showed that project accounting and reporting was still done manually and the accounting software used by the Finance Department (*Luka Budget*) could not support key functions required by the Bank. Due to high staff turnover there is little knowledge of World Bank requirements for financial management and disbursement procedures. Consequently, there is a risk that weaknesses observed during implementation of the RTRP Loan will persist unless remedial measures are taken. These measures include hiring qualified international and local procurement and financial management staff through the PMC and strict implementation of policies and procedures for procurement and financial management, including budgeting, accounting, reporting, internal control and audit, incorporated in the Project Operation Manual (POM). Automation of the Project accounting and reporting system is necessary to ensure accuracy, timeliness, and reliability of accounting transactions and financial reporting.

ne "Guidelines: Procurement under IBRD Loans and IDA Credits" published

<sup>&</sup>lt;sup>12</sup> The "Guidelines: Procurement under IBRD Loans and IDA Credits" published by the Bank in May 2004 and revised in October 2006 and the "Guidelines: Selection and Employment of Consultants by World Bank Borrowers," dated May 2004 and revised October 2006, will be the versions governing this Project and the relevant Bank standard bidding documents.

- 73. Due to capacity constraints within the Finance Department of the MoTC, establishment of satisfactory financial management arrangements required consultant input. As agreed during negotiations a short-term financial management consultant was contracted to set up a Project financial management system, including development of a financial procedures manual (as part of the POM), upgrading of the automated project accounting system and training of Finance Department staff responsible for Project accounting, reporting and disbursement. The consultant helped customize the *Luka Budget* system to meet Bank project accounting and reporting requirements. The POM, incorporating financial management procedures, was developed to the satisfaction of the Bank. To ensure continued adequacy of the project financial management system during implementation, a financial management consultant will be hired, as part of the PMC, to support and train MoTC staff assigned financial management and disbursement responsibilities.
- 74. **Fiduciary Risk at the Project Level:** The overall financial management risk for the Project was rated **High** before mitigation and **Substantial** after risk mitigation measures. The Project will be implemented in an environment of high perceived corruption, even after adequate mitigation measures are put in place. These will be closely monitored to ensure that the residual Project risk is acceptable, including: (a) regular review of compliance with the internal control framework as described in the POM; (b) regular monitoring of activities of any bank accounts associated with the project, including reconciliation of the accounts with bank statements; (c) quarterly submission of interim financial reports that will be used to monitor overall financial activity of the project; (d) Project financial statements will be audited by independent auditors under terms of reference acceptable to the Bank; and (e) regular fiduciary supervision and post reviews will be conducted to ensure continued adequacy of the financial management and procurement arrangements.
- 75. *Fiduciary Risk at the Country Level*: Although the Project will be implemented in an environment of high fiduciary risk and high perceived corruption, appropriate mitigation measures have been put in place, including oversight on the procurement function. The PMC will be responsible for the preparation of bidding documents, preparation of bid evaluation reports, coordination and oversight of quality control of works, preparation of progress reports, etc., for all operations along the project road sections (including the civil works financed by other IFIs). Additional measures to mitigate corruption risk are included in the GAC Action Plan (see Annex 11).

# 5. Social

76. Much of the proposed Project is located in a desert and/or semi-desert area. The WE-WC Corridor serves over half the population of Kazakhstan as it passes through Almaty (the former Capital), the highly productive and densely-populated South Kazakhstan oblast, through Kyzylorda oblast, and the desert north of the Aral Sea. The Project area extends west from the densely populated areas around Shymkent to Kyzylorda, and further north, where the population density is less than 2.7 people per sq.km, with few villages and settlements. The Corridor traverses the South Kazakh heartland, including open steppes and large areas irrigated by diversions from the Syr Darya (river), and passes near the ancient settlement of Turkestan and the cosmodrome at Baikonur. The Corridor is the only major artery through the area and is therefore the main economic lifeline. Improvements to the

Corridor can be expected to accelerate growth trends in the major population centers and stimulate commerce at intersections and along bypasses, but are unlikely to stimulate the establishment of new settlements in uninhabited areas.

- 77. Improvements to the Corridor will have both international and local impacts. Increased international traffic will open access to new markets and to trade beyond the two oblasts. Locally, more transit will mean greater opportunities to buy and sell goods and to provide accommodation and other road services. Transit through congested areas will be limited by the construction of new bypasses, thereby greatly reducing potential resettlement and housing displacement and increasing traffic safety in settled areas. The road design ensures that the bypasses do not leave settlements disconnected from the road network. Highway maintenance will also offer direct and indirect employment opportunities. The social impacts from the proposed Project are therefore expected to be largely positive. The most significant general social risk is related to traffic safety, both on the open highway and in settled areas. The risks of injuries and fatalities will be mitigated through public awareness campaigns and by addressing physical deficiencies at potential black spots. In addition, bypasses and transit points will be designed to minimize public danger by routing heavy traffic away from the center of towns and villages.
- Highway construction and the development of long-term transit routes have 78. promoted the transmission and spread of HIV/AIDS in many regions. The Completion Report for the Almaty-Bishkek Road, financed jointly by ADB and EBRD, 13 indicated that the incidence of HIV/AIDS increased along the route although there was no data available to ascertain to what extent the increase was due to the road improvement. However, throughout Central Asia, the HIV/AIDS infection rate of women is increasing and the prevalence of infection among drug users is declining, suggesting that attention should be given to transit routes as points of transmission. The Bank is financing the Central Asia AIDS Control Project that will enable Governments and non-governmental organizations in the region to carry out HIV/AIDS prevention and control activities covering populations such as migrants and remote settlements that have not been adequately addressed in the past. This includes settlements along regional transport corridors, and cross border epidemiological hotspots. The PMC public relations specialist to be hired under this Project will build on this work, focusing on the WE-WC Corridor. In addition, the construction contracts under the Project will include relevant clauses on dissemination of information regarding HIV/AIDS.
- 79. The Kazakhstan Country Gender Assessment<sup>14</sup> published by the ADB in 2006 identifies Kazakhstan as a source, transit and destination country for human trafficking with evidence of growing internal rural-urban trafficking. Most of the trafficking is of women for sexual purposes, primarily moving to Russia from northern Kazakhstan, and to Turkey, Egypt or other locations. Kazakhstan is also a potential transit route for drug trafficking from Afghanistan to Russia and Europe.<sup>15</sup> The Project is not likely to affect significantly trafficking patterns, as the investments themselves will not remove any significant transit

<sup>&</sup>lt;sup>13</sup> ADB, Completion Report of the Almaty-Bishkek Regional Road Rehabilitation Project, December, 2007.

ADB, Kazakhstan Country Gender Assessment, 2006.

<sup>&</sup>lt;sup>15</sup> RUVR Broadcasting, "Kazakhstan Fights Drug Trafficking," June 6, 2008.

barriers. However, once work on the WE-WC Corridor is completed, including upgrade of the virtually impassible road section in Aktobe oblast, the improved Corridor may be seen by both human and drug traffickers as an attractive alternate to the prevailing south-north route via Astana. To deter such a transition, one element of the communications program to be implemented by the PMC for the whole Corridor program will be to raise public awareness and encourage civil society engagement to protect potential victims of trafficking.

- 80. Most of the road sections to be financed by the Bank will follow the existing alignment, staying within the long-established right-of-way, except where bypasses will be constructed around populated areas. The Feasibility Study estimated that the bypasses would require the demolition of 7 residences and 31 other structures in South Kazakhstan and Kyzylorda oblasts, as well as requiring over 3,000 ha for permanent use, mostly for the bypasses. In contrast, if the construction was to be contained entirely within the existing alignment, the result would be the demolition of 425 residences and 96 other structures, and the acquisition of 2,400 ha. Preliminary data from the detailed designs indicate that displacement will be greater than previously anticipated in the Feasibility Study, with 152 structures (including 55 residences and 65 commercial units) in South Kazakhstan oblast and 20 structures in Kyzylorda oblast (including 6 residences and 14 commercial units) earmarked for demolition. The detailed design studies also show that no informal land users were identified in South Kazakhstan oblast. In Kyzylorda oblast, a total of 7 informal land users were identified, who either lack ownership titles or building permits / licenses for their structures. An estimated total of 105 households in Kzylorda oblast and 750 households in South Kazakhstan will lose part or all of the land they use as private owners or long-term renters. Most of the losses are a very small portion of an affected plot.
- 81. A socio-economic survey of affected persons will be undertaken prior to the start of civil works once final design data are completed for all road sections. This will ascertain the impact of the losses and determine whether or not additional mitigation initiatives are needed. Local governments generally have reserve land and the Land Code in Kazakhstan gives preference to land swapping and replacement of buildings, rather than cash compensation. Nonetheless, private owners can select their preferred option. Discussions with local officials suggest that private landowners are increasingly aware of their rights and often do exercise them. For example, highway construction in the north of Kazakhstan was held up in 2007 when owners refused to agree to the Government's compensation offer and the Government was reluctant to expropriate the land forcefully.
- 82. Local consultations occur at two stages in the preparation of such road projects in Kazakhstan: during the feasibility study and the final design. At the feasibility stage for the WE-WC Corridor program, consultations were held primarily with local (Rayon) officials to discuss and reach agreement on preferred alignments and their implications. Based on the agreement, Rayon officials would freeze property transactions within the proposed alignments to deter speculation. This stage was completed in November 2007 in the Project area. Local officials were consulted again to participate in refining the alignment options, following which the design teams obtained cadastral data. During the final design stage, consultations were held with local communities on the proposed designs and alignments, and were concluded in January 2009. The report on the consultations notes that residents were dissatisfied with the plans for a 2.3 kilometer elevated roadway through Temirlanovka

village. Alternative designs will be developed and presented at further public consultations in Temirlanovka in April, 2009. The final design for this segment will complete the design process for the Project roads. Consultations with local officials will continue during the transfer of state land, and with private owners whose land is scheduled to be acquired permanently or used temporarily during construction.

83. After the detailed designs have been completed, PMC safeguards specialists will carry out a census of affected people who will lose structures or land (permanently or temporarily) due to the Project, as well as focused social assessments in the settlements affected by the bypasses to be financed under the Project. This will be completed within six months of Project effectiveness. The social assessment will establish a baseline for highway use (active users and passengers in buses, etc.) and the economic influence of the road on the settlements. The census will be used to complete site specific Resettlement Action Plans for all road sections, and will be disclosed locally through a third round of consultations. The census will set a baseline to monitor and assess Project impacts; it will be repeated after the road works are completed to determine whether or not the incomes of those households affected by land acquisition and resettlement have been restored The data from the social assessments will also be used to anticipate and address unforeseen issues and to establish a baseline from which to monitor broader impacts of the Project.

#### 6. Environment

- 84. The environmental conditions for the Project road sections are characterized by arid or semi-arid climate, sparse vegetation, few year-round surface water courses and large areas with naturally hyper-saline soils. Especially in the section north of Kyzylorda, the landscape is very arid and barren with very limited vegetation that is prone to wind erosion, dust generation and moving sand dunes. Surface water courses are mainly seasonal, especially in spring when flash floods can occur and draining waters can have high erosion potential. The landscape has a relief characterized by wide valleys and basins, separated by slightly elevated plateaus. Land use is restricted to low density animal grazing in the natural environment (mainly camels, sheep, goats, and cattle). Permanent settlements are extremely sparse. Southeast of Zhosaly, the climate gradually becomes less severe and the settlements are more frequent, mainly clustered around former state farms and rail facilities. The steppe vegetation, dominated by grassland with small patches of forest near rivers and in valleys, is interrupted by large tracts irrigated by water from Syr Darya. Further Southeast, the area between Turkestan and Shymkent is used extensively for agriculture and horticulture.
- 85. The proposed alignments for the road sections, including the bypasses, were examined in detail by the Project team during a series of field missions that included environmental and social specialists. The majority of the construction works, except bypasses around settlements and notably around Kyzylorda city, will remain confined within the existing right-of-way. Thus, the Project is not expected to have unprecedented or significant adverse impacts on the environment that cannot be mitigated. Nevertheless, the Project was classified environmental screening Category A for the following reasons: (i) the standard approach of the Bank's Europe and Central Asia (ECA) region is to classify road widening as Category A; (ii) the unusually large physical dimensions of the Project and the corresponding scope of civil works; (iii) the potential magnitude of induced impacts from

material sourcing and the production and transport of construction materials; and (iv) the substantial cumulative length of bypasses in the Project and the reconstruction of several large bridges. Furthermore, the Category A classification is warranted by the planned widening of the road between Shymkent and Kyzylorda from 2 to 4 lanes, and the bypasses around Shymkent and Kyzylorda, with a new bridge to be constructed over the Syr Darya.

- 86. The main environmental impacts identified during the environmental and social studies carried out for the borrower by Consultants are extensively characterized in the Environmental and Social Impact Assessment (ESIA) report of February 2009 and are summarized in Annex 10. In addition to the direct or immediate impacts of the Project, there will also be indirect, induced and cumulative impacts, which will take effect over a longer period and over a larger area than affected by the Project. These include increases in traffic, economic activities, better connectivity and further development along the Corridor. However, as the Project largely deals with rehabilitation of an existing road, no radical, rapid development is likely to occur. Instead long term, gradual processes are expected, which will allow the synchronous development of appropriate institutional and regulatory instruments for monitoring and control.
- 87. Most impacts that cannot be avoided can be offset or mitigated with readily available environmental management measures. In the case of the road section between Shymkent and Kyzylorda, the key impacts on soil, air and vegetation are anticipated to include: (i) the conversion of land; (ii) emissions in the form of noise, dust and exhaust gases; (iii) associated impacts of borrow pits; (iv) construction of temporary access roads, storage areas for materials, asphalt plants, and camps; and (v) transport and limitations for road use. Additional impacts from road operation are expected to be minor due to engineering measures to control noise and traffic safety for both people and livestock. Measures to address these impacts are comprehensively listed in the EMPs produced by the Borrower for each road section. The environment along the alignment between Turkestan and the Kyzylorda/Aktobe oblast border is mostly arid steppe to semi-desert landscapes with few river crossings, some wetlands (partly natural, partly irrigated lands) and no forests, sensitive natural habitats or protected areas directly impacted by road construction. There were sites of cultural significance identified near the road alignment at Turkestan and Sauran. However, these will not be affected by the planned civil works. The EMPs specify procedures and actions in case of archaeological "chance finds" during construction.

# 7. Safeguard policies

88. The Feasibility Study carried out in 2007 by consultants for the Committee included a preliminary environmental assessment (EA) report prepared to the national standards of Kazakhstan. The Bank identified gaps in the preliminary EA report and a number of follow-up actions were agreed to address the gaps. The Bank supervised the preparation of a Resettlement Policy Framework (RPF), and the ADB supervised the preparation of an Environmental Assessment Review Framework (EARF) for the entire WE-WC corridor. The EARF and RPF provide an overview of the environmental and social measures necessary to mitigate or offset potential and actual adverse environmental and social impacts along the entire Corridor that will be applied to all IFIs projects. The EARF and RPF are consistent with World Bank policies and were first disclosed prior to appraisal at the Bank's

InfoShop on June 17, 2008 and June 23, 2008 respectively, and on June 30, 2008 by the MoTC in Kazakhstan.

- 89. During the initial stages of preparation, the proposed Project was designed to be implemented as separate phases of an APL, for which the EARF and a RPF had been prepared and disclosed for Phase 1. It was anticipated that Phase 2 of the APL would comprise road sections placed in environmental screening Category A with involuntary resettlement. However, with the change of the lending instrument from an APL to a SIL at appraisal, the entire Project was reclassified as environment Category A, involving involuntary resettlement. The implication of this re-classification is that the EARF was no longer sufficient for the requirements under OP 4.01. Instead, a detailed EA report covering all road sections under the Project, incorporating site specific EMPs, needed to be completed, disclosed and consulted upon, prior to appraisal. With regard to OP 4.12, compliance requires completion and disclosure of a Resettlement Action Plan (RAP) prior to appraisal if all affected persons and the land to be acquired can be identified at that time, otherwise an RPF can be an appropriate form of resettlement plan. As a consequence of the change of lending instrument from an APL to a SIL at appraisal, a request was made to senior Bank management for a waiver to be sought from the Board of Executive Directors to exempt the Project from the requirement for the EA report and the RAPs to be completed and disclosed prior to appraisal, on the understanding that these would be completed to the satisfaction of the Bank prior to Board presentation. The EARF and RPF were therefore withdrawn from InfoShop because they had been superseded by the waiver request.
- 90. The Government hired independent Consultants under TOR acceptable to the Bank, to carry out the detailed Environmental and Social Impact Assessments. The Consultants prepared the ESIA report incorporating site specific EMPs in accordance with the requirements specified in the earlier EARF. The site-specific EMPs provide the basis from which contractors will prepare construction detail EMPs for their bid documents. Contractors will be required to include these detailed EMPs for individual road sections together with monitoring plans as part of their construction implementation designs and price quotations. The ESIA report was extensively reviewed and found satisfactory to the Bank, and was disclosed in the Bank's InfoShop and in Kazakhstan by MoTC in February 2009. An executive summary of the ESIA highlighting all pertinent safeguards issues for the Project was distributed to the Board of Executive Directors in March 2009.
- 91. With regard to the requirements under OP 4.12 (Involuntary Resettlement), the ESIA consultants prepared a draft Resettlement Report incorporating site-specific RAPs as the basis for an overall RAP. However, the Consultants were not able to finalize this as a RAP because resettlement data was incomplete for three of the twelve Project road sections, and a new design will be required for the road section at Temirlanovka where public consultations led to the rejection of the proposed design of a 2.3 km overpass bridge. Further consultations in Temirlanovka are planned in April 2009 to select an alternative alignment. The detailed designs for the selected alternative will be financed through the Project. Consequently, it was not possible to obtain the specific land ownership, usage and socio-economic data for all of the Project road sections as required for a RAP. While the draft Resettlement Report identifies the affected households and properties along all Project road sections with the estimated compensation (including the current design for Temirlanovka), this cannot be

considered a final RAP for purposes of OP 4.12 primarily because of the potential change in road alignment at Temirlanovka. Consequently, the draft Resettlement Report does not include a baseline socio-economic assessment of all affected persons.

- 92. In view of the above, it was decided to disclose the draft Resettlement Report in the form of an updated RPF, which sets the legal, policy, institutional and physical context for the final RAP, presents a detailed entitlement matrix, and provides a preliminary overview of the magnitude of anticipated impacts, as well as documenting preparation stages and the consultation process to date. The updated RPF includes initial cost estimates based on the data available to date. When all the necessary data has been obtained, the draft Resettlement Report will be finalized to serve as the umbrella RAP. Site-specific RAPs will be prepared for each Project road section early during Project implementation when the final designs are completed and fully documented, making it possible to conduct the prerequisite census and social assessments.
- 93. During Project implementation, the Bank will ensure that there is strong supervision of all safeguards policies and that adequate resources are made available. Bank supervision will ensure that implementation is in full compliance with the national environmental and social regulations of Kazakhstan as well as Bank safeguard policies. In this respect, the Bank will require that the Government (especially the committees on environmental assessment, water, land and forestry/hunting of the Ministry for Environment), supported by the environmental and social safeguards specialists of the PMC, should monitor on a quarterly basis compliance by each contractor with the safeguards measures as prescribed in the detailed EMPs and site-specific RAPs. The monitoring results will be included in Quarterly Progress Reports. The Bank will review the reports and verify their contents through periodic site visits. Any non-compliance with the EMPs and site-specific RAPs, or any other safeguards—either indicated in Quarterly Progress Reports or detected during site visits by the Bank—will require immediate remediation. Contractors will need to assume full responsibility for implementation of the respective EMPs, present reasons for noncompliance, propose a detailed and time-bound action plan to achieve compliance, and obtain the no objection of the Bank for the action plan. The cost of proposed corrective measures will be borne by the corresponding contractors in addition to contractual fines for grossly negligent conduct.

Table 4 - Safeguard Policies Triggered by the Project

	Yes	No
Environmental Assessment (OP/BP 4.01)	[X]	[ ]
Natural Habitats ( <u>OP/BP</u> 4.04)	[ ]	[X]
Pest Management (OP 4.09)	[ ]	[ ]
Physical Cultural Resources (OP/BP 4.11)	[ ]	[X]
Involuntary Resettlement (OP/BP 4.12)	[X]	[ ]
Indigenous Peoples (OP/BP 4.10)	[ ]	[X]
Forests (OP/BP 4.36)	[ ]	[X]
Safety of Dams (OP/BP 4.37)	[ ]	[X]
Projects in Disputed Areas ( <u>OP/BP</u> 7.60)	[ ]	[X]
Projects on International Waterways (OP/BP 7.50)	[ ]	[X]

# 8. Policy Exceptions and Readiness

- 94. Preparation of this Project did not fully comply with the requirements under the Bank's Operational Policy OP 4.01 (Environmental Assessment) and OP 4.12 (Involuntary Resettlement) which require environmental assessment and resettlement plans to be prepared and disclosed prior to appraisal of a Specific Investment Loan (SIL). During the initial stages of preparation, the Project was designed to be implemented as separate phases of an APL. However, to respond to the Government's requirement that the entire Loan be committed upfront, as was done for other sections financed by other IFIs, the proposed financing instrument was changed from an APL to a SIL. Accordingly, the Project was reclassified after appraisal and placed in environmental screening Category A involving involuntary resettlement, which requires the environmental assessment and resettlement plans to be disclosed prior to appraisal.
- 95. Senior Bank management agreed that a waiver should be sought from the Board of Executive Directors concurrently with the approval of this Project for the requirement to have disclosed these safeguards documents prior to appraisal. Except for the timing, the requirements under OP 4.01 and OP 4.12 have been met as the requisite EA report and the resettlement policy framework were disclosed both in Kazakhstan and at the Bank's InfoShop in February 2009 and March 2009, respectively.
- 96. Readiness of the Project is demonstrated through the following actions already taken by the Borrower or its agencies: (i) counterpart funds for the proposed Project are included in the budgets for 2009 and 2010; (ii) the detailed designs for eleven out of twelve road sections were completed in February 2009; (iii) the ESIA report (incorporating site-specific EMPs) and an updated RPF for the Project were disclosed in February 2009 and March 2009, respectively, and are satisfactory to the Bank; (iv) the POM has been completed and was endorsed by MoTC in March 2009; (v) the procurement plan prepared by the Committee for the first year of the Project has been reviewed and approved by the Bank; and (vi) arrangements have been agreed upon for monitoring Project performance indicators and outcomes.

## Annex 1. Country and Sector or Program Background

# KAZAKHSTAN: SOUTH WEST ROADS PROJECT

# **Country Background**

- 1.1. Kazakhstan enjoyed strong economic performance from 2000 to 2007 with average real GDP growth of 10 percent. The Government maintained a healthy fiscal surplus during that period, accumulating over US\$27 billion (about 21 percent of GDP) by end-2008 in the National Fund of the Republic of Kazakhstan. However, the economy is highly resourcedependent, with manufacturing accounting for only 11 percent of GDP in 2008, and agriculture 5 percent. In contrast, minerals, oil and gas, accounted for 73 percent of exports, amounting to around 39 percent of GDP. Consequently, the Government has made diversification of the economy a development priority. Trade expanded rapidly from 2004 to 2008 with external trade orientation gradually changing towards China and other markets outside the Former Soviet Union although Russia remains the largest single trading partner. The rapid economic growth up to 2008 facilitated a sharp increase in income per capita, which reached US\$6,200 in 2008 (GNI per capita by Atlas methodology). With a population of 15.7 million in 2008 and an annual population growth rate of about 1.2 percent, income per capita is expected to rise. Despite this, the overall poverty headcount ratio was estimated at 13 percent of the population, indicating some inequalities in income, particularly for the population living in rural areas.
- Despite the strong overall economic trends in Kazakhstan, a spiral of growth in 1.2. commercial lending and foreign borrowing in the context of a real estate boom from 2005 until mid-2007 set the stage for difficulties in the financial and construction sectors after August 2007. The banking sector had built up a substantial foreign debt burden of US\$46 billion, primarily from early 2005 to mid-2007. However, since mid-2007, problems in the global financial markets significantly reduced access of the local banks to cheap external financing. In Almaty, the largest city, real estate prices declined by almost 40 percent in 2008, causing further difficulties for commercial banks with significant exposure to the real estate sector. The National Bank of Kazakhstan spent about US\$6 billion or 25 percent of its foreign reserves (not including the NFRK) to support the KZT between August and October 2007. Kazakhstan's sovereign rating was subsequently downgraded in October 2007. The Government and National Bank succeeded in stabilizing expectations about the exchange rate in late 2007 and 2008, but received a major boost from a strengthening of oil and other commodities export price, which brought the current account into surplus. Gross reserves of the National Bank actually increased in January-June 2008 by US\$3.6 billion.
- 1.3. The deepening of the world economic crisis since September 2008 has had very negative repercussions in Kazakhstan. Sharp declines in commodity export prices since the fourth quarter of 2008 hit Kazakhstan with a major terms-of-trade shock and tighter financial markets have prevented commercial banks from rolling over their sizeable debt repayment obligations. In this context, most regions and sectors of the Kazakhstan economy were in recession by early 2009. Pressures for devaluation became insurmountable in early February 2009, leading to an 20 percent devaluation as part of an exit from an explicit peg

of the KZT to the US\$ to a corridor plus or minus 5 percent. Balance of payments pressures may persist further, as Kazakhstan probably needs about a 30 percent decline in imports to bring the current account back to a reasonably sized deficit. Falls in commodity prices and the economic downturn present problems for the state budget as well, as revenues should decline by 6-7 percent of GDP. The devaluation has further complicated the situation in the Kazakhstan banking sector, as over 40 percent of loans are denominated in foreign currency and most revenue flows for Kazakhstan businesses are in KZT. In light of these difficulties, the Government nationalized the two most problematic large banks on February 4, 2009. In this context, Kazakhstan faces major challenges over the short run for sustaining economic growth, managing the state budget, and regulating the financial sector.

- 1.4. Economic growth in Kazakhstan remained positive in 2008, but decelerated steadily during the course of the year. Preliminary estimates place annual GDP growth for 2008 at 3.2 percent, with a breakdown of 6.1, 5.3, 1.6, and 1.1 for the respective four quarters of the year. An examination of the structure of growth in 2008 reveals three primary sources: resource extraction and related investments concentrated in Atyrau oblast, transportation and some other domestic services, and construction, which have been supported by increased government funding. Many other sectors of the economy already suffered from the liquidity crunch, as well as from stagnant or declining demand. The former rapid growth of real disposable income of the population did not carry into 2008, and a number of regions registered real income declines. A further negative shock to domestic income from substantially lower export prices since October 2008 raises the threat of recession in 2009. Consequently, the outlook for 2009 is largely gloomy with GDP growth close to zero percent.
- 1.5. A strong expected decline in budget revenues present a challenge, which is being met through budgetary expenditure sequestration and financing a number of new expenditures (US\$5 billion) off budget out of National (Oil) Fund resources. The Kazakhstan Government has already sequestered budgetary expenditures for 2009 to meet expected revenue declines for oil at US\$40 a barrel, and stands committed to implement further sequestration as needed if the revenue situation should deteriorate further. Most of the sequestration concerns investment expenditures, and the Government has pledged not to cut social outlays. At the same time, Kazakhstan hopes to maintain investment and other key expenditures through off budget finance of US\$5 billion through the state holding company Samruk-Kazyna and greater inflows of FDI and other foreign finance.
- 1.6. The primary risk in the banking sector is a rapid deterioration in the quality of bank assets. This deterioration already began with the sharp declines of real estate prices in 2008. Over 40 percent of bank loans are collateralized by real estate. Furthermore, a large share of lending in 2005-2007 was to construction and real estate, which is now in a depressed state. The recent devaluation of the KZT will also contribute to asset deterioration, as more than 40 percent of all loans in Kazakhstan are denominated in foreign currency, and domestic debtors with incomes in KZT should have more trouble servicing these loans. The level of distress is very uneven across the banking sector, however, with the majority of problems concentrated in the two largest banks, BTA and Alliance. The Government recently took control of BTA, and may purchase up to 76 percent of its ordinary shares) and a similar deal is expected for Alliance. BTA holds about US\$16 billion in foreign debt. Alliance has

US\$3.7 billion. As these loans did not have sovereign guarantees, the Government is determined not to assume them without a substantial hair cut. Negations are currently underway in this area.

- The overall financial position of the Kazakhstan Government remains fairly strong, 1.7. but should weaken somewhat in the near future. International monetary and National Fund reserves of the country still amount to US\$42 billion in February 2009 and explicit sovereign indebtedness is only US\$1.4 billion. But claims on the Government may grow substantially in 2009. About US\$10 billion of these reserves are being used for a bank recapitalization and a fiscal stimulus package. A decision to defend the new exchange rate of 150 KZT to the US\$ could lead to the further depletion of reserves. The Government has now issued explicit guarantees for private pension funds that comprise roughly 8 percent of GDP. These funds have experienced considerable losses in recent months, and are now being encouraged to engage in essentially quasi-fiscal activities in support of the Anti-Crisis Program. Deposit insurance was increased 5-fold to 5 million KZT (US\$33,333). The nationalization of two large banks with substantial foreign debts has increased expectations that the Government will convert a good share of that debt into sovereign debt. There is uncertainty about what the Government will do if the current re-capitalization package for the banking sector proves insufficient.
- 1.8. Kazakhstan is continuing to attract Foreign Direct Investment in connection with the large off-shore Kashagan oil project, which will allow the country virtually to double oil production in 10-15 years. This fact, together with the probable recovery of commodity prices along with the world economy in a few years, implies that the medium and longer term picture for Kazakhstan looks promising. The challenge will be getting through the current difficult period with minimal damage to living standards, infrastructure, and the National Fund fiscal reserves of the country. In the context of tighter conditions for Kazakhstan on international financial markets, the Government is now considering large scale sovereign borrowing from International Financial Institutions (IFIs), particularly for infrastructure.
- 1.9. The Government is counting on substantial capital inflows associated with the South West Roads and other projects not only to support investment activity during the time of budgetary difficulties, but to provide balance of payments support to the country. To relieve balance of payments pressures on the currency, Kazakhstan needs strong capital inflows to compensate for substantial outflows associated with foreign debt payment obligations in the range of US\$14 billion. Part of this will come from Kashagan related FDI, as summarized above. Another part is expected to come from expanded Government borrowing from the World Bank and other IFIs associated with large infrastructure projects. In addition to providing balance of payments support and infrastructure crucial to future development, these projects will also provide employment at a time of rising layoffs.
- 1.10. The primary macroeconomic risks in Kazakhstan remain uncertainty about the balance of payments and the financial sector. If oil prices remain at US\$40 a barrel and foreign debt repayments are made according to schedule in 2009 without rollovers or restructuring, Kazakhstan would need an import contraction of about 30 percent to bring the balance of payments to a credible position, thus relieving pressure on the exchange rate and

preventing a possible melt down in the financial sector should the KZT depreciation become "excessive." Kazakhstan should experience a significant import decline as a result of the economic slowdown and 20 percent devaluation, although it is not yet clear if the import contraction will be of significant enough magnitude to relieve pressure on the KZT. The probability that some decision will be reached to reschedule and/or restructure Kazakhstan foreign debt is fairly high, however. This would likely put the capital account for 2009 into surplus, and the import decline would not need to be as sharp. If Kazakhstan can hold the exchange rate at close to 150 to the dollar, it should also be able to manage the situation in the financial sector. No other banks have debts are nearly the level as BTA.

- 1.11. The probability that Kazakhstan will request an IMF program or DPL from the Bank in the near future appears to be uncertain. The Government and National Bank currently do not entertain any such plans, and may not do so unless reserves become severely depleted. The risk of the latter is associated with the balance of payments position and the degree of Government assistance to banks. Yet the Government remains determined to manage on its own, and hopes for assistance from the Bank and other IFIs through investment lending.
- 1.12. While authorities have taken strong measures to contain the macroeconomic instability, Kazakhstan's leaders have maintained a strategic vision for economic development. The vision is based on diversification and integration into the global economy through the adoption of international standards for the productive, financial and public sectors. Over the past decade Kazakhstan maintained macroeconomic and fiscal stability, made progress in strengthening institutions in several key areas, and embarked on an ambitious public administration reform. With time, its development programs have become richer and more focused on issues related to competitiveness, such as competition, the investment climate, institutions, human capital, basic infrastructure, and environment. <sup>16</sup>
- 1.13. Non-transparent corporate governance remains an issue and limits the attractiveness of Kazakhstan as an investment destination. Although Kazakhstan's Doing Business ranking improved in 2008 to 71<sup>st</sup> and its Ease of Paying Taxes ranking to 44<sup>th</sup>, the highest in the CIS group, it is still ranked 133<sup>rd</sup> in the Trade Logistics Perception Index. Kazakhstan entered the World Economic Forum's Global Competitiveness index in 2006 at 61<sup>st</sup> place, and improved in 2007 to 54<sup>th</sup>, but worsened again in 2008 to 61<sup>st</sup> overall, primarily due to low human development— on which it ranks 94<sup>th</sup>. Overall, governance ratings suggest that corruption did not abate in the past four years.

\_

<sup>&</sup>lt;sup>16</sup> Of particular importance was the March 2006 President's Address, which set the goal for Kazakhstan of joining the group of fifty most competitive nations by 2020.

# **Sector Background**

1.14. To achieve the goal of aligning its economy with that of the leading economies in the world Kazakhstan needs to improve its competitiveness. The Government has adopted comprehensive development strategies to achieve this. Relevant to the transport sector are the Kazakhstan 2030 Strategy, 17 the National Territorial Development Strategy, 18 the Transport Sector Development Strategy for 2006-2015<sup>19</sup> and the Road Sector Development Program for 2006-2012. The overall aim of these strategies is to "ensure sustainable development of the country, improve living standards, and increase competitiveness of Kazakhstan in the region and in the world by allocating economic and human resources in an efficient manner." The Territorial Development Strategy focuses on promoting the development of growth poles and core cities along selected strategic axes. At the core of this would be an efficient network of transport infrastructure required to link the planned growth poles. The TSDS and the RSDP define investment programs that include rehabilitation of the Republican road network and the provision of selective additional infrastructure. The planned investment program gives priority to the reconstruction of six strategic road transport corridors (totaling 8,290 km) that carry the majority of the traffic on the Republican road network (see Table 1.1).

Table 1.1 – Traffic Intensity on Kazakhstan's Six Strategic International Transport Corridors

Description	Length (km)	Traffic per Day*
Uzbekistan border – Shymkent – Taraz – Bishkek – Almaty – Khorgos- border of China	1,137	> 7,000
Uzbekistan border – Shymkent – Kyzylorda – Aktobe – Uralsk – border of Russian Federation	2,048	> 3,000
Almaty – Karaganda – Astana – Petropavlovsk	1,669	> 500
Border of the Russian Federation – Atyrau – Aktau – Turkmenistan border	1,420	> 1,800
Border of the Russian Federation – Pavlodar – Semipalatinsk – Maikapshagai – border of China	1,105	> 1,500
Astana – Kostanai – border of the Russian Federation	879	> 1,300

<sup>\* -</sup> Annual Average Daily Traffic

1.15. Efficient and safe transport systems are necessary prerequisites for development of the economy and for national cohesion. Kazakhstan has 89,000 km of roads, of which 13,000 km are primary roads. Roads represent the leading mode for short haul transportation in the country. There is little substitute for trucks despite the rather low road density (3 km

<sup>&</sup>lt;sup>17</sup> Kazakhstan-2030: Prosperity, Safety and Improving Living Conditions for All People in Kazakhstan, Republic of Kazakhstan, 1997.

<sup>&</sup>lt;sup>18</sup> Strategy of Territorial Development of the Republic of Kazakhstan up to 2015, (2006).

<sup>&</sup>lt;sup>19</sup> Transport Strategy of the Republic of Kazakhstan Up to 2015, MOTC, (2006).

per 100 sq.km which equals the density in Russia, but is far lower than Uzbekistan's 41km/sq.km or Kyrgyzstan's 17km/sq.km). Additionally, many of the roads that exist are in poor condition, making transport time-consuming, expensive and dangerous. The winter season is an acute problem in the northern regions. The significant travel distances and the poor condition of existing transport infrastructure have been identified as the main reason for the high costs of transport in the region. Nonetheless, Kazakhstan has substantial potential to provide trade corridors linking Asian countries with Russia and Europe. In addition to establishing strategic regional transport links within Central Asia, the Government plans to improve transit corridors for trade with China, Russia and Europe, which are Kazakhstan's main trading partners in non-oil export sectors.

- 1.16. Kazakhstan's increasing links with its neighboring countries in Central Asia, as well as China, Russia and Europe, will have an impact on the directions of trade flows and create new opportunities for road transport. Kazakhstan's trade flows were previously dominated by the north-south corridor because of its links with Russia and the rest of Central Asia, and these flows were served mainly by rail. Kazakhstan's geographic position makes road and rail transport infrastructure potentially attractive for transit transport to and from other countries. Based on the Statistical Yearbook of Kazakhstan (2005), rail freight transport dominated the market in 2005, accounting for more than 75 percent of the combined ton-kilometer carried by rail and road in Kazakhstan. But a closer look at the trends over time shows that road freight in terms of ton-kilometers has increased by some 10 percent each year since 2002 and investments in road corridors are now at the core of the Government's strategy for transport.
- 1.17. Institutional and organizational structures for road management have not evolved since independence. The Committee for Roads is the entity responsible for the Republican road network (including network development, road rehabilitation and maintenance). The Committee consists of one central organization based in Astana with 14 territorial departments, one in each oblast. The state-owned enterprise–Kazakhavtodor–provides most of the road maintenance services, including routine and winter maintenance works and some periodic and capital works projects on a contract basis. While some of the civil works and services are already outsourced, there are several instances where there is no clear division of the client-supplier contractual relationship between the Committee and Kazakhavtodor. At the oblast level, Kazakhavtodor is directly involved in works identification, planning of maintenance works, and also carrying out routine and winter maintenance. Its employees are seen (by all parties including private sector contractors) as the in-house technical experts for road maintenance. This administrative arrangement does not fully capture the benefits of separating client/supplier functions that would greatly improve the efficiency of operations.

# **Road Network Characteristics**

1.18. The main road network (the Republican road network) of about 23,000 km (see Table 1.2) is managed by the Committee for Roads under the responsibility of the Ministry of Transport and Communications. The network is relatively small with a road density that is well below that of countries like Canada and Australia, which also have large sparsely inhabited areas.

Table 1.2 – Characteristics of the Republican Road Network

	]	Road ge	ometry cl	ass (km	)	S	urface ty	pe (km)		Road	conditio	on (km)	Bridges	Culverts
	I	II	III	IV	V	A/C	BCS	CS	G	Good	Fair	Poor	No.	No.
Length	705	3,424	16,667	2,059	141	7,427	13,584	1,841	144	3,455	8,719	10,822	1,177	13,828
Percent	3.1	14.9	72.5	9.0	0.6	32.3	59.1	8.0	0.6	15.0	37.9	47.1		

Notes: A/C = Asphalt-Concrete, BCS = Black crushed stone, CS = Crushed stone, G = Gravel.

Source: Committee for Roads, MoTC.

- 1.19. Road conditions have substantially deteriorated since independence, primarily due to underinvestment, resulting in a backlog of required major rehabilitation and reconstruction. In addition, improving the efficiency of transit through Kazakhstan would require the removal of non-physical barriers at the borders and along the transit corridors, improved management of road safety, and adequate provision and maintenance of road infrastructure and services. Additionally, the existing road networks in Kazakhstan were designed for an operational environment where axle loads were relatively light and there was adequate enforcement of axle load limits. This situation has changed and it is expected that the rate of deterioration of road pavements will accelerate, as a result of the increase in axle load limit (from 6-8 tons to 10 tons) and the poor enforcement of overloading.
- 1.20. An analysis of the road sector budget over the period of 2001 to 2005 reveals a bias towards construction, reconstruction and rehabilitation works. While investments are increasing, resource allocations towards maintenance are insufficient, representing only about 30 percent of the road budget in 2005. This situation is aggravated by the fact that budget rules in Kazakhstan do not allow line ministries to reallocate between budget lines, i.e., to use resources allocated towards new construction for maintenance and vice versa.
- 1.21. Notwithstanding the above, a detailed review of the RSDP and appraisal of the situation on the ground reveal reassuring facts:
  - The budget earmarked for maintenance purposes is increasing by 10 percent in real terms each year since 2006. This trend is expected to last until 2012 at minimum.
  - Kazakhavtodor considers that the budget it received in 2007 allowed it to cover 60 percent of the needs for maintenance over the entire network.
- 1.22. The reduction of the backlog on maintenance is part of the objectives of the government as stated in the RSDP. By the end of 2012, the percentage of roads for which conditions will be rated unsatisfactory is expected to drop from 47 percent as reported in 2005 to 14 percent. On the Republican network 412 bridges are planned to be repaired during the period to allow them to support the new bearing capacity of 13 tons per axle. About 1,660 km of existing Republican roads are planned to have major repairs and 16,800 other km will be overlaid. As for the local roads, 18,000 km are to be repaired. This effort to bridge the backlog should be seen in the context of the 7,205 km of the Republican road

network that will be "upgraded" during the period 2006-2020. Table 1.3 details the financing of upgrades and repairs during the period 2006-2012. Raw estimates for the works indicate that the major repairs foreseen by the program can be done, but the budget for pavement strengthening using overlays is not sufficient—a shortfall of about 40 percent. The budget for routine maintenance will cover about 80 percent of needs, which is acceptable given the fact that 45 percent of the network should be new in 2012. Following the analysis above, it is important that a sound Road Management System be put in place. The Project will address (activities to be financed under component 4). Perhaps more importantly, the quality of the works that will be implemented has to be monitored appropriately. In the past, some Bank-financed works were not found to be of acceptable quality. The Project will address this issue also, although implementation mechanisms will remain the responsibility of the Committee, based on a five-step action plan for quality enhancement. The supervision of the works will be delegated to teams of supervision consultants in the field, with management by the PMC working directly for the Committee from its headquarters.

2006 2007 2008 2009 2010 2011 2012 Upgrade 44,283 69,166 85,253 95,026 100,557 107,805 121,526 Major repairs 4,128 9,000 10,350 11,250 11,700 13,050 14,400 Medium repairs 7,800 9,800 12,800 13,800 8,800 10,800 11,800 Routine repairs 9,000 10,500 5,349 6,000 7,000 8,000 10,000

Table 1.3 Budget for Roads according to the RSDP (2006 million KZT)

1.23. Increased traffic and greater private vehicle ownership, access to higher specification vehicles (with larger load carrying capacity), and a reduced level of oversight, have created an environment where travel speeds are high and driver behavior is poor. This has resulted in both high road traffic injury rates and a faster rate of road network deterioration. Road safety has become an increasing issue in Kazakhstan with fatalities having increased by 53 percent over the period from 2000 to 2003, well in excess of the rates reported for Europe and Asia, and very high even when compared with other CIS countries. For example, fatalities per 100,000 people in CIS countries are between 11 and 14, while in Kazakhstan, the current rate is 18. If the present trend in road crash rates in Kazakhstan is allowed to continue, annual fatalities could be as high as 10,000, with 50,000 injuries by 2020, making road traffic injuries one of the top three health problems for the country by then.

1.24. The legal framework governing road safety in Kazakhstan indicates a highly complex system of responsibilities with no single institution or agency designated as responsible. Although the Ministry of Internal Affairs, through the Department of Road Police (DRP), plays a major role, there is no comprehensive road safety policy, nor a procedure for national policy development. The Project will address issues such as: (i) coordination of agencies involved in road safety; (ii) a defined action plan for reducing traffic injuries with set goals and targets that will be financed in the first year of the Project; (iii) a road safety audit to assess the extent of the road safety problem; (iv) adequate funding

- 41 -

<sup>&</sup>lt;sup>20</sup> Upgrading means having the road category improved by one class, from SNIP category III to SNIP category II and from SNIP category II to SNIP category I.

for road safety activities—works and supply of goods— that will be financed in subsequent years once the road safety action plan has been completed; and (v) assigning responsibility for road safety traffic injury data management and analysis (responsibilities to be agreed upon under the action plan).

1.25. Institutional and organizational road management arrangements in Kazakhstan have evolved slightly since independence. The Committee for Roads is responsible for the Republican road network (including planning, network development, road rehabilitation and maintenance). The Committee consists of a central organization in Astana with 14 branch offices, one in each oblast. Under the new administrative arrangements, the Procurement, Financing and Legal Departments have been transferred to the MoTC and now constitute independent departments accountable to the MoTC directly. As noted above, until now, the state enterprise Kazakhavtodor has provided most of the road construction and management services, including periodic and capital works projects as well as routine and winter maintenance works. While some activities have been outsourced, there are several instances where there is no clear division of the client-supplier contractual relationship. In order to achieve this, the capacity of the Committee would need to be strengthened, particularly with respect to management of contracts and projects.

<sup>&</sup>lt;sup>21</sup> Local roads are managed by road departments or units (comprising a few people within the other local government departments) of the oblast Akimats. As these departments and units are often poorly resourced and have limited technical capacity, they often rely on the expertise of the Committee staff located in each oblast.

<sup>&</sup>lt;sup>22</sup> Equipment operated by Kazakhavtodor is largely supplied by the Committee. At the oblast level, Kazakhavtodor is directly involved in works identification, planning of maintenance works, and also carrying out the routine and winter maintenance task. They are seen (by all parties including private sector contractors) as the technical experts for road maintenance.

## Annex 2. Major Related Projects Financed by the Bank and/or other Agencies

#### KAZAKHSTAN: SOUTH WEST ROADS PROJECT

- 2.1. In recent years, the World Bank has contributed to the financing of the transport sector in Kazakhstan through two projects:
  - Urban Transport Project (US\$40 million equivalent). The project was completed in 1999 and the outcome was rated satisfactory. The project helped to restore public transport capacity in the cities of Almaty, Karaganda and Shymkent. The project also helped implement key improvements in policies and institutions described in a Policy Statement and Action Plan for urban public transport in the three cities, which was formally adopted by the government before the loan was signed.
  - Road Transport Restructuring Project (US\$100 million equivalent). The project was completed in December 2007 and the Implementation Completion Report was approved on June 28, 2008. The project helped to achieve more efficient road and road transport sub-sectors in Kazakhstan mainly through: (i) improvement of the Almaty–Astana national road; (ii) development of routine road maintenance capability on the Almaty–Karaganda section of the Almaty–Astana road; (iii) improvement of the institutional capability of the Kazakh road administration (Committee of Roads) and local road contractors; and (iv) improvement of road transport regulations and road traffic safety.
- 2.2. Other assistance for the sector is channeled through the CAREC Transport Program. The list of projects most of which are under preparation can be summarized as follows:
  - Railway Projects: (i) Electrification of Almaty–Aktogay Railway (558 km) \$243 million; (ii) Electrification of Aktogay-Mointy Railway (521km) \$251 million; (iii) Construction of Korgas–Zhetygen Railway (298.4 km) \$742 million; (iv) Electrification of Dostyk–Aktogay Railway (312 km) \$134 million.
  - Airport Projects: Expansion of Shymkent, Semei and Kokchetau Airports total \$163 million.
  - Road Projects: (i) Reconstruction of Western Europe–Western China Transit Corridor \$7,500 million, implementation ongoing to 2015; this Project will finance part of this investment, the rest will be financed by ADB/JICA, EBRD, IDB and the Republican Budget; (ii) Almaty–Kapshagay Road Rehabilitation Project (104 km) \$580 million; feasibility study to be completed in 2008 and construction starting in 2010, to be completed in 2011; (iii) Rehabilitation of Aktau–Beineu Road Project (417 km) \$550 million, implementation 2009-2012; (iv) Astana–Karaganda Road Rehabilitation (238 km with bypass of Karaganda) \$1,000 million, implementation 2009–2012.
  - Port Project: Expansion of Aktau Port \$347.5 million, tentative schedule 2006–2014.

# Annex 3. Results Framework and Monitoring

# KAZAKHSTAN: SOUTH WEST ROADS PROJECT

# **Results Framework**

DD.O	D : (0 / T !! /	Use of Project Outcome			
PDO	Project Outcome Indicators	Use of Project Outcome			
		Information			
Increase transport efficiency along the road sections between Aktobe/ Kyzylorda oblast border and Shymkent, and improve road management and traffic safety in Kazakhstan.	<ul> <li>(i) Reduce, by the end of the Project, Road User Costs from US\$0.26/veh-km to US\$0.23/veh-km on Project road sections.</li> <li>(ii) Prepare and implement a national road safety improvement strategy with action plans to be financed from the Budget.</li> <li>(iii) Initiate changes in road management by implementing a computerized road management system and piloting performance-based road maintenance contracts in three oblasts.</li> </ul>	<ul> <li>(i) Assessing road transport costs to improve planning and efficiency in the road sector construction and maintenance program.</li> <li>(ii) Assessing the extent of road safety related losses to improve planning and implementation of road safety enhancing activities.</li> <li>(iii) Improving the efficiency of management and cost effective maintenance to improve the overall condition of the Republican road network.</li> </ul>			
Intermediate Outcomes	Intermediate Outcome	Use of Intermediate Outcome			
Intermediate Outcomes	Indicators	Monitoring			
Component 1.					
Upgrade and Reconstruction of road sections in Kyzylorda oblast (excluding Kyzylorda bypass).	A total of 788.5 km of road sections upgraded and reconstructed within Kyzylorda oblast (excluding Kyzylorda bypass) by the end of the Project.	Project supervision and to ensure that the Committee follows the procurement plan.			
Component 2.					
Upgrade of road sections within South Kazakhstan oblast, including the Kyzylorda bypass.	A total of 273.4 km of road sections upgraded and reconstructed within South Kazakhstan oblast, including Kyzylorda bypass.	Project supervision and to ensure that the Committee follows the procurement plan.			
Component 3.					
Timely processing and implementation of contracts and the staff training program.	Number of contracts processed and managed by Project Management Consultant. Training received by staff.*	Project supervision and to assess the performance of Project Management Consultant.			

Intermediate Outcomes	Intermediate Outcome Indicators	Use of Intermediate Outcome Monitoring		
Component 4.				
Begin implementation of a Road Management System and associated database for the network managed by the Committee.	Updating road data for 100 percent of Class I and Class II roads, and for 50 percent of Class III roads.*  -Improve traffic safety along Project road sections measured by reduction, by the end of the project, of the rate (per veh-km) of road crashes by at least 10 percent.  -Use of the RMS by the Committee to plan and budget for maintenance.	Scheduling annual road data collection, and program road maintenance activity.  Assessing the extent of road safety related losses to improve planning and implementation of road safety enhancing activities.  Preparation of annual maintenance programs.		
Rolling multi-year road maintenance and rehabilitation program.	Preparation of multi-year road program for 2012-2017 with the assistance of the RMS.	Improve the Committee's planning capabilities.		
A strategy with an Action Plan to improve road safety.	Approval of the Action Plan by the Committee and implementation of its 'black spot' removal program and three other important components by 2015.	Monitor progress on improvement in road safety in Kazakhstan.		
Conduct of intermediate outcome data surveys on the Project road sections starting from 2011.	Capacity to measure road safety improvement indicators including vehicle speed limits, seat belt use, alcohol-related traffic incidents, and emergency response times	Allow development of strategy targets and to provide a baseline for improving performance.		
Conduct public awareness activities to enhance road safety along the Project road sections and dissemination information on progress.	Reduce the percentage of vehicles driving above the speed limit on Project by 10%  Increase the participation of civil society in monitoring the Project	Assess the effectiveness of road safety intervention and activities, and the possibility to scale those activities up to other sections of the network.		
Enhanced provision of services to road users along the corridor.	Road Service action plan approved and main activities recommended by the action plan underway.	Assess the level of investments by the private sector along the Project road sections.		
Component 5.				
Improved supervision of the civil works contracts.	works along the Project roads.	Annual Reviews of the Project by all IFIs with the Borrower.		

Note: \* See next table on Outcome Indicators and Target Values.

# **Arrangements for results monitoring**

3.1. Project monitoring during implementation will be carried out by staff of the Committee, with the assistance of the PMC, Kazakhavtodor and Kazdornii. Monitoring entails close supervision of the works and technical assistance, auditing of physical works, procurement processes and financial statements, and monitoring of Project performance indicators for the duration of the Project. Oversight of monitoring indicators will be particularly important to respond rapidly to delays and ensure timely Project completion. The selected indicators should facilitate data collection and therefore capacity is not anticipated to be an issue. Quarterly project progress reports, which focus on results rather than process-related information, will be prepared by the Committee and submitted to the Bank for review.

Outcome Indicators and Target Values

	Ourcome I	naicaiors a	Outcome Indicators and Larget values	uues			
			Target Values	Values		Data Provision	sion
Project Outcome Indicators	Baseline	2010	2011	2012	2013	Data Collection	Data
						Instruments	Collection
Reduce Road User Costs by at least 10% on the Project road sections (US\$ per vehicle-km in 2007)	0.26	0.26	0.25	0.24	0.23	Road condition survey. User cost	The Committee
Proportion of the Republican road network length that	53% in 2006	55%	%09	72%	%98	From HDM4 Road condition	The
Reduce, by the end of the Project, the rate (per 100						Road safety survey	The
million veh-km) of road crash fatalities along the Project road sections by at least 10%	11 in 2007	11	ı	ı	9.5	and accident reports	Committee
Implementation and Effective use of Road	ı	1	Yes	Yes	Yes	Project reports	The
Management System by the Committee							Committee
Intermediate Outcome Indicators							
Number of kilometers of roads upgraded (cumulative	0km	0 km	250 km	550 km	1,062  km	Contract completion The	The
km)						and acceptance Committee reports	Committee
Works, Goods, and Consulting Services contracts	1	3 (W)	8 (W)	10 (W)	12 (W)	Contract monitoring The	The
processed and managed by the PMC		0 (G)	0 (G)	1 (G)	2 (G)	report	Committee
		2 (CS)	4 (CS)	4 (CS))	6 (CS)		
Training received by the Committee staff from PMC (staff-hours)	ı	200	1500	2500	3000	Contract monitoring The report	The Committee
Updating of road data for Republican roads (% of total	ı	1	100	100	100	Road condition The	The
length per year)						survey	Committee
Rolling multi-year road maintenance and rehabilitation	ı	1	ı	Yes	Yes	Project reports	The
program established							Committee
Prepare road safety strategy and action plan	No coordinated		Coordinated			Project reports.	The
	strategy. No		Strategy and			Published road safety	Committee
	dissemination		action plans issued.			action plan	
Prepare road service strategy and action plan	No coordinated		Coordinated			Project reports.	The
	strategy and no		Strategy and			Published road	road Committee
	dissemination		action plans			services action plan.	
			approved				
(W) Works (G) Goods (CS) Consulting Services							

(W): Works; (G): Goods; (CS): Consulting Services

# **Annex 4. Detailed Project Description**

# KAZAKHSTAN: SOUTH WEST ROADS PROJECT

# Background

- 4.1. The Project will focus on the upgrade of the Western Europe-Western China Corridor (CAREC 1b & 6b), which not only serves transit traffic, but also the population living in the region. Upgrading the main transport corridors of Kazakhstan is set by the government as the first priority for the sector. The WE-WC Corridor not only connects communities to large cities, but also supports heavy transit traffic to/from other countries in Central Asia. The road corridor is one of the few infrastructures in the western part of Kazakhstan and therefore plays an important role in regional development, making a significant contribution to the development of the main cities of the region. The Project will finance the upgrade of the corridor and support the Government in reviving the construction industry. Seminars will be organized in Astana, Almaty and in the three oblasts, to help local contractors better understand the procurement procedures under the Project so that they can participate in the bidding. The Project also provides an opportunity to address some institutional reform and capacity building issues that are pending. A key role for the PMC will not only be to train junior and mid-level MoTC staff, but also to arrange exchange visits for senior management of the Committee with other comparable road organizations, e.g., in Australia, Canada, Finland and in other countries.
- 4.2. The government has set an ambitious time-frame to upgrade the WE-WC Corridor. The Project is designed to take this constraint into consideration through a series of 14 civil works contracts that will be ready to start at the beginning of the first construction season, with other contracts for more complex works (dual carriageway road sections) to be prepared for the second and third year construction seasons. The first year of the Project is designed to focus on the road sections that follow the existing alignment so that the works can start in 2009. The Project will first focus on the 788 km road sections within Kyzylorda oblast excluding the Kyzylorda bypass. This consists of upgrading of the existing carriageway. The construction of road sections in South Kazakhstan oblast and the Kyzlorda bypass will follow from 2010.

#### **Project Details**

4.3. The Project is expected to be implemented within four to five years and will comprise five components:

# Component 1: Upgrade and reconstruction of road sections along the WE-WC Corridor within Kyzylorda oblast (excluding the bypass to Kyzylorda)

4.4. This component will finance the upgrade and reconstruction of about 788.5 km of road sections in Kyzylorda oblast with a modern structural design to lower the life-cycle cost of the road asset, including road safety features and road services. The estimated cost for this component is US\$1,334.5 million equivalent, excluding physical and price contingencies, and the costs of consulting services for supervision of the construction. Land acquisition and road design costs will be financed by the Borrower's own funds. The list of civil works contracts was agreed with the Committee. The proposed reconstruction will improve ride quality and lower

operating costs for road users, leading to lower life-cycle cost for the road asset, with lower accident rates and better road services. Communities living along the Corridor would also benefit from improved access to markets. It is planned that about 14 civil works contracts will be awarded ranging in value between US\$75 and 130 million. Details of this are included in the procurement plan.

# Component 2 – Upgrade and reconstruction of road sections within South Kazakhstan oblast, including the bypass to Kyzylorda

- 4.5. This component will finance the upgrade and reconstruction of about 273.4 km of road sections, all of which will be dual carriageways with 4 lanes, at an estimated cost of US\$879.1 million equivalent, excluding physical and price contingencies, and the costs of consulting services for construction supervision. The cost estimates of between US\$3 million to US\$5 million per km for category I road sections (four lanes) are closer to recent bid prices. Land acquisition, and road design costs will be financed through the Borrower's own funds. The construction of a 2.3 km overpass within Temirlanovka settlement (40 km west from Shymkent) was initially suggested by the Committee but will have to be reviewed after all other alignment alternatives have been considered. The outcome of public consultations recommended that other options be investigated as this variant was rejected by local residents and may not be the most economical solution.
- 4.6. For both *Components 1 and 2*, the construction cost estimates presented in the feasibility study were based on sample average costs per km as approved by the State Expertise for the costs of: (i) materials; (ii) transport; (iii) interchanges; (iv) overpasses and underpasses; and (v) various equipment (e.g., lighting of some portions of the road). On average, the resulting cost estimates are US\$1.8 million to US\$2.5 million per km for proposed category II road sections (two lanes). These are significantly higher than bid prices for recent road construction projects in the region. Consequently, the average cost that was agreed with the Committee during the preappraisal mission was US\$1.6 million per km for SNIP category II road sections. The road designs will be enhanced to include road safety features and facilities for road services (e.g. bus and truck stops, connections to local roads, etc)
- 4.7. The Project proposes to address environmental and geotechnical issues in an integrated way. Previous constructions of embankments along the existing road used soils with poor geotechnical properties. There has been little if any management of soil stockpiles and handling areas. The Project will address this issue and will provide a more uniform quality of embankment material by mixing of better and less favorable soil types, and by using geo-textiles on road sections where the crystallization pressure of salts could be a problem. The soils along the alignment consist mainly of various mixes of fine sand, silt and clay, ranging from almost pure, entirely non-cohesive dune type sand to highly cohesive, plastic soils dominated by clay and silt. Under dry conditions most of these materials have favorable properties and can be used as embankment fill material with proper management, controlled humidity and compaction.

*Table 4.1 – Characteristics of Bypasses* 

Description	Location	Comments
Shymkent Bypass	(km 2231+000 to	Long bypass with flyover and clover leaf junctions with existing
	674km of M39)	roads.
Ikan Bypass	(km 2123+000 to 2135 + 000)	Flyover at the contiguity section of the M 32 road with existing Turkestan bypass road at the 2114 km road sign and flyover at the contiguity section of the existing Ikan settlement bypass road with the Ibata settlement.
Zhanakorgan Bypass	km(2010 +000 to 2012 +000)	Zhanakorgan settlement bypass runs for approx 21km, from 1986 km to 2007 km.
Shieli Bypass	(km 1934+700 to 1945 + 500)	11 kilometres length Shieli bypass from 1934 (+700) km to 1945 (+500) km
Kyzylorda Bypass	(km 1808+000 to 1830+000)	The construction of a new Kyzylorda bypass includes:  - tube-type flyover at the contiguity section of new Kyzylorda bypass with existing M 32 highway at 1830 km road sign;  - clover-leaf flyover on intersection of new Kyzylorda bypass and R-68 "Kyzylorda – Aydarly" highway, at 23 km road sign;  - clover-leaf flyover on intersection of new Kyzylorda bypass and "Kyzylorda – Dachnyi Massive" highway, at 25 km road sign;  - tube-type flyover at the contiguity section of new Kyzylorda bypass with existing M 32 highway at 1808 km of road sign.  Also includes construction of 8 underpasses and 4 bridges over Syr Darya and Shirkelinsky channel.
Temirlanovka		The original reconstruction project provides for construction of 2932 meter length overpass in Temirlanovka settlement (2221-2224 km), 4 underpasses, 6 bridges (1 suspension bridge) and renewal and reconstruction of 10 bridges.  The overpass through Temirlanovka was rejected by local residents, an alternative bypass is currently under consideration.
Turkestan bypass		Online upgrading of the existing bypass of Turkestan.
Shagan Bypass	(km 1757+000 to 1767+200)	Shagan bypass from 1767+200 km road sign to 1757 km road sign.
Adjustment of Alignment	(km 1753+000 to 1754+600)	Straightening of the alignment in accordance with the design speed of 120km/hr.
Akzarma Bypass	(km 1741+800 to 1749+100)	Akzharma bypass from 1749+100 km to 1741+800 km
Zhosaly Bypass	(km 1634+000 to 1649+500)	15.5km re-route around Zhosaly settlement.
Kazalinsk Bypass	(km 1470+000 to 1476+000)	6km re-route around Kazalinsk settlement.
Aralsk Bypass	(km 1350+000 to 1361+000)	Aralsk bypass from 1361 till 1350 km. flyover and underpass over rail.

# Component 3: Project Management Consultants

4.8. The consultant services, estimated at US\$6.5 million equivalent (US\$5.5 million Bank financed), will assist the Committee with the management of all activities associated with the IFI projects, including the supervision of all safeguards and fiduciary aspects, as part of a joint effort by all IFIs and the Government to ensure efficient and transparent implementation of the Corridor development program. The capacity and staffing of the Committee is considered to be insufficient for managing the entire WE-WC Program. The MoTC and the IFIs therefore agreed to hire a reputable international firm as the PMC to assist the Committee through the provision of

technical support for management and reporting during the implementation of all the activities financed under the Project. The PMC will help by preparing bidding documents, bid evaluation reports, and progress reports, and will undertake coordination and oversight of quality control of works, and monitor implementation of safeguards. In addition, the PMC will be involved in the transfer of skills to the Committee staff through training and day-to-day operations. The participation of the PMC is expected to result in a better control of the implementation schedule, the provision of quality assurance for executed works, supply of goods and services, and transfer of knowledge and best practices to the Committee staff. The need for PMC support is necessary due to the following:

- The Committee has not been able to attract and retain qualified staff with the necessary experience to manage large projects and the fiduciary processes.
- Supervision of works has been weak in the past due to: (i) the shortage of experienced engineers within the Committee, (ii) poor supervision of civil works, (iii) the lack of skilled labor and appropriate equipment for the contractors, and (iv) poor quality materials used for the construction. Supervising engineers would need much closer monitoring by the Committee, hence it is proposed that this function be carried out with the assistance of the PMC.
- Concerns about governance and corruption in the construction industry will require special attention. The level of professionalism in the administration is an important factor. There will be systematic dissemination of information about the contract awards, cost and duration of the works, and strong supervision and monitoring by the PMC. In addition, as a means of auditing technical aspects of construction, the PMC will review results of technical inspections that will be conducted by oblast Road Laboratories.
- 4.9. The main activities to be carried out by the PMC will be: (i) review of detailed designs and preparation of bidding documents for the activities financed under the proposed Project; (ii) assistance to the Committee during the procurement process; (iii) construction management; (iv) implementation of the institution building, road safety and road services components of the Project; (v) training; (vi) monitoring of supervision of safeguards implementation; and (vii) communication and information to the public. The PMC will manage an information campaign about the Project during the entire duration of implementation. The focus will be on the World Bank financed portion of the investment, but could be extended upon the Committee's request. Several products may target different groups and different matters—communities, public at the national level, construction industries, awareness campaign (road safety, HIV-AIDS, etc.)—using different media. The main objective should remain the information of all local communities along the corridor about the works, the services provided to the communities, the costs, the companies involved, etc.
- 4.10. During implementation of the Project, the PMC will interact mainly with the following counterparts:
  - The Committee: The PMC represents an independent body that interacts on a daily basis with the Committee at various levels. The PMC provides the Committee with additional capacity. It will also provide training to staff of the Committee. The Committee represents the Employer, both for the PMC contract and for the various contracts for works, goods and services that are financed by the Project. The Committee will delegate most of the technical review and project management tasks to the PMC.

- *Other government units*: The PMC will maintain close dialogue with several stakeholders, including the Procurement Division of the Committee and the Legal and Finance Departments of the MoTC. The PMC will cooperate with stakeholders in dealing with relevant matters and transfer knowledge and experience as necessary.
- *The Civil Works Supervision Teams:* Each civil works contract has a supervision team on site, independent of the PMC and the Committee. There are about 21 large civil works contracts to supervise during the Project. Each supervision team represents the resident engineer as per the definition of the International Federation of Consulting Engineers (FIDIC), whereas the PMC represents the Employer (a delegation from the Committee). The PMC monitors the supervision teams, and they perform the duty of the Employer. Because the supervision teams are based in the field, the PMC will need to travel frequently to Kyzylorda oblast (i.e., where the works are located).
- **Consultants and Suppliers:** The PMC will directly interact with consultants and suppliers of goods and other services. The PMC will manage the various contracts, check the quality of goods, review reports prepared by the supervising engineers, and prepare all payments for the Committee to process.
- 4.11. The PMC will assist MoTC and the Committee to meet disbursement conditions, as well as for the implementation of the other projects financed by ADB, EBRD and IDB. Supervision of civil works will be contracted out by the Committee to separate consultants who will act as the resident engineers based in the field. The PMC will be responsible for monitoring the supervision teams. It is therefore expected that the PMC's presence in the field will be commensurate with its responsibility over the supervision of the works.
- 4.12. The Committee has expressed concerns that international consultants in Kazakhstan have not always matched the requirements set for satisfactory implementation of projects in the past. It is therefore paramount that the PMC should have experience in the coordination and overall implementation of large highway projects. The importance and the magnitude of the Project are additional parameters in this context; should the PMC's performance become unsatisfactory, there will not be enough time and resources available to bridge the gap in management of the Project. Therefore both the Committee and PMC will benefit from monitoring PMC performance on a regular basis (see Table 4.2 below). Detection of non-performance will help in identifying mitigation measures. PMC performance will be monitored quarterly by the Committee and included in reports to be sent to the Bank for review.
- 4.13. If non-performance (i.e., rating 1 or 2) is detected, mitigation measures and agreement reached between PMC management and the Committee will be described in the report. If no mitigation measure is agreed upon, or if it cannot be implemented or fails, then individuals at the PMC will be replaced. Ultimately, the PMC contract will be terminated if improvement in performance cannot be achieved.
- 4.14. The PMC will employ adequate numbers of qualified staff to efficiently and comprehensively fulfill the duties described above. Especially, the team composition shall support effective transfer of knowledge and skills between international and local staff. One suggested model is to employ both international and local experts for the same position for the first part of the service duration, during which knowledge transfer takes place and after which the

local staff will take over to complete the assignment. The PMC is expected to have the following experts: (i) key international staff: one team leader, one deputy manager, two senior procurement officers, one senior finance management officer, one environmental specialist, and four senior road engineers; (ii) key local staff: one deputy manager, two finance management officers, three procurement officers, one environment specialist, one resettlement specialist, one public relations officer, and twelve road engineers; and (iii) support personnel.

*Table 4.2 – PMC evaluation matrix* 

Rating 1 applicabl	(poor) to 5 (outstanding) or N-A (not le).	PMC	Team Leader	Technical team	Communi cation team
Professio	onal Competence				
<ul> <li>Profe</li> </ul>	essional expertise				
• Anal	ytical rigor				
• Innov	vation and risk-taking				
• Tech:	nical grounding (strength of education)				
Project/T	Task Management			•	
• Team	n leadership				
• Task	planning and execution				
• Appli	ied, relevant experience				
Cooperat	tion with the Committee teams		•	1	•
• Focus	s on team building				
<ul> <li>Coop</li> </ul>	peration with the Committee management				
• Coor	dinating with the various partners involved				
Commun	nications			•	
• Lister	ning				
• Speal	king persuasively				
Resource	efulness				
• Initia	tive and drive for results				
• Adap	otability				
Commen	ts on assessments rated 4 or 5				

# Component 4: Institutional Development, Road Safety and Road Services

4.15. This component (estimated cost US\$3.5 million with Bank financed share of US\$3.0 million) will comprise consulting services to: (i) review options for strengthening the Committee for Roads and improving the overall condition of the road network; (ii) develop a training program to enhance capacity of Committee staff in project management with particular emphasis on procurement, financial management, and safeguards; (iii) develop and implement a road management system; (iv) prepare a road safety improvement plan; and (v) prepare an action plan for the development of services along the Project road sections. The component also includes the provision of goods and equipment for the RMS. A grant from the Institutional Development Fund has been received to complement the activities under this component, particularly to enhance monitoring and evaluation. With regard to road safety, the Project will only finance

technical studies. The physical improvements, pilot projects, or other actions as recommended by the ongoing study on Road Safety Management Capacity Review funded by the Bank through the GRSF, will be financed by the Borrower from the Budget. The main output from the Road Safety Capacity Review study will be a medium-term action plan for achieving road safety improvements in the form of a national road safety investment strategy together with an action plan. The component will also finance the preparation of a road services action plan to facilitate private sector investments in the provision of services to transporters along the corridor. The Project will assist in developing incentives to the private sector for investments in roadside services. Funds for public sector investments, such as improvements of links to local roads, construction of bus terminals, road/rail terminals, etc. will be provided from the Budget.

## Institutional Development

4.16. The first task builds on the objectives set by the Government in the RSDP. In addition to the physical investments to improve the quality of the roads in the South-West region, this Project is designed to strengthen incrementally the institutional framework of the roads sector, in particular the organizations managing the road network, and to improve road safety and services to road users. Activities under this component will be monitored jointly with WBI. Technical studies in the first year of the Project will review options for strengthening the Committee for Roads, and will develop a comprehensive action plan for improving road management, road safety, and road service delivery. In subsequent years, the MoTC will initiate changes in the administrative structures for road management and financing, to modernize procedures for road asset management, and begin the implementation of wider private sector participation in routine maintenance of roads. In the final years of the Project, it is envisaged that nationwide implementation of improved planning and management of road maintenance, full use of competitive bidding for all road maintenance works, including routine maintenance, and completion of the civil works on the remaining road sections of the Corridor will be completed.

#### 4.17. The main activities that will be financed include:

- Technical Study in the first year of the Project to review options for strengthening the Committee for Roads and improving the overall condition of the Republican road network in Kazakhstan.
- *Training staff in the Committee staff* in project management with particular emphasis on procurement, financial management and safeguards.
- *Implementation of a Road Management System*: comprising a computerized database system with support equipment for planning and scheduling road interventions. This should be designed to improve budget planning, road investment prioritization and maintenance scheduling. Implementation of the computerized road management system will be piloted at the Committee headquarters and in two oblasts within the first two years of the Project.
- *Environmental protection*: finance increased capacity at the Committee to help address matters related to environment during design, construction and maintenance of the road network. Training workshops organized for staff of the regional/local environmental authorities.

# Road Safety

4.18. Road safety is a real concern in Kazakhstan. With the growth in motorization, road crashes have become an increasing issue. Accident rates were reported at 15 deaths per 10,000 vehicles in 2005 (see UN Economic and Social Commission report on road safety in the country for the year 2005). Casualty rates are very high on the Republican road network (e.g., 65 people died along a 215 km stretch of the corridor north of Shymkent in 2006—with traffic of between 6,000–8,000 vpd). In addition, and as the number of vehicles per inhabitant is very low (130 vehicles per 1,000 inhabitants), the risk is high for the situation to worsen proportionally to the increase in vehicle ownership.

4.19. The Bank-financed Road Safety Management Capacity Review expected to be completed by June 2009, will review road safety management capacity in Kazakhstan and develop a consensus with the government on a strategy to improve road safety. The main output from the study will be a medium-term national action plan for achieving road safety improvements in the form of a qualitative safety investment strategy and appropriate implementation steps. This will include "soft" aspects of the road safety action plan, such as: (i) public awareness campaigns, (ii) strengthening regulations to improve road safety, (iii) introduction of new approaches to enforcement, and (iv) development of new approaches for timely emergency medical services. The "hard" activities agreed upon in the road safety action plan will be financed by the Government in subsequent years of the Project. This Project will finance some of the "soft" aspects, particularly detailed studies recommended in the road safety action plan, such as: (i) preparation of a road safety design manual; (ii) physical road safety audit of all major roads; (iii) estimation of the social cost of accidents; (v) strengthening road accident research, etc.

#### **Road Services**

4.20. The lack of services geared towards the different types of road users (e.g. local population, national and international transporters) needs to be addressed. Most of the investment in this regards is expected to come from the private sector. Nonetheless, the TSDS highlights the role of the government as a catalyst for the investments that the private sector will carry out. The component will finance an assessment of services provided along the corridor by consulting with various stakeholders, prepare an action plan for the development of the services and technical assistance to foster favorable conditions to the private sector investments. The Project will help define public and private sector solutions and assist in developing an incentive scheme to attract private sector investments. Physical works to improve road safety and road services along the Project road sections (such as speed reduction measures, pedestrian and animal crossing points, bus stops, improved connections to local/service roads, etc.) will be included in the construction contracts financed under the Project. The main beneficiaries would be road users in general as well as local communities along the Corridor.

\_

<sup>&</sup>lt;sup>23</sup> The report is available at www.unescap.org/ttdw/roadsafety/StatusPapers2006/Kazakhstan\_statuspaper.pdf.

# Component 5: Supervision of Civil Works

4.21. This will finance consulting services for supervision of civil works under Components 1 and 2 estimated at US\$55.0 million. This will also include review of detailed engineering designs and supervision of the implementation of environment management plans prepared for each road section. This has been designated as a separate Project component in order to promote transparency in the disbursement of Project funds.

# **Unallocated Contingency Amount**

4.22. The total Project cost includes \$221.4 million for physical and price contingencies during implementation (about 8.9 percent of the total). Given the planned large size of the contract packages, it is anticipated that competitive bidding could result in lower prices. The contingency amount may also be utilized for additional costs of civil works on road sections for which final designs were not yet available, such as the alternative alignment required for Temirlanovka town.

# **Annex 5. Project Costs**

# KAZAKHSTAN: SOUTH WEST ROADS PROJECT

Project Cost by Component and/or Activity

Component	Project Total <sup>1</sup>	World Bank	Borrower <sup>2</sup>
1. Upgrade and reconstruction of road sections within Kyzylorda			
oblast (excluding the bypass to Kyzylorda) (about 788.5 km)	1,334.5	1,134.3	200.2
2. Upgrade and reconstruction of road within South Kazakhstan			
oblast, including the bypass to Kyzylorda (about 273.4 km)	879.1	747.2	131.9
3. Consultant services for Project Management (PMC)	6.5	5.5	1.0
4. Consultant services for Institutional Development, Road Safety			
and road Services	3.5	3.0	0.5
5. Consultant services for supervision of civil works	55.0	46.8	8.2
Unallocated amount for physical and price contingencies	221.4	188.2	33.2
TOTAL FINANCING	2,500.0	2,125.0	375.0

<sup>&</sup>lt;sup>1</sup> Identifiable taxes and duties are US\$319 million, and the total project cost, net of taxes, is US\$2,334 million. Therefore, the share of Project cost net of taxes is 97 percent.

<sup>2</sup> Government of Kazakhstan.

<sup>&</sup>lt;sup>3</sup> Physical and price contingencies are excluded in the above amounts for Components 1 and 2.

# **Annex 6. Implementation Arrangements**

# KAZAKHSTAN: SOUTH WEST ROADS PROJECT

## **Background**

- 6.1. The Government of Kazakhstan plans to invest in the upgrade of the Western Europe-Western China Road Corridor through a combination of IFI loans, PPP concessions and budget finance. The corridor development program will improve the existing road and construct bypasses and new alignments to make the corridor suitable for international traffic. The investment is estimated at US\$7.5 billion. The feasibility study carried out by consultants hired by the Committee was completed in December 2007, and was approved by the Government in February 2008. Detailed designs for all road sections to be financed under the Project were completed by December 2008.
- 6.2. The Government is seeking assistance from the ADB jointly with JICA, the EBRD, IDB, and the Bank to finance specific sections along the WE-WC Corridor. It was agreed that each institution will prepare separate Projects as follows (see Map in Annex 16):
  - ADB/JICA project to finance road sections between Shymkent and Almaty within Zhambyl oblast (about 350 km) at an estimated total cost of US\$995 million;
  - IDB project to finance 114 km of road sections between Shymkent and Almaty within Zhambyl oblast at an estimated total cost of US\$475 million;
  - The European Bank for Reconstruction and Development, will co-finance the Project "Russian Federation border–Martuk–Aktobe" estimated at US\$127 million and will assist with the concession of the Project "Almaty Khorgos" estimated at US\$1,408 million;
  - The World Bank will co-finance the Project "Aktobe region border–Kyzylorda–Shymkent" estimated at US\$2,500 million;
  - The Government has completed the construction of 273 km of road sections in Aktobe oblast, plus 205 km of the Almaty-Bishkek road that was completed in 2005 with ADB and EBRD loans. In addition, the government is financing ongoing construction of 418 km of roads in Aktobe oblast and the road link between Uzbekistan and Shymkent. The total cost of these projects is estimated to be KZT 230 billion (approx US\$1.9 billion equivalent).

# **Memorandum of Understanding**

- 6.3. A Memorandum of Understanding was agreed upon outlining the implementation arrangements. The Committee and the participating IFIs have agreed on the following set of principles that will apply to all Projects:
  - (i) Role of the Parties, Line of Reporting, and Coordination: The Committee has received full delegation from the MoTC to implement the Program and the various Projects. All parties involved in a Project will liaise with the Committee. All Projects

- will be implemented independently from the others, but all parties agreed that coordination will play an important role.
- (ii) *Implementation Arrangements:* Given the magnitude of the Program, the Committee will need more capacity and expertise than currently available. The Committee will therefore hire the PMC with international expertise to coordinate the Program. The role of the PMC will be to bring sufficient expertise to implemen rapidly the various Projects. In the medium term, the PMC will transfer knowledge to the Committee. The performance of the PMC will be evaluated quarterly and the outcome of these reviews will be included in Progress Reports to be sent to all parties. Day to day supervision of the civil works will be contracted out by the Committee to separate consultants who will act as the resident engineers based in the field.
- (iii) *Progress Reports:* The Committee assisted by the PMC will issue quarterly reports focusing on the coordination between the various projects and the outputs in each quarter. To the extent possible the format of the quarterly reports will be similar regardless of which financial institution is involved. Quarterly reports will be shared among all parties.
- (iv) *Project Performance Monitoring:* The responsibility for Project performance monitoring will remain with the Committee, but most of the activities related to this will be implemented by the PMC. Project monitoring will also entail close supervision of the civil works to ensure their quality. Project Performance Monitoring will be shared with all the parties.
- (v) Sharing of Information: As a general principle, the Committee and the IFIs will share information relevant to the Program and to the Projects. Quarterly reports, monitoring and evaluation information, recommendations, reporting on technical issues etc., when distributed, will be copied to the Project Director (Deputy Chairman of the Committee), to the PMC manager and to the Project Team Leaders of each IFI.
- (vi) Environment and Resettlement Policy Frameworks: The ADB agreed to assist the Committee for Roads with the preparation of an "Environmental Assessment Review Framework" for the Program. The framework will ensure a unified standard across all civil works financed under the various Projects. Similarly, the World Bank agreed to assist the Committee with the preparation of a "Resettlement Policy Framework" that will apply to the whole Corridor. Both frameworks were reviewed in detail and endorsed by the Committee prior to publication on the MoTC website and will be made available in the oblast Committee offices.

# **Role of the Project Management Consultants**

6.4. The PMC is expected to complement the capacity and staffing of the Committee. The responsibility of the PMC is threefold. First, the PMC will assist the Committee during the implementation of the Project by reviewing the engineering design, reviewing the preparation of the bidding documents, assisting the Committee during bid evaluations, coordinating and ensuring quality control of the works, verifying payment certificates before presentation to the

employer for approval and signature, and preparing progress reports. The participation of the PMC should result in better control of the implementation schedule and the provision of quality assurance for executed works, goods and services. Second, the PMC will facilitate the institutional reform of the Committee and the transfer of skills to the Committee staff through training and day-to-day operations. It should aim at a systematic transfer of knowledge and best practice to Committee staff so that upon expiration of the PMC contract the Committee will have attained capacity to implement quality projects. Finally, the PMC will assist the Committee in fulfilling the dated covenants, some of which are disbursement conditions.

- 6.5. The PMC will have one team leader and five units, i.e., one Specialists Unit and four Project Units, each of which will be dedicated to one IFI project. The World Bank will finance three Project Units dedicated for projects along the WE-WC Corridor financed by the Bank, EBRD and IDB, and the ADB will separately finance another Project Unit. Each Project Unit, consisting of one senior road engineer and three local road engineers, will coordinate with one another when necessary to attain consistency and efficiency. The ADB Project Unit will hire one senior procurement officer for its project segment, while other IFI units will share one international senior procurement officer and three local officers within the Specialist Unit. The Specialists Unit will be financed out of the World Bank Project and will provide expertise in areas of financial management, procurement, environment, resettlement, legal, and public relations. The Specialists Unit is lead and tasked by the PMC Deputy Manager to provide ondemand resources to each Project Unit for relevant matters.
- 6.6. For the World Bank financed Project, the PMC will be responsible for the following:
  - (i) Review of detailed design and preparation of bidding documentation: The PMC will review, verify and comment on the detailed design of the road works before the bidding and shall be responsible for the recommendations to update the technical solutions when necessary. In reviewing the designs the PMC will ensure that appropriate standards and recognized international best practice have been applied to the design<sup>24</sup> and that qualified EMPs are produced by the bidders before commencement of works. The PMC is expected—if it believes that the design does not adequately cover the scope of the works or does not comply with internationally accepted design practice—to submit substantiated recommendation for design modifications or amendments.
  - (ii) Assistance to the Committee during the entire procurement process: Procurement of works, goods and services will be conducted through the procedures as specified in the World Bank's Guidelines: Procurement under IBRD Loans and IDA Credits. The PMC will provide assistance to the Committee at each phase of the bidding process.

- 59 -

-

<sup>&</sup>lt;sup>24</sup> It is advised that the road design be prepared on the basis the SNIP norm; however, the Eurocode or the AASHTO standards may be referred to as necessary.

Table 6.1: PMC staffing

Unit	Position	Internation	nal	Local		Financed by
Ullit	rosition	person	month	person	month	rmanced by
PMC	Team leader	1	48			World Bank
Specialists Unit	Deputy manager <sup>†</sup>	1	20	1	48	World Bank
	Finance mgmt officer <sup>†</sup>	1 (senior)	12	2	96	World Bank
	Procurement officers <sup>†</sup>	1 (senior)	6	3	72	World Bank
	Environment specialist <sup>†</sup>	1 (senior)	12	1	18	World Bank
	Resettlement specialist <sup>†</sup>	1 (senior)	9	1	24	World Bank
	Public relations officers			1	12	World Bank
Project Unit (WB)	Road engineers	1 (senior)	48	3	48	World Bank
Project Unit (ADB)	Team Leader/Highway Engineer	1	42			ADB
	Deputy Team Leader/Hwy Engineer			1	42	
	Procurement Specialist	1	6	1	10	ADB
	Financial Mgmt Specialist			1	42	ADB
	Transport economist	1	1	1	1	ADB
	Environmental specialist	1	1	1	1	ADB
	Social Development Specialist	1	2	1	2	ADB
Project Unit (IDB)	Road engineers	1 (senior)	30	3	90	World Bank
Project Unit (EBRD)	Road engineers	1 (senior)	24	3	72	World Bank
Support Staff		TBD		TBD		The Committee
Total employment fi	nanced by the Bank	9	209	18	480	
Total employment (e	xcl. supporting staff)	14	261	24	578	

<sup>&</sup>lt;sup>†</sup> For training and capacity building purposes, this tentative staffing plan suggests overlap between duties of international staff and local staff. The Consultants may adjust the suggested staffing plan where needed

Ministry of Transport & Communications Committee for Roads (Project Director) Project Management Consultants (PMC) Area Specialists: Procurement Team leader Financial Specialists Unit Management **Deputy Manager** (unit leader) Environment Area specialists (available to all IFI teams) Resettlement Public Relations Project Unit: Project Unit: Project Unit: Project Unit: **Financing** I IBRD Team | ADB Team **IDB Team** I EBRD Team IBRD ADB IDB Supervising Supervising Supervising Supervising **EBRD FIDIC** Consultants Consultants Consultants Consultants Arrangements Contractors Contractors Contractors Contractors Sub-contractors Sub-contractors Sub-contractors **Sub-contractors** 

Figure 6.1- PMC structure

- (iii) Construction management: The PMC will be responsible for oversight of the consultant teams who supervise the civil works financed under components 1 and 2. This assignment will last for the entire Project implementation period. The PMC will develop a quality management system to ensure that quality of the civil works and their supervision meet the requirements set forth in the bidding documents and the relevant Kazakh legislation concerning construction. The PMC will also ensure that during construction works all environmental and social provisions are duly implemented, that the Contractors are in compliance with approved EMPs and that chance find procedures for physical cultural property are universally respected.
- (iv) Implementation of road safety and road services components of the Project: The PMC will be responsible for the implementation of all activities under component 4 of the Project. This includes procurement of services, the preparation of action plans (for road safety and for road services), and their implementation and monitoring. The Committee will be responsible for the evaluations of proposals, but the PMC will prepare all TORs, bidding documentation, reports and any activity that is needed until the award of contracts.
- (v) Communication, information to the public: It will be crucial to make all information transparent – beyond the information related to procurement processes. For example, making the road investment plans public (with the plan for the specific works when possible) may limit opportunities for speculative behavior by some who may benefit from government compensation. This is why the PMC will be charged with developing a communication plan, including the use of user satisfaction surveys or citizen report cards to monitor the efficiency of implementation of the communication plan and of the Project. The PMC will manage the information campaign about the Project during the entire duration of implementation. This campaign will be conducted in the name of the Committee. It will target a large audience. Several products may target different groups and different matters (communities, public at the national level, construction industries, awareness campaigns—road safety, HIV-AIDS, etc) using different media. The support for the media should remain inexpensive and priority should be given to frequent and concise messages. The main objective should remain the information of all local communities along the corridor about the works, the services provided to the communities, the costs, the companies involved, etc.
- (vi) Institutional Development and Skills/Expertise Transfer (component 4 under Annex 3): The PMC will help the Committee meet the objectives of the Road Sector Development Program 2006-2012. The main activities of the program are described under component 4 of the Project. The scope of the PMC's assistance will include preparation of all TOR, bidding documentation, reporting and necessary activities until the award of contract, procurement, and oversight of the institution building programs during their implementation. The objective of the PMC should be to ensure that by the end of its assignment, the Committee staff will have the knowledge to adjust to the institutional reforms that they will be putting into place. The PMC will also design the program for training, seminars, mentoring activities, etc. Those activities will be targeting both operational and managerial levels of the Committee.

- (vii) Assistance to the Committee to match the dated covenants that act as the disbursement conditions: During its assignment, the PMC will be responsible for monitoring the various activities that will ensure that all conditions and dated covenants under the Project are satisfied on or before the specified dates. The PMC will help the Committee to complete those activities. Performance of the PMC also will be assessed against this assistance to the Committee.
- (viii) *Quality Management System:* The PMC will be responsible for development and implementation of a quality management system (QMS) to ensure fulfillment of the client's needs. The objectives of the QMS are: (i) to provide a concrete framework for performance evaluation; (ii) to systematically control Project quality based on internationally accepted standards; (iii) to detect potential problems at earlier stages, and in advance, to minimize Project costs; and (iv) to be accountable for and responsive to complex needs/wants of the client. Documentation and implementation of QMS shall satisfy the standardization established in the ISO 9001 or equivalent QMS frameworks that are proven to be effective.

# **PMC Performance Monitoring**

- 6.7. Good performance from the PMC is expected from the outset. The Committee management has expressed concerns that international consultants sent to Kazakhstan have not always matched the requirements set for satisfactory implementation of projects in the past. It is therefore paramount that the PMC be skilled at coordination and overall implementation of large highway projects.
- 6.8. The importance and magnitude of the Project carry additional significance in this context: non-performance could cause delays and increase the overall cost of the Project. Therefore both the Committee and the Project will benefit from monitoring the performance of the PMC on a regular basis. Detection of non-performance will help to implement mitigation or correction measures early. PMC performance will be monitored on a quarterly basis through a formal report endorsed by the Committee management and the report will be sent for review to the IFIs financing the Project. The first report will be issued within 15 days following the inception report drafted by the PMC. If non-performance is detected and justified, mitigations/correction measures and agreement reached between the PMC management and the Committee should be described in the report. If no mitigation/correction measure is agreed upon, or if it cannot be implemented or fails, then individuals at the PMC will be replaced, or the PMC contract will be terminated depending on the situation.

# MEMORANDUM OF UNDERSTANDING AND COOPERATION BETWEEN THE MINISTRY OF TRANSPORT AND COMMUNICATIONS AND THE INTERNATIONAL FINANCIAL INSTITUTIONS

#### Introduction

# **Article 1. Project Description**

The Government of Kazakhstan plans to invest in the upgrade of the entire Western Europe-Western China Road Corridor ("the Program"). The Program will improve the existing road and construct bypasses and new alignments to make the corridor suitable for international traffic. The investment is estimated US\$6.7 billion. The feasibility study, which was completed in December 2007, was approved by the Committee for Construction, Housing and Communal services of the Ministry of Industry and Trade of the Republic of Kazakhstan on June 4, 2008 # 220-PIR. Detailed designs are ongoing and should be completed in December 2008.

# **Article 2. Participating International Finance Institutions**

The Government is now seeking assistance from the Asian Development Bank (ADB), the European Bank for Reconstruction and Development (EBRD), Islamic Development Bank (IDB) and the International Bank for Reconstruction and Development/World Bank (IBRD) to finance specific sections along the corridor ("the Projects"). It is agreed that each institution will prepare separate Projects as follows:

- (i) the Asian Development Bank and Japan Bank for International Cooperation will jointly finance the Project within "Taraz Korday" section;
- (ii) the Islamic Development Bank will co-finance the Project within "South Kazakhstan region border Taraz" section;
- (iii) the European Bank for Reconstruction and Development will co-finance the Project "Russian Federation border Martuk Aktobe" and assist with the concession of the Project "Almaty Khorgos";
- (iv) the World Bank will co-finance the Project "Aktobe region border Kyzylorda Shymkent".

Since each party desires a common approach to be agreed upon for implementation arrangements the Ministry of Transport and Communications of the Republic of Kazakhstan and the above mentioned International Financial Institutions have therefore agreed on the following set of principles that will apply to all Projects.

# General Provisions Article 3. Role of the Parties, Line of Reporting, and Coordination

The Committee for Roads of the Ministry of Transport and Communications of the Republic of Kazakhstan (further Working Member) has received full delegation from the Ministry of Transport and Communications of the Republic of Kazakhstan to implement the Program and the various Projects. All parties involved in a Project will liaise with the Working Member. All Projects will be implemented independently from the others, but all parties agreed that coordination will play an important role.

# **Article 4. Implementation Arrangements**

Given the magnitude of the Program, the Working Member will need more capacity and expertise than currently available. The Working Member will therefore hire Project Management Consultants with international expertise to coordinate the Program. Project Management Consultants (PMC) will be financed out of the loan proceeds of the International Bank for Reconstruction and Development, Asian Development Bank and from the Republican Budget. The role of the PMC teams will be to bring sufficient expertise to implementing rapidly the various Projects. In the medium term, the PMC teams will transfer knowledge to the Working Member. The performance of the PMC teams will be evaluated quarterly and the outcome of these reviews will be included in Progress Reports to be sent to all parties.

There may be different PMC teams for different financial institutions. If this happens, the various teams should work in close cooperation and under the same set of guidance from the Working Member. Day to day supervision of the civil works will be contracted out by the Working Member to separate consultants who will act as the resident engineers based in the field.

# **Article 5. Progress Reports**

The Working Member assisted by the PMC will issue quarterly reports focusing on the coordination between the various projects and the outputs in each quarter. To the extent possible the format of the quarterly reports will be similar regardless of which financial institution is involved. Quarterly reports will be shared among all parties.

# **Article 6. Project Performance Monitoring**

The responsibility for project performance monitoring will remain with the Working Member, but most of the activities related to this will be implemented by the PMC teams. Project monitoring would also entail close supervision of the civil works to ensure that the quality of the works reaches acceptable standards. Project Performance Monitoring will be shared with all the parties.

## **Article 7. Timeframe**

The Ministry of Transport and Communications of the Republic of Kazakhstan plans to present the Program to the Parliament for consideration December 2008. The financial institutions therefore commit to provide draft Loan Agreements for the corresponding first phases of the various Projects as soon as possible.

#### **Article 8. Sharing of information**

As a general principle, the Working Member and the financial institution will share information relevant to the Program and to the Projects. Quarterly reports, monitoring and evaluation information, recommendations, reporting on technical issues etc., when distributed, will be copied to the Deputy Chairman of the Working Member, to the head of the PMC teams and to the Project Team Leaders of each financial institution.

#### **Article 9. Environment and Resettlement Policy Frameworks**

The Ministry of Transport and Communications of the Republic of Kazakhstan has prepared an Environmental Assessment Review Framework under the ADB's assistance and a Resettlement Policy Framework under the World Bank's assistance and has agreed to apply them for the Program. The frameworks ensure unified standard across all the works that will be financed under the various Projects. The IFIs agreed to the main principles of the above safeguard frameworks. If required, the Ministry of Transport and Communications of the Republic of Kazakhstan will have separate safeguard frameworks for each IFI based on the main principles taking into account specific requirements by the IFIs. Both frameworks had been reviewed in detail and revised by the Working Member before they were published on the website of the Ministry of Transport and Communications of the Republic of Kazakhstan in June, 2008. Disclosure and acceptance by each financial institution will be a condition for their respective appraisal procedures.

# Final Provisions Article 10. Effectiveness

This Memorandum shall be drawn in five copies, in English and Russian, a copy for each Party. The Memorandum shall become effective upon execution of the signatures of all parties.

#### Signatures:

Ministry of Transport and Communications The Republic of Kazakhstan	D. Kuterbekov
International Bank for Reconstruction and Development	S. Shatalov
European Bank for Reconstruction and Development	U. Hindstrom
Asian Development Bank	S. Wermert
Islamic Development Bank	H. Maaruf

# **Annex 7. Financial Management and Disbursement Arrangements**

## KAZAKHSTAN: SOUTH WEST ROADS PROJECT

## **Background**

- 7.1. An assessment of the financial management capacity of the Finance Department of the MoTC was conducted in April 2008. The aim of the assessment was to determine the capacity of the Finance Department to provide satisfactory financial management support for the Project. The assessment focused on arrangements for budgeting, accounting, internal control, financial reporting, and auditing. The former Committee for Infrastructure Development under the MoTC, now Committee for Roads, implemented a number of investment projects, including the World Bank financed RTRP (Loan IBRD-44370) that closed in December 2007. Following recent restructuring, all financial management functions have been transferred to the Finance Department within the MoTC. The Finance Department has a special unit that handles some aspects of financial management functions (budgeting and disbursement) for investment projects.
- 7.2. Past financial management supervision of the Committee, including a fiduciary review carried out in August 2007, showed significant fiduciary weaknesses in financial management, disbursement and procurement. Following the fiduciary review, a set of actions was developed to resolve the weaknesses and strengthen the overall fiduciary framework. Although most of the actions have since been implemented, the fiduciary review highlighted weaknesses in financial management and procurement capacity that were confirmed during the financial management assessment, including non-submission of interim financial reports, delayed audits, internal control weaknesses and lack of familiarity with World Bank disbursement procedures. There is, therefore, the risk that these weaknesses will persist unless remedial measures are taken to address these within the Finance Department of the MoTC. These measures include hiring of qualified international and local procurement and financial management staff through the PMC, developing a manual of policies and procedures for procurement and financial management, including budgeting, accounting, reporting, internal control and audit. Automation of the Project accounting and reporting system will also ensure accuracy, timeliness, and reliability of accounting transactions and financial reporting.
- 7.3. Due to capacity constraints within the Finance Department of the MOTC, establishment of satisfactory financial management arrangements required external consultant input. It was, therefore, agreed that a short-term financial management consultant would be contracted to set up a project financial management system, and train staff of the Finance Department who have been assigned responsibilities for Project accounting, reporting and disbursement. The consultant has helped customize the *Luka Budget* system to meet Bank project accounting and reporting requirements. To ensure continued adequacy of the project financial management system, a financial management consultant would be hired, as part of the PMC, to support and train MOTC staff assigned financial management and disbursement responsibilities during Project implementation.
- 7.4. *Fiduciary Risk at the Project Level:* Based on past FM supervision of the closed RTP, that included the fiduciary review carried out jointly with procurement, and the financial

management assessment, it was established that the MOTC did not have a financial management system that fully met the Bank's minimum requirements. In particular (i) project accounting system was manual and not integrated with the ministry's accounting system; (ii) lack of experienced and skilled project financial management staff; (iii) untimely and irregular submission of interim financial reports; (iv) delayed submission of audited project financial statements; and (v) ineffective internal control procedures that do not ensure completeness and accuracy of financial transactions, and safeguarding of assets. However, some actions have been implemented to strengthen the financial management system, including adapting the MOTC accounting system to support project accounting and reporting. A manual of financial procedures is being developed and will be completed before the project become effective, and staff will be trained on Bank procedures for financial management and disbursement during implementation.

- 7.5. *Fiduciary Risk at the Country Level:* As noted above the Project will be implemented in an environment of significant fiduciary risk and high perceived corruption. However, appropriate mitigation measures have been put in place, including oversight over procurement function by the Project Management Consultants. The PMC will be responsible for the preparation of bidding documents, preparation of bid evaluation reports, coordination and oversight of quality control of works, preparation of progress reports, etc., for all operations along the project road sections (including the civil works financed by other IFIs). Additional measures to mitigate corruption risk are included in the Project Governance and Corruption Plan, including internal audit, enhanced supervision that will include detailed review of transactions, and financial and technical/procurement audits.
- 7.6. *Conclusion*. The overall financial management risk for the Project was assessed to be *High* before mitigation measures and *Substantial* after mitigation measures. The Project will be implemented in an environment of high perceived corruption, therefore adequate mitigation measures are included in the design of the Project to ensure that the residual risk is acceptable, including: (a) regular review of compliance with the internal control framework as described in the POM; (b) regular and timely reconciliation of bank accounts; (c) timely submission of interim financial reports that will be used to monitor overall financial activity of the project; (d) the project financial statements will be audited by independent auditors hired on terms acceptable to the Bank; and (e) regular supervision by the Bank will be conducted to ensure continued adequacy of the financial management and procurement arrangements. Table 7.1 summarizes the financial management assessment and risk ratings of this Project.

Table 7.1: Financial Management Assessment and Risk Ratings

	Before	Risk Mitigating Measures	After
INHERENT RISKS			
Country level			
Weak Public Financial Management (FM) institutions (see text below)	Н	No ongoing program to strengthen financial management. MoTC to establish and maintain, with support of PMC, project FM system, and have project accounts audited by independent auditors acceptable to the Bank	S
Entity level		-	
FM arrangements established by MoTC are weak and not capable of providing effective financial management support to the Project	S	Action plan developed to strengthen FM systems of the MoTC, including contracting FM consultant, automation of accounting system and development of POM.	M
Project level			
Project amount is large, with big civil works contracts that are susceptible to corrupt practices and official manipulation	Н	PMC to be established and will oversee procurement function and contract management	S
OVERALL INHERENT RISK	Н		S
Control Risks			
Budget	M	MoTC has adequate budgeting capacity that will be used for the Project	M
Project accounting is largely manual with no inbuilt controls, leading to incomplete and inaccurate processing of accounting transactions	S	MOTC Accounting system ( <i>Luka Budget</i> software) to be upgraded, with inbuilt controls to ensure reliability and enhance timeliness in processing transactions and financial reporting.	M
Internal Controls, including internal audit. Weak internal control procedures leading to inaccuracies and poor record-keeping. No proper policies and procedures manual to guide project staff	S	Project FM/accounting policies and procedures, including internal control procedures to be documented in a manual and compliance reviewed periodically by the Internal Audit Board	M
Funds flow. Past problems with management of Special account pose significant risks of misuse. However, project will not utilize Designated Account	S	Project will not use Designated Account, but necessary controls to be put in place for the reimbursement procedure. Any accounts associated with the project will be subject regular reconciliation, on a monthly basis.	M
Financial Reporting. Manual project accounting system not capable of generating timely and reliable financial reports. Past reports under closed project submitted with delay	S	MOTC automated system to be upgraded, with capacity to generate interim financial reports. Financial reports to be generated by the accounting system to ensure timeliness and reliability	M
Auditing. Past audit reports submitted to the Bank with significant delay (common problem with audit reports in the World Bank portfolio). 2006 and 2007 audit reports submitted after 15 months and 4 months, respectively, from due date	Н	Agreement reached for separate audit arrangements, with auditor being contracted separately by the MoTC. Adequate budgetary provisions to be made for audit.	S
OVERALL CONTROL RISK	S	Mitigation measures to be implemented Prior to Board Presentation	M
RESIDUAL RISK RATING	Н	Risk based FM supervision	S

## **Country issues**

- Recent Accounting and Auditing Reports on the Observance of Standards and Codes 7.7. (ROSC) for Kazakhstan show that capacity of the accounting profession is still low, and there is no critical mass of professionally qualified accountants, particularly in the public sector. Knowledge of internationally recognized accounting and auditing standards, such as International Financial Reporting Standards (IFRS), International Public Sector Accounting Standards (IPSAS) and International Standards on Auditing (ISA), is limited due to the lack of capacity, both in the public and private sectors. Most project implementing entities use the cash basis of accounting, which is not in accordance with IFRS, but is allowed under IPSAS, and in many cases can be sufficient for proper project accounting. Internal audit functions exist only in very few institutions; and external audit is practiced by individuals and a small number of local audit firms. Most audits required by international donors have traditionally been performed by one of the four large international firms. The Bank conducted a review of local audit firms to determine their acceptability to audit Bank-financed projects and found only two Kazakhstanbased firms that would be eligible to do so. The Bank currently does not place any reliance on audits conducted by the Accounts Committee, the equivalent of the Supreme Audit Institution in the country.
- 7.8. Corruption is widely acknowledged as a major issue in the country, as indicated in the Transparence International Corruption Perception Index for 2007 (# 150 with CPI of 2.1) and 2008 (# 147 with CPI of 2.2). Corruption is perceived to be particularly prevalent in the road construction sector. The Project will thus be implemented in an environment of high perceived corruption, and appropriate mitigation measures have been put in place, including oversight over procurement function by the PMC. Additional measures to mitigate corruption risk are included in the Project Governance and Corruption Plan (see Annex 11) including internal audit, enhanced supervision that will include detailed review of transactions, and financial and technical/procurement audits.

#### **Implementation arrangements**

7.9. The MoTC, through the Committee, will be the implementing agency. The PMC will be contracted to assist the Committee through the provision of technical support for management and reporting during implementation. Financial management support for the Project will be provided by the Finance Department of the MoTC.<sup>25</sup> The planning division within the finance department will be strengthened to enhance its capacity in project budgeting, accounting, disbursements and reporting. The Finance Department will manage Project funds, including the Designated Account, maintain accounts and have the accounts audited. The PMC and Finance Department will collaborate to ensure that Project resources are managed with due attention to economy, efficiency and effectiveness, and that Project funds are used only towards the realization of Project objectives. The risk rating for the implementing entity is *High* before mitigation and *Substantial* after mitigation measures.

<sup>&</sup>lt;sup>25</sup> This follows the restructuring of the Committee that transferred the fiduciary functions to the MoTC. The Finance Department has established a special unit dealing with financial management arrangements for projects financed by IFIs.

- 7.10. **Strengths.** The Financial Department of the MoTC has a strong team headed by the Financial Director. The Ministry uses a computerized accounting system designed for budget organizations. The software has been adapted to suit the Project environment, including ability to generate interim financial reports. Control procedures established for budget organizations are also relatively strong and compliance is monitored by the financial Control Committee and the Accounts Committee. The MoTC has also established an Internal Audit Board that is expected to further strengthen the internal control environment.
- 7.11. **Weaknesses and Action Plan**. Staff turnover at the Committee has been high due to low staff salaries, resulting in scarcity of skilled and experienced fiduciary staff. Knowledge of Bank procedures for financial management, disbursement and procurement is, therefore, low. Compliance with financial covenants, including timely submission of audit reports and interim financial reports, has been poor, with the 2006 and 2007 audit reports submitted after considerable delays (September 2008 for the 2006 audit report, and November 2008 for the 2007 audit report).
- 7.12. Although there is an Internal Audit Board within the MoTC, the internal control environment is still weak, with no proper policies and procedures manual to guide staff. These weaknesses will be mitigated by requiring use of a manual of financial management procedures (incorporated in the POM), automating the accounting system and hiring a financial management consultant for the Project as part of the PMC. Commitment will be sought from the MoTC for regular review of systems and procedures for the Project by the Internal Audit Board and timely submission of interim financial reports and audited financial statements.
- 7.13. In order to strengthen the financial management function and make it acceptable the actions listed in the table below were agreed during negotiations.

Table 7.2: Financial Management Action Plan to be Implemented by MoTC

	Agreed Action	Deadline	Status
1	FM consultant to be hired to help set up the financial management system for the Project, including development of a manual of financial procedures, automation of project accounting system and training of project financial management staff. The accounting system to have capacity to record and report project transactions and generate interim financial reports	Negotiations	Consultant has been contracted and accounting system modified to support project accounting and reporting.
2	Manual of financial procedures (incorporated in the POM) developed and satisfactory to the Bank	Prior to Project effectiveness	Consultant contracted and work is ongoing.
3	The software currently used by the MoTC ( <i>Luka Budget</i> ), to be modified and upgraded to have capacity to generate interim financial reports	Negotiations	Accounting system satisfactorily adapted.
4	Training to be provided to FM staff by the FM consultant recruited as part of the PMC.	During implementation	To begin as soon as PMC established.

- 7.14. **Internal Control Systems and Internal Audit**. The MoTC follows the manual of accounting and reporting for state organizations (No. 30). However, the manual does not specifically describe the internal control mechanisms to be followed in the application and use of Project funds and project implementation. A POM is being developed that will describe key internal control mechanisms to be followed by staff in the application and use of Project funds, with specific focus on ensuring completeness of accounting transactions, reliability of accounting data, safeguarding of Project assets, including safe custody of cash and other assets, proper monitoring of contracts, proper authorization and documentation of all Project expenditures, and full accountability of Project funds.
- 7.15. The manual will reflect the Project structures that allow for adequate segregation of functions, defined job descriptions for staff with different authority levels, as well as the flow of funds to support Project activities, including proper management of bank accounts, regular reconciliation of bank statements with Project records and bank account signing mandate that requires at least two signatures to withdraw cash from the bank. The manual will include a chart of accounts for the Project to facilitate the processing and monitoring of Project transactions. The manual will also provide for regular financial reporting to ensure close monitoring of Project activities, as well as the flow of funds.
- 7.16. The MoTC has an Internal Audit Board, but its functions and effectiveness have not been assessed. It is expected that the Internal Audit Board will play the role of internal audit and keep under review systems and procedures followed in the management of Project resources, ensuring compliance with financial covenants, and rules and regulations governing budget organizations in the management of public resources. During Negotiations assurance were given by the MoTC that the Internal Control Board will review, on a regular basis, systems and procedures established to ensure an effective Project financial management system. The risk associated with internal control and audit is *Substantial* before mitigation and *Moderate* after mitigation measures.
- 7.17. **Accounts and Records**. Accounts and records for the closed RTRP were maintained manually using an Excel spreadsheet, which is susceptible to frequent errors and inaccuracies. Document retention was also found to be poor making it difficult to verify certain expenditures. Such weaknesses are being mitigated by modifying the Ministry's computerized accounting system to support project accounting and reporting requirements. Project accounting and reporting have been incorporated in the MOTC accounting system, and the software used in the Finance Department (*Luka Budget*) has been reconfigured and now has capacity to support project accounting and reporting functions. The accounting system will ensure proper tracking of resources and expenditures; and generate quarterly financial reports in formats acceptable to the World Bank. A financial management consultant will be contracted to establish a computerized accounting system that meets Project accounting and reporting requirements. The risk associated with accounting and records is *Substantial* before mitigation and *Moderate* after risk mitigation measures.
- 7.18. **Staffing.** There are about 40 staff members in the Finance Department of the MoTC, headed by the Finance Director. Accounting functions for investment projects are handled by a special unit within the Department. Due to high staff turnover, few staff members are familiar with World Bank requirements and procedures for financial management and disbursements.

Project financial management functions will be formally assigned to this unit within the Finance Department, with specific people assigned the responsibility for Project accounting, reporting and disbursement. Training will be provided by a financial management consultant to equip the staff with skills necessary to carry out the assigned functions and responsibilities. The Finance Director will have overall responsibility for Project financial management, including timely audit of Project financial statements. The risk rating for the staffing is *Substantial* before risk mitigation and *Moderate* after mitigation measures.

- 7.19. **Information Systems.** The MoTC uses *Luka Budget* for accounting and budget execution report submissions to the Ministry of Finance. Accounting and reporting under the closed RTRP Loan was never integrated into the ministry's accounting system. Project related transactions were processed manually and reports prepared using excel spreadsheets. The *Luka Budget* has been reconfigured and upgraded to support accounting and reporting requirements of the project, including capacity to generate interim financial reports. Reconfiguration of the *Luka Budget* is part of the actions to strengthen financial management arrangements for the project that was agreed during negotiations. The risk associated with information system is *Substantial* before mitigation and *Moderate* after risk mitigation measures.
- 7.20. **Interim Un-audited Financial Reports.** The former Committee for Transport Infrastructure Development did not submit quarterly financial monitoring reports on a regular basis for the closed RTRP. The Finance Department of the MoTC will be responsible for submission of interim un-audited financial reports (IFR) that will be generated by the Project accounting system based on formats agreed with the World Bank. The reports, to include Statement of Sources and Uses of funds, use of Funds by Project activities (Components & Expenditure Categories), and Procurement Reports, will be submitted to the World Bank within 45 days of the end of each quarter, with the first reports under the proposed Project being submitted after the end of the first full quarter following initial disbursement. The risk associated with financial reporting is *Substantial* before mitigation and *Moderate* after mitigation.
- 7.21. **Planning and Budgeting.** The MoTC will be responsible for preparing annual budgets for the Project based on procurement plans and in line with the POM. These budgets will form the basis for allocating funds to Project activities, both from the loan and the national budget. The budgets may be prepared in accordance with the IFR format (disbursement categories, components and activities, account codes, and broken down by quarter). Annual budgets should be agreed with the Bank before being submitted to the Ministry of Finance for final approval. Approved annual budgets will then be entered into the accounting system and used for periodic comparison with actual results as part of the interim financial reporting. The risk associated with planning and budgeting is assessed as *Moderate*.
- 7.22. External Audits and Operational Reviews. Projects implemented by the MoTC have not been audited regularly; and audit report for fiscal years 2006 and 2007 that were due for submission on June 30, 2007 and June 30, 2008, respectively, were submitted to the Bank with considerable delay on September 24, 2008 and November 1, 2008, respectively. Although the reports contained unqualified opinion and issued by audit firm acceptable to the Bank, such delays violate the financial covenants contained on the Loan Agreement.

7.23. The loan agreement will require annual audits of the Project financial statements, to be performed by independent private sector auditors acceptable to the World Bank and in accordance with International Standards on Auditing (ISA), issued by the International Auditing and Assurance Standards Board of the International Federation of Accountants (IFAC), as stated in the guidelines: Financial Management Practices in World Bank-financed Investment Operations (November 2005), as may be revised from time to time. The auditors' TOR will be prepared by the MoTC and cleared by the World Bank before the engagement of the auditor. The TOR will include both the audit of financial transactions and an assessment of the operation of the Project accounting system as well as a review of the internal control mechanisms. The annual audit reports will be in a format in accordance with ISA and World Bank guidelines, and they will include an opinion on the Project financial statements, incorporating the Statement of the Designated Account and Statement of Expenditure (SOE) Withdrawal Schedule, if used, as well as a management letter. The audit reports will be submitted to the Bank no later than six months after the end of the fiscal year to which they relate (i.e., by June 30 of each year).

7.24. In addition to the financial statement audit, there will be annual technical inspections and procurement audits by an independent consultant reporting to the MOF and the IFIs. The technical inspections will be carried out by oblast roads laboratories under the supervision of the PMC. The activities will include the taking of physical samples (cores) at randomly selected locations along completed road sections and their laboratory analysis, in order to verify compliance with technical specifications. The procurement audit, to be carried out by international consultants hired by the Bank, will include review of procurement processes and procurement results, verification of payments, price comparison between contract price and market price, etc. Specific forensic audits will be required if major allegations of corruption surface during project implementation. Table 7.3 identifies the audit reports that will be required to be submitted by the MoTC together with the due date of submission. The risk associated with external audit is considered *High* before mitigation and *Significant* after mitigation.

Table 7.3: Audit Reports to be Submitted by MoTC

Audit Report	Due Date
Project financial statements to include Project Balance Sheet, Sources	Within six months of the
and Uses of Funds, Uses of Funds by Project Activity, SOE Withdrawal	end of each fiscal year and
Schedule, Designated Account Statement, and Notes to the financial	also at the closing of the
statements, and Reconciliation Statement.	project
<b>Technical Inspections</b> to include the taking of physical samples at	Results included in
randomly selected locations along completed road sections and their	Quarterly Progress
laboratory analysis, in order to verify compliance with technical	Reports to be submitted to
specifications.	the Bank
<b>Procurement Audits</b> to include review of procurement processes and	Within six months upon
procurement results, verification of payments, price comparison between	request from the World
contract price and market price, etc. This will also include verification of	Bank
technical inspections, conducted by oblasts roads laboratories supervised	
by the PMC.	

- 7.25. **Designated Account**. A decision was made by the Borrower that this Project would not have a Designated Account in order to improve control over Project funds in addition to the Borrower's ability to process small payments through the treasury system.
- 7.26. Flow of Funds and Disbursement Arrangements. The proceeds of the loan will be disbursed over a period of four years, or for such longer period as will be agreed with the Bank. Due to the desire by the Borrower to improve control over Project funds and the ability to process small payments through the treasury system, the Government made a decision not to have a Designated Account. The Project will follow transaction-based disbursement procedures (i.e., direct payment, reimbursement and special commitments). Withdrawals from the Loan Account will be requested in accordance with the guidance to be given in the Disbursement Letter. Withdrawal applications will be signed by two persons: (i) an authorized representative of the Borrower (Ministry of Finance) and (ii) the Deputy Minister of the MoTC or another designated person as authorized by written delegated authority from the Ministry of Finance. The MoTC, through its Finance Department, will be responsible for keeping the supporting documentation for all Project expenses, especially those reported through SOEs, and for making them available to World Bank supervision missions as well as to the auditors. Since project will not utilize the Designated Account there is no potential risk posed by the global financial crisis that might impact project funds in a negative way. The risk associated with funds flow and disbursement is, therefore, Moderate with no additional risk mitigation measures.
- 7.27. **Withdrawal Applications**. The MoTC will be responsible for preparing and submitting withdrawal applications, along with appropriate documentation. Expenditures relating to direct payments will be fully documented (i.e., invoices, shipping documents, etc.) irrespective of the contract value. However, reimbursement applications will be fully documented for contracts above the limits provided below:
  - (a) Works contracts valued at US\$10.0 million equivalent each or more;
  - (b) Goods contracts valued at US\$500,000 equivalent each or more;
  - (c) Consultant Services Contracts for firms valued at US\$200,000 equivalent each or more; and
  - (d) Consultant Services for individuals valued at US\$50,000 equivalent each or more.
- 7.28. **Use of Statements of Expenditure.** Disbursements may be made against SOEs for:
  - (a) Works under contracts costing less than US\$10.0 million equivalent each;
  - (b) Goods under contracts costing less than US\$500,000 equivalent each;
  - (c) Consulting contracts with firms, costing less than US\$200,000 equivalent each; and
  - (d) Consulting contracts with individuals, costing less than US\$50,000 equivalent each.
- 7.29. **Documentation** in support of SOEs will be retained by the MoTC for at least one year after the Bank has received the audit report for the fiscal year in which the last withdrawal from the Loan Account was made. The documents will be made available for review during Bank supervision missions and for annual audits. All withdrawal applications for expenditures above the SOE thresholds specified above will be supported by full documentation, i.e., contracts, invoices, etc.

- 7.30. **Direct Payments.** The Minimum Application Size for direct payments and for issuance of Special Commitments was communicated to the Borrow in the Disbursement Letter. All withdrawal applications for direct payment or for issuance of special commitments will be supported by full documentation.
- 7.31. **Supervision Plan**. As part of its Project supervision missions, the World Bank will conduct risk-based financial management supervisions, initially after every six months and thereafter at appropriate intervals, depending on the level of assessed risk. These will pay particular attention to: (i) Project accounting and internal control systems; (ii) budgeting and financial planning arrangements; (iii) review of the Interim Un-audited Financial Reports; (iv) review of audit reports, including financial statements, and remedial actions recommended in the auditor's Management Letters; (v) disbursement management and financial flows, and counterpart funds, as applicable. Financial management supervision will pay particular attention to any incidences of corrupt practices involving Project resources, including resources provided by the Borrower and other IFIs that may be co-financing the Project.

## **Annex 8. Procurement Arrangements**

## KAZAKHSTAN: SOUTH WEST ROADS PROJECT

#### General

- 8.1. Procurement for the proposed Project will be carried out in accordance with the World Bank "Guidelines: Procurement under IBRD Loans and IDA Credits" dated May 2004 and revised in October 2006, and "Guidelines: Selection and Employment of Consultants by World Bank Borrowers" dated May 2004, and revised in October 2006 in addition to the provisions stipulated in the Loan Agreement.
- 8.2. The Committee and its consultants will follow the Bank's anti-corruption measures and will not engage services of firms and individuals debarred by the Bank. The listing of debarred firms and individuals is located at: <a href="http://www.worldbank.org/html/opr/procure/debarr.html">http://www.worldbank.org/html/opr/procure/debarr.html</a>.
- 8.3. The various items under different expenditure categories are described in broad terms below. For each contract to be financed by the Loan, the different procurement methods or consultant selection methods need for pre-qualification, estimated costs, prior review requirements, and time frame have been agreed between the Borrower and the Bank. These are reflected in the Procurement Plan, which covers the first 18 months of implementation of the Project. Thereafter, a rolling procurement plan will be updated at least annually to specify activities planned for the following 12 months (or as required) to reflect the actual project implementation needs and the improvements in institutional capacity.
- 8.4. **Procurement Notices:** A General Procurement Notice (GPN) was published in October 2008 in the United Nations Development Business (UNDB) and in the Bank's dgMarket. The GPN described in general terms the list of potential goods, works and consulting services contracts to be procured under the Project and invites all potential suppliers, contractors and consultants to express interest and request additional information from the Committee. As bid documents become available, invitations to pre-qualify or to bid will be advertised as Specific Procurement Notices (SPNs) for ICB procurement packages, and the SPNs and Expressions of Interest (EOI) for consulting assignments estimated to cost more than US\$200,000 equivalent per contract, will be published in UNDB (on-line), in dgMarket and in at least one national newspaper of broad circulation. In addition, the Procurement Plan (including all formal updates), SPNs and EOIs for all contracts as well as results of contract awards will be published on the external website of the MoTC and the World Bank.
- 8.5. **Procurement of Works:** Works contracts will include upgrade and reconstruction of road sections between Shymkent and Aktobe oblast border. Contracts above US\$10 million equivalent will follow ICB procedures. The majority of large civil works contracts will require pre-qualification of contractors. Contracts below US\$10 million equivalent will be procured under National Competitive Bidding (NCB) procedures detailed in the POM, which also includes sample bidding documents for NCB. All bidding documents and contracts will include measures to minimize or mitigate environmental impact and will follow recommendations in the EMPs.

- 8.6. **Procurement of Goods:** Goods procured under this Project will include road condition monitoring equipment, road management systems, and related IT equipment. Contracts above US\$500,000 equivalent will be procured under ICB procedures using the Bank's Standard Bidding Documents (SBDs) for Goods. Contracts above US\$100,000 equivalent and below US\$500,000 equivalent will follow the NCB procedure detailed in the POM. All IT hardware and software costing less than US\$100,000 equivalent may be procured using Shopping procedures on the basis of at least three written price quotations obtained from qualified suppliers.
- 8.7. Selection of Consultants: Consultant services required under this Project will include inter alia: (i) Project management; (ii) technical assistance for studies; and (iii) supervision and monitoring of construction contracts. The methods for selection of consultants will include Quality and Cost Based Selections (QCBS), Quality Based Selection (QBS), Fixed Budget Selection (FBS), Least Cost Selection (LCS), Selection based on Consultants Qualifications (up to \$200,000) and Individual Consultants (IC). Contracts estimated to cost above US\$200,000 equivalent will be advertised on-through UNDB, dgMarket (Gateway), and in local media (one newspaper of national circulation or the official gazette, and the website of the MoTC). Shortlists for consultants for services estimated to cost less than US\$100,000 equivalent per contract may be composed entirely of national consultants in accordance with provisions of paragraph 2.7 of the Consultant Guidelines.
- 8.8. *Operating Costs:* The loan will not finance incremental operating costs.

# **Assessment of the Capacity of the Committee for Roads**

- 8.9. The Project will be implemented by the Committee under the oversight of the MoTC. An assessment of the capacity of the Committee to implement procurement actions for the Project was carried out by the Bank in April 2008. A copy of the assessment report is in the Project file. The environment for conducting procurement under the proposed Project was assessed as high risk. The assessment reviewed the procurement process being carried out by the Committee and the interaction between the staff responsible for procurement, financial management and project management. It was noted that the newly established procurement unit has successfully procured large road contracts. However, the procurement experts do not have World Bank procurement experience. The MoTC awarded only one ICB contract during the last two years to a Turkish firm, indicating very limited experience.
- 8.10. The Country Procurement Assessment Reviews dated June 2000 and January 2005, reported that fraud and corruption are regarded as real impediments to the activities of the private sector in Kazakhstan. As a result, the Public Procurement Law (effective on January 1st, 2008) sets out a number of provisions to address fraud and corruption, notably fraudulent practices, misrepresentation, conflicts of interest and bid-rigging. With the Public Procurement Law in place and with a competent regulatory agency to oversee its implementation, the main weakness in the procurement system appears to be lack of capacity and resources. Procurement based on market economy principles is a relatively new concept in Kazakhstan and there are only a few trained procurement officers available, although in almost each ministry there is a purchasing and supply department.

- 8.11. Based on the analysis of its legislative framework, the effectiveness of its regulatory institutions, the strength of its enforcement regime, the capacity of the Committee for Finance Control and Procurement (COFP) and its human resources and the risk of corruption, the assessment found that the environment for conducting procurement under the proposed project is at High Risk. The key issues and risks concerning procurement have been identified and mitigation measures discussed. The main risk and mitigation are summarized in Table 8.1.
- 8.12. **Anti-Corruption Action Plan:** The Bank team intends to maintain close oversight and will carry out prior review of all major contracts according to the thresholds that will be regularly reviewed and adjusted as needed in the Procurement Plan. The following measures will be carried out to mitigate corruption risk:
  - *Training of fiduciary staff* starting from the project launch and periodically thereafter, training will be customized to the procedures and methods that would be required in the next 12 months period. On-the-job training will also be provided during supervision missions and, if possible, regional training will be provided by the Bank on procurement;
  - *Prior review:* There will be close supervision by procurement accredited staff of the Bank. In addition, all contract amendments will be subject to prior approval by the Bank;
  - Publication of Advertisements and Contracts: all publications for advertisements and contract awards, including the results of the awards, will be done in accordance with the Procurement Guidelines and published in the World Bank client connection system and on external websites, i.e., UNDB and dgMarket websites;
  - *Debarred Firms*: Appropriate attention will be given to ensuring that debarred firms or individuals are not given opportunities to compete for Bank-financed contracts;
  - *Complaints:* all complaints by bidders will be diligently addressed and monitored in consultation with the Bank;
  - Evaluation Committee: If required, the Bank will review qualifications and experience of proposed members of the Evaluation committee(s) with a view to avoiding nomination of unqualified or biased candidates. All members will be required to sign a disclosure form (sample included in the POM);
  - Civil Works supervision: Contractors carrying out construction of road works will be supervised by technically qualified engineering firms, selected by the Committee to ensure that quality specified in the contract is delivered in a timely manner. The PMC will assist the Committee to monitor the quality and performance of supervision consultants;
  - 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. 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 looked at on a case-by-case basis to identify the reasons. The CP will maintain up-to-date procurement records available to all concerned Bank staff, auditors and INT members of the Bank.

Table 8.1 – Summary of Procurement Risk Assessment

Risk	Rating Before	Mitigation	Rating After
The Committee staff lack capacity to undertake the proposed procurement work under the Project, particularly regarding international procurement or World Bank procurement guidelines.	High	The PMC will provide on-the-job training to the MoTC, the Committee staff and to bid evaluation committee members. The PMC will provide assistance in the preparation of bidding documents, requests for proposal, bid evaluation reports and contract agreements. Training in procurement under World Bank guidelines will also be provided by Bank staff during the Project launch workshop	Medium
Bid evaluation committee members are not familiar with international procurement procedures, and may obstruct or delay the procurement process, especially the evaluation of bids and proposals	Medium	The POM will include: (a) sample TOR and qualification requirements for procurement staff and for evaluation committee members; (b) conflict of interest disclosure forms which should be signed by all evaluation committee members; and (c) a detailed Procurement Manual	Low
Lack of awareness of procurement opportunities available in the Project for civil works, goods and services	Medium	Carry out aggressive public awareness programs using various media, such as newspapers, brochures, radio, TV, project website, etc	Low
Poor quality of bidding documents, including ambiguous technical specifications; unclear and unrealistic requirements, such as delivery, completion time which bidders would be unable to meet, and frequently no qualifications and experience	Medium	Prepare and make widely available clear, easy to understand standard bidding documents containing all bidding requirements. Train MoTC staff in preparing unambiguous technical specifications and set up mechanisms for obtaining technical experts in relevant areas for the preparation of specifications. Create and maintain a database of sample specifications and prepare standard technical specifications for items procured frequently	Low
Faulty technical design may cause excessive variation orders. Poor quality construction may require remedial works.	Medium	The supervising engineers will review technical specifications while preparing the bidding documents. Local oblast roads laboratories of the Committee will carryout independent technical inspections to verify construction quality. The PMC will monitor the quality of the results.	Low
Corruption or collusion may lead to the award of high price contracts	High	An independent procurement auditor will be hired by the Bank to review project related internal controls and all procurement processes	Medium
Use of national procurement procedures such as NCB, especially small contract sizes, for most or all of the contracts as a means to award contracts to domestic contractors/ suppliers	High	Ensure proper packaging of contracts so that most of the contracts fall under ICB <sup>26</sup> to allow for international competition and more participation by more internationally reputed firms. Monitor growth of domestic private sector in the road construction industry	Medium

\_

 $<sup>^{26}</sup>$  MoTC has awarded only one ICB contract during the last two years to a Turkish firm, indicating very limited experience.

- *Monitoring of payment vs. physical progress:* Monitoring reports prepared for the Bank will be customized to include a form to monitor physical progress compared to payment installments to avoid upfront loaded payments;
- *Timeliness of payments:* Payment to contractors, suppliers and consultants will be monitored through semi-annual interim un-audited financial reports (IFR) to ensure timely payments. The CP will maintain a system/database to ensure payments to the suppliers and contractors are paid without delay according to the conditions of the contract.

#### **Procurement Plan**

- 8.13. The Borrower, with support from the Bank, drafted a procurement plan that was discussed and agreed during the negotiations. The draft procurement plan shows details for the first 18 months of implementation. The procurement plan will be updated at least annually or more frequently as required to reflect actual Project implementation needs and improvements in institutional capacity.
- 8.14. The procurement plan and its updates will be available in the Project's database and the World Bank external website following the loan signing and the public disclosure of the Loan Agreement and Project Appraisal Document.

## **Frequency of Procurement Supervision**

- 8.15. Initially, procurement supervision will include prior review of contracts and procurement supervision missions (part of project supervision missions) once every six months. Phone and video consultations will also be used for discussion of particular cases to speed up preparation of the tenders. Once the capacity of the implementing agency is strengthened, frequency of procurement supervision missions and prior review thresholds may be revised.
- 8.16. *Post Review:* All contracts under the Project will be subject to prior review with the exception of some shopping or minor works contracts.

## **Prior Review Thresholds:**

- 8.17. Prior review thresholds will be set up in the Procurement Plan and will be generally based on the following requirements:
  - All contracts awarded through ICB Works (>US\$10 million);
  - First two Minor Works and all NCB contracts less then US\$10 million equivalent;
  - All contract awarded through ICB Goods (>US\$500,000);
  - First two shopping and all NCB contracts above US\$3 million;
  - All consulting contracts for firms >\$200,000 and contracts with individual consultants estimated to cost US\$50,000 equivalent or more each and TOR for consulting firms selected through Consultants Qualifications; and
  - All single source, sole source, amendments and direct contracts.

Table 8.2: Procurement Plan - Consultant Services and Goods

Consulting services	Selec- tion Method	Review By Bank (PRIOR / Post).	Publi- shing of REOI	Preparation of shortlist	Approval of shortlist	Request for propo- sals	Proposal Submiss- ion	Tech. Evalua- tion	Final Eval.	No Objection Date	Contract Award Date	Start Date	Comple- tion Date
					1. 3	Supervision	נ						
1240-1398 km	QCBS	PRIOR	Jan. 2009	Feb. 2009	Mar. 2009	Mar. 2009	May 2009	Jun. 2009	Jun. 2009	Jun. 2009	Jul. 2009	Jul. 2009	Nov. 2012
1398-1578 km	acbs	PRIOR	Jan. 2009	Feb. 2009	Mar. 2009	Mar. 2009	May 2009	Jun. 2009	Jun. 2009	Jun. 2009	Jul. 2009	Jul. 2009	Nov. 2012
1578-1702 km	QCBS	PRIOR	Jan. 2009	Feb. 2009	Mar. 2009	Mar. 2009	May 2009	Jun. 2009	Jun. 2009	Jun. 2009	Jul. 2009	Jul. 2009	Nov. 2012
1702-1807 км	QCBS	PRIOR	Jan. 2009	Feb. 2009	Mar. 2009	Mar. 2009	May 2009	Jun. 2009	Jun. 2009	Jun. 2009	Jul. 2009	Jul. 2009	Nov. 2012
1837-1917 km	QCBS	PRIOR	Jan. 2009	Feb. 2009	Mar. 2009	Mar. 2009	May 2009	Jun. 2009	Jun. 2009	Jun. 2009	Jul. 2009	Jul. 2009	Nov. 2012
1917-1980 km	QCBS	PRIOR	Jan. 2009	Feb. 2009	Mar. 2009	Mar. 2009	May 2009	Jun. 2009	Jun. 2009	Jun. 2009	Jul. 2009	Jul. 2009	Nov. 2012
1980-2057 km	QCBS	PRIOR	Jan. 2009	Feb. 2009	Mar. 2009	Mar. 2009	May 2009	Jun. 2009	Jun. 2009	Jun. 2009	Jul. 2009	Jul. 2009	Nov. 2012
1807-1837 km (Kyzylorda bypass)	QCBS	PRIOR	PRIOR Jun. 2009	Jul. 2009	Aug. 2009	Aug. 2009	Oct. 2009	Nov. 2009	Dec. 2009 Dec.	2009	Jan. 2010	Jan. 2010	Nov. 2012
2057-2135 km	QCBS	PRIOR	PRIOR Jun. 2009	Jul. 2009	Aug. 2009	Aug. 2009	Oct. 2009	Nov. 2009 Dec. 2009 Dec.	Dec. 2009	2009	Jan. 2010	Jan. 2010	Nov. 2012
2135-2231 km	QCBS	PRIOR	PRIOR Jun. 2009	Jul. 2009	Aug. 2009	Aug. 2009	Oct. 2009	Nov. 2009	Dec. 2009 Dec.	2009	Jan. 2010	Jan. 2010	Nov. 2012
Shymkent bypass and 2231-2260 km	QCBS	PRIOR	PRIOR Jun. 2009	Jul. 2009	Aug. 2009	Aug. 2009	Oct. 2009	Nov. 2009	Dec. 2009 Dec.		2009 Jan. 2010	Jan. 2010	Nov. 2012
Total													
				2.	Project Mai	nagement (	Project Management Consultants	401					
PMC	QCBS	PRIOR	Jan. 2009	Feb. 2009	Mar. 2009	Mar. 2009	May 2009	Jun. 2009	Jun. 2009	Jun. 2009	Jul. 2009	Jul. 2009	Nov. 2012
					3. Institut	3. Institutional development	opment						
Pavement Mgmt Sys	QCBS	PRIOR	Jan. 2010	Feb. 2010	Feb. 2010	Mar. 2010	May 2010	Jun. 2010	Jul. 2010	Jul. 2010	Sep. 2010	Oct. 2010	Apr. 2012
Committee Reform	QCBS	PRIOR	Jan. 2009	Feb. 2009	Feb. 2009	Feb. 2009	Mar. 2009	Mar. 2009	Apr. 2009	Apr. 2009	May 2009	Jun. 2009	Jun. 2010
Road Safety	QCBS	PRIOR	PRIOR Mar. 2009	Apr. 2009	Apr. 2009	Apr. 2009	Apr. 2009	Apr. 2009	May 2009	May 2009	Jun. 2009	Jul. 2009	Apr. 2010
Road Services	QCBS	PRIOR	Авг. 2012	Sep. 2012	Sep. 2012	Sep. 2012	Sep. 2012	Sep. 2012	Oct. 2012	Oct. 2012	Nov. 2012	Dec. 2012	Sep. 2013
Equipment (all)	NCB	PRIOR	Jan. 2010	Feb. 2011	Feb. 2011	Feb. 2011	Mar. 2011	Apr. 2011	Apr. 2011	Apr. 2011	May 2011	Jun. 2011	Jun. 2013
Total 2 and 3													

Table 8.3: Civil Works

Work Activity	Procur- ement Method	PQ Invitation Date	Expected PQ Bid- Opening	Approval of PQ report	Invitation to bid	Bids applica- tion/ bid opening	Evaluation & Recomm	WB No Objec- tion	Contract Award Date	Start Date	Comple- tion Date
				Prequal	Prequalification I						
1240-1330 km	ICB	Jan. 2009	Mar. 2009	Apr. 2009	Apr. 2009	Jun. 2009	Jul. 2009	Aug. 2009	Sep. 2009	Oct. 2009	Aug. 2012
1330-1398 km	ICB	Jan. 2009	Mar. 2009	Apr. 2009	Apr. 2009	Jun. 2009	Jul. 2009	Aug. 2009	Sep. 2009	Oct. 2009	Aug. 2012
1398-1498 km	ICB	Jan. 2009	Mar. 2009	Apr. 2009	Apr. 2009	Jun. 2009	Jul. 2009	Aug. 2009	Sep. 2009	Oct. 2009	Aug. 2012
1498-1578 km	ICB	Jan. 2009	Mar. 2009	Apr. 2009	Apr. 2009	Jun. 2009	Jul. 2009	Aug. 2009	Sep. 2009	Oct. 2009	Aug. 2012
1578-1650 km	ICB	Jan. 2009	Mar. 2009	Apr. 2009	Apr. 2009	Jun. 2009	Jul. 2009	Aug. 2009	Sep. 2009	Oct. 2009	Aug. 2012
1650-1702 km	ICB	Jan. 2009	Mar. 2009	Apr. 2009	Apr. 2009	Jun. 2009	Jul. 2009	Aug. 2009	Sep. 2009	Oct. 2009	Aug. 2012
1702-1752 km	BOI	Jan. 2009	Mar. 2009	Apr. 2009	Apr. 2009	Jun. 2009	Jul. 2009	Aug. 2009	Sep. 2009	Oct. 2009	Aug. 2012
1752-1807 km	BOI	Jan. 2009	Mar. 2009	Apr. 2009	Apr. 2009	Jun. 2009	Jul. 2009	Aug. 2009	Sep. 2009	Oct. 2009	Aug. 2012
1837-1877 km	ICB	Jan. 2009	Mar. 2009	Apr. 2009	Apr. 2009	Jun. 2009	Jul. 2009	Aug. 2009	Sep. 2009	Oct. 2009	Aug. 2012
1877-1917 km	ICB	Jan. 2009	Mar. 2009	Apr. 2009	Apr. 2009	Jun. 2009	Jul. 2009	Aug. 2009	Sep. 2009	Oct. 2009	Aug. 2012
1917-1947 km	BOI	Jan. 2009	Mar. 2009	Apr. 2009	Apr. 2009	Jun. 2009	Jul. 2009	Aug. 2009	Sep. 2009	Oct. 2009	Aug. 2012
1947-1980 km	BOI	Jan. 2009	Mar. 2009	Apr. 2009	Apr. 2009	Jun. 2009	Jul. 2009	Aug. 2009	Sep. 2009	Oct. 2009	Aug. 2012
1980-2012 km	BOI	Jan. 2009	Mar. 2009	Apr. 2009	Apr. 2009	Jun. 2009	Jul. 2009	Aug. 2009	Sep. 2009	Oct. 2009	Aug. 2012
2012-2057 km	BOI	Jan. 2009	Mar. 2009	Apr. 2009	Apr. 2009	Jun. 2009	Jul. 2009	Aug. 2009	Sep. 2009	Oct. 2009	Aug. 2012
				Prequali	Prequalification II						
2057-2111 km	BOI	Jul. 2009	Aug. 2009	Sep. 2009	Sep. 2009	Nov. 2009	Dec. 2009	Jan. 2010	Feb. 2010	Mar. 2010	Aug. 2012
2111-2135 km	BOI	Jul. 2009	Aug. 2009	Sep. 2009	Sep. 2009	Nov. 2009	Dec. 2009	Jan. 2010	Feb. 2010	Mar. 2010	Aug. 2012
2135-2183 km	BOI	Jul. 2009	Aug. 2009	Sep. 2009	Sep. 2009	Nov. 2009	Dec. 2009	Jan. 2010	Feb. 2010	Mar. 2010	Aug. 2012
2183-2231 km	ICB	Jul. 2009	Aug. 2009	Sep. 2009	Sep. 2009	Nov. 2009	Dec. 2009	Jan. 2010	Feb. 2010	Mar. 2010	Aug. 2012
2231—2260 km	BOI	Jul. 2009	Aug. 2009	Sep. 2009	Sep. 2009	Nov. 2009	Dec. 2009	Jan. 2010	Feb. 2010	Mar. 2010	Aug. 2012
2231-674 km (Shymkent bypass)	BOI	Jul. 2009	Aug. 2009	Sep. 2009	Sep. 2009	Nov. 2009	Dec. 2009	Jan. 2010	Feb. 2010	Mar. 2010	Aug. 2012
1807-1837 km (Kyzylorda bypass)	ICB	Jul. 2009	Aug. 2009	Sep. 2009	Sep. 2009	Nov. 2009	Dec. 2009	Jan. 2010	Feb. 2010	Mar. 2010	Aug. 2012
Works total											

## **Annex 9. Economic and Financial Analysis**

## KAZAKHSTAN: SOUTH WEST ROADS PROJECT

#### **Assessment of Direct Economic Benefits of the Project**

- 9.1. An economic analysis was performed for the entire WE-WC Corridor, including the road sections to be financed under the proposed Project. The evaluation was conducted using HDM-4, which simulates life cycle conditions and costs and provides economic decision criteria for road construction and maintenance activities in accordance with World Bank operational guidance for the economic evaluation of investment operations.<sup>27</sup> The HDM-4 model estimates the net discounted benefits of each proposed intervention, in terms of the associated reduction in vehicle operating costs, passenger travel time, road construction and maintenance expenditures, and accidents.
- 9.2. The proposed Project will improve ride quality leading to lower operating costs, in terms of time and money, for road users; guarantee structural soundness of the road for a prolonged period, leading to lower life-cycle costs for the road asset; and reduce road crashes and associated fatalities and injuries. The economic analysis was undertaken by comparing the net economic benefits from the proposed Project, the 'project scenario', against a 'do nothing' scenario', which is essentially the continuation of the current maintenance and rehabilitation regime.
- 9.3. The Program scenario reflects the agreed works and activities. Works consist of:
  - The upgrade of about 550 km of Class III<sup>28</sup> roads to Class II roads:
  - The upgrade of about 380 km of Class III and Class II roads to Class I roads;
  - The construction of three main bypasses of about 95 km;
  - The execution of periodic maintenance every 7 years during the Project appraisal period starting in 2019; and
  - The execution of routine maintenance annually for all road sections.
- 9.4. The do nothing scenario consists of the continuation of the current pre-determined maintenance and rehabilitation regime in Kazakhstan whereby routine maintenance, consisting mainly of crack sealing and pothole patching, is carried out annually, and periodic maintenance, consisting mainly of a 5 cm overlay, is performed every seven years.
- 9.5. The results of the cost-benefit analysis indicate that the total NPV for the road sections to be financed under this Project amount to US\$157 million (in 2007 value) at a discount rate of 12 percent, and the ERR is 13 percent. While the ERR for the overall Project is above the 12 percent cut-off rate, the ERR on certain sections, particularly between

<sup>&</sup>lt;sup>27</sup> Handbook of Economic Analysis of Investment Operations, The World Bank, 1998.

<sup>&</sup>lt;sup>28</sup> Category I corresponds to a dual carriageway with a 27.5 meter wide road platform, category II corresponds to a carriageway with a 15 meter wide platform, and category III corresponds to a carriageway with a 13 meter wide platform.

Kyzylorda and the border with Aktobe oblast, are shown to be low (between 10 and 11 percent). This is mainly a consequence of the high cost estimates for some reconstruction works combined with low traffic on these sections. It should be noted however that the unit costs used in these analyses are considered to be high. With lower unit costs expected through use of more appropriate design standards and competitive bidding of construction contracts, the estimated economic returns for road sections with low traffic that were marginal at appraisal could be further boosted. Furthermore, additional benefits accruing from the macroeconomic impacts of the project are expected.

## **Assumptions and Inputs**

- 9.6. The economic analysis has been undertaken for the Project road sections, covering 1,025 km from Shymkent to the border between Aktobe/Kyzylorda oblasts. The corridor was divided into several homogeneous sections in accordance with its pavement structure, geometric characteristics, condition, and traffic. Traffic and condition data were collected and updated in 2007. The appraisal period was defined at 20 years, which best accounts for the economic life of the reconstruction and upgrade activities proposed under this Project. A salvage value of about 35-40 percent at the end of the appraisal period was assumed for the works performed under the Project scenario.
- 9.7. Traffic data was collected and updated by the Committee. Traffic ranges from 800 Average Annual Daily Traffic in the northern section (Aktobe oblast border to Kazalinsk) to about 6,200 vehicles per day around Kyzylorda and Shymkent, and the traffic composition varies among sections and road classes. A conservative annual traffic growth of 4 percent was assumed between 2007 and 2012, and 6 percent onwards for all vehicle types in this analysis. Diverted traffic was considered where appropriate in the analysis, particularly for sections with bypasses, and generated traffic was assumed in the ranges between 10 percent-30 percent of normal traffic where the Project is expected to bring significant improvements in the road condition and the road class is upgraded. The Project sections, with their respective length and traffic, as well as the proposed works and associated costs are given in Table 9.2.
- 9.8. Unit construction costs were provided by the Committee in accordance with the planned works. Average maintenance and rehabilitation works unit costs were estimated based on information from the Committee. These costs include the following: pavement works and off-carriageway works such as shoulders, footpaths, safety devices, road marking, land acquisition, etc. A summary of the work unit costs adopted for the maintenance and rehabilitation is given in Table 9.1 below.
- 9.9. The vehicle fleet characteristic, vehicle operating costs, and time values were based on a 2003 feasibility study for the Borovoe-Petropavlovsk road project. Costs were updated to reflect inflation as well as substantial changes in some unit costs, such as fuel costs. The vehicle fleet characteristics and vehicle operating costs are presented in Tables 9.3 and 9.4 respectively.

*Table 9.1 Maintenance Financial Unit Costs (US\$, 2007 value)* 

Maintenance Activity	Unit	Value
Pothole Patching*	\$/m <sup>2</sup>	14
Crack Sealing*	\$/m <sup>2</sup>	11
Asphalt Overlay (5 cm)*	\$/m <sup>2</sup>	6
Joint Sealing**	\$/km	1,200

<sup>\*</sup> For Asphalt Concrete (AC) Pavements

9.10. In addition, upgrading the existing single carriageway category III and II sections to dual carriageway category I sections is expected to reduce accidents by removing "head on" conflicts and accident rates associated with overtaking. It was assumed that the upgrade of a road section from a category III or II to category I will decrease fatality and injury rates from 1.3 and 25 per 100 million vehicle-km to 1 and 24.67 vehicle-km, respectively. In order to estimate the benefits from reduced car accidents, a cost of US\$400,000 per accident fatality and US\$50 000 per accident injury were adopted. These costs are based on estimates and studies in European countries<sup>29,30,31</sup> and were adjusted based on differences in GDP to reflect Kazakhstan's economic development level. Financial costs constitute the sum of market prices of materials, labor and equipment, and conditions (taxes, subsidies, legal formation of the level of remuneration, etc.). Economic costs represent the real costs, net of all transfer payments. Financial costs were assumed to represent 120 percent of economic costs in this analysis.

## **Cost Benefit and Sensitivity Analysis Results**

- 9.11. The results show an aggregate NPV of US\$157 million (discounted to 2007 at 12 percent), for the Project road sections, with an ERR of 13 percent. Table 9.5 shows the results of the cost benefit analysis. While the Project is overall justified as the ERR exceeds the cut-off rate of 12 percent, the investments in the two sections from Aktobe border to Kyzylorda yield low economic returns. This is mainly a consequence of the high cost estimates for some of the reconstruction works as shown in Table 9.1. It should be noted however that the unit costs in this analyses are considered to be high, and actual unit costs might be lowered at the detailed design stage depending on the techniques that will be used for construction. In addition, it is likely the actual traffic growth rates exceed the conservative 4 to 6 percent assumed in this analysis given the rapid economic growth.
- 9.12. A sensitivity analysis was carried out to assess the robustness of the results to possible variations in key project parameters, which in this case were identified as construction costs and the forecast traffic growth rate. The analysis tested the impact on the

<sup>\*\*</sup> For Cement Concrete (CC) Pavements

<sup>&</sup>lt;sup>29</sup> "Socioeconomic Cost of Road Accidents." COST 313. Final Report of the Action. CEC DG XIII. EUR15464EN. Luxembourg 1994.

<sup>&</sup>lt;sup>30</sup> Communication on Road Safety in the EU, COM (97) 131 final, 9 April 1997.

<sup>&</sup>lt;sup>31</sup> Feasibility Study for Arad-Timisoara Motorway, Scetauroute/BCEOM 2007.

economic returns of a 25 percent upward and downward variation in the construction costs, as well as a 25 percent upward and downward variation in the traffic growth rates on the Project road sections. The results of the sensitivity analysis (Table 9.6) show that the Project is sensitive to the specified variation in the key parameters, with ERR dropping to 11 percent, slightly below the 12 percent threshold for the two scenarios with increased construction cost or reduced traffic growth rate. Nevertheless, and as discussed above, the base traffic growth rate and cost assumptions in this analysis are quite conservative, and therefore it is reasonable to expect the project ERR to remain above the 12 percent threshold.

9.13. The results also show that the Project sensitivity to cost variations is generally higher than that to traffic growth variations, except for the bypasses: The construction of a bypass will result in both generated as well as diverted traffic, in contrast to only generated traffic for upgraded sections, and therefore variations in traffic growth will result in compounded effect for bypasses. The analysis also tested the Project's sensitivity to a one year delay in the start of implementation, and to an extension of the Project implementation period by one year. The results show that the Project is robust to such variations as one year is a short time relative to the Project appraisal period. The results of this analysis are not reported in Table 9.6 as the ERR of the various sections hardly change.

## **Macroeconomic Impacts of the Project**

- 9.14. Given the magnitude of the Project, a study assessing the macroeconomic impacts of the road corridor was commissioned by ADB. A multi-country General Equilibrium (GE) assessment model was used in the analysis. A GE model is a system of simultaneous equations that simulate price directed interactions between firms and households in commodity and factor markets, while accounting for the role of the Government, capital markets, and trade partners to reflect economy wide resource allocation, production, and income determination. The model estimated the direct and indirect effects from the proposed WE-WC Corridor on the economy of Kazakhstan as well as on the economies of neighboring countries and trading partners. Benefits include trade facilitation, transport cost reduction, and increased productivity.
- 9.15. The GE model separately analyzed Project benefits from: (i) reduced vehicle operating costs; (ii) increased productivity; (iii) reduced losses from road inefficiency; and (iv) increased trade, relative to a base scenario which is essentially the without project scenario. Note that the direct benefits estimated by the GE model, expressed in term of reduction in vehicle operating costs, are different (higher) than those estimated in the HDM analysis: the GE model accounts for vehicle savings from using the improved road corridor as well as for the multiple downstream effects, such as the benefits of intermediate and final buyers of parts. The results show that the corridor investment will benefit almost every sector of the Kazakh economy. Other countries in Central Asia will also significantly benefit from the Project, particularly the Kyrgyz Republic.

Table 9.2 Description of project sections and proposed works

Road Section	Length (km)	Existing Road Class	Proposed Works	Traffic per Day (2007)	Average Investment Cost per Km (Million US\$)	Total Investment Cost (Million US\$)
Aktobe oblast border to Zhosaly	375	III	Upgrade to category II	1250	1.6	009
Zhosaly – Kyzylorda	189	III	Upgrade to category II	2260	2.05	388
Kyzylorda Bypass	20	N/A	Construction category II	6150*(3741)**	2.85	57
Kyzylorda-Turkestan	275	III	Upgrade to category II	2362	2.30	633
Turkestan-Shymkent	128	67 km II, 61 km III	Upgrade to category I	2600	4.58	540
Shymkent Bypass	38	N/A	Construction category I	6135(3566)	3.64	138
TOTAL	1,025					2,356

\* Average annual daily traffic on the existing alignment in 2007. \*\* Diverted traffic (per day) to the new bypass after its completion in 2012.

Table 9.3: Vehicle Fleet Characteristics

No. of	riiysicai				Utilization	ıtion			L03	Loading
PCSE         Wheels         No. of of of of no.         No. of of of of of of no.         No. of of of no.         No. of of no.         No. of of no.         Tyre Tyre I.00         Tyre I.00         A condition of no.         Tyre I.00         A condition of no.         I.00         I.00         A condition of no.         I.00         I.00         I.00         II.00         III.00         III.00         III.00         III.00         III.00         III.00         III.00         IIII.00         IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII		Tyre						Work		
PCSE         Wheels 1.00         Axles 7 Tyre Type           1.00         4         2         Radial ply		Retread		Annual				Related		
PCSE         Wheels         Axles         Tyre           1.00         4         2         Radial ply           1.00         4         2         Bias ply           2.00         6         2         Bias ply           1.60         6         2         Bias ply           1.00         4         2         Bias ply	Recaps	Cost	Annual	Working	Average	Private	Pass	pass. Trips		Operating
1.00       4       2       Radial ply         1.00       4       2       Bias ply         2.00       6       2       Bias ply         1.60       6       2       Bias ply         1.00       4       2       Bias ply	(No)	(%)	Km	Hours (h)	Life (Years)	Use (%)	(No)	(%)	ESALF	Weight (Tons)
1.00       4       2       Bias ply         2.00       6       2       Bias ply         1.60       6       2       Bias ply         1.00       4       2       Bias ply	al ply   1.00	20.00	15,000	200	7	100	3	00.09	00.0	1.30
2.00       6       2       Bias ply         1.60       6       2       Bias ply         1.00       4       2       Bias ply	s ply   1.00	50.00	000,09	1,600	8	0	8	50.00	0.04	2.50
1.60         6         2         Bias ply           1.00         4         2         Bias ply	s ply 1.00	20.00	110,000	3,200	8	0	23	80.00	0.18	7.83
1.00 4 2 Bias ply	s ply 1.00	20.00	140,000	3,500	12	0	45	80.00	1.87	14.86
	s ply 1.00	20.00	000,09	1,600	10	0	0	0.00	0.01	1.50
Medium Truck 1.40 6 2 Bias ply 1	s ply   1.00	50.00	75,000	1,500	8	0	0	0.00	0.22	7.40
Heavy Truck 1.60 10 3 Bias ply 1	s ply 1.00	50.00	120,000	3,000	10	0	0	0.00	1.15	18.43
Articulated Truck 1.80 18 5 Bias ply 1	s ply 1.00	50.00	195,000	5,000	10	0	0	0.00	5.69	33.05

Table 9.4: Vehicle Operating Costs – Economic Unit Costs (2007 US\$)

-									
Value	Cargo Holding (US\$/hr)	00.00	00.0	00.0	00.0	60.0	0.19	0.25	0.32
Time Value	Passenger Non- Work (US\$/hr)	1.17	0.40	0.40	0.40	0.00	0.00	0.00	0.00
	Passenger Work Time (US\$/hr)	3.91	1.35	1.35	1.35	0.00	0.00	0.00	0.00
	Annual Interest (%)	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
	Annual Overhead (US\$)	400	400	400	800	400	300	600	800
S	Crew Wages (US\$/hr)	0.00	2.97	2.97	3.89	3.78	4.32	4.16	4.56
Vehicle Resources	Maintenance Labor (US\$/hr)	5.13	5.13	5.64	5.64	5.13	5.64	5.64	5.64
V	Lubricating Oil (US\$/ litre)	29.9	29.9	29.9	29.9	6.67	29.9	29.9	6.67
	Fuel (US\$/ litre)	0.67	0.67	0.67	0.42	0.67	0.67	0.42	0.42
	Replace Tyre (US\$)	42	58	117	200	46	133	200	200
	New Vehicle (US\$)	13,100	12,400	19,800	52,800	11,200	19,000	40,000	55,000
Name		Passenger Car	Minibus	Medium Bus	Large Bus	Pickup Truck	Medium Truck	Heavy Truck	Articulated Truck

Table 9.5: Project scenario to do-nothing scenario summary of economic indicators

Road Section	Length (km)	Traffic per Day (2007)	Total Economic Investment Cost (US\$ million)	NPV (Million US\$)	ERR (Percent)
Aktobe oblast border to Zhosaly	375	1250	500	(69)*	10
Zhosaly – Kyzylorda	189	2260	323	(23)	11
Kyzylorda Bypass	20	6150	47	11	15
Kyzylorda-Turkestan	275	2362	527	6	12
Turkestan-Shymkent	128	5600	450	88	15
Shymkent Bypass	38	6135	115	144	26
TOTAL	1,025		1962	157	13

<sup>•</sup> NPV values in brackets are negative values

Table 9.6: Summary of sensitivity analysis results

Road Section	Length (km)	Traffic per Day (2007)	ERR Base Case	raffic per Day ERR + 25% costs Base Case	ERR - 25% costs	ERR - 25% traffic growth	ERR + 25% traffic growth
Aktobe oblast border to Zhosaly	375	1250	10	8	13	8	12
Zhosaly – Kyzylorda	189	2260	11	6	14	10	13
Kyzylorda Bypass	20	6150	15	10	19	9	23
Kyzylorda-Turkestan	275	2362	12	11	13	11	13
Turkestan-Shymkent	128	2600	15	12	19	13	17
Shymkent Bypass	38	6135	26	21	30	18	32
TOTAL	1,025		13	11	16	111	15

## **Annex 10. Safeguard Policy Issues**

## KAZAKHSTAN: SOUTH WEST ROADS PROJECT

# **Regulatory Framework**

- 10.1. Four main institutional entities were identified as relevant to national environmental and social safeguards regulations, specifically for: (a) environment; (b) water resources; (c) forestry and hunting; and (d) land management. For each institution, the Project team assessed their roles, responsibilities and capacity for implementation of safeguards policies and regulations.
- 10.2. *Ministry for Environmental Protection (MoEP)* Environmental Expertise and Nature Use Regulation Department (EENUR): The environmental expertise and nature use control department appears to fulfill basic staffing and skill requirements and has the administrative structure for effective environmental supervision of projects.
- 10.3. Water Resources Committee (WRC) is perceived mainly as an information source and as such appears to have adequate capacities. Strengthening will likely be required in sourcing, assembly and communication of environmentally relevant information to the permitting authority. Groundwater resources are managed by the "Committee for Hydrology and Subsoil Waters Use" under the Ministry for Energy and Mineral Resources.
- 10.4. *Committee for Forestry and Hunting (CFH)* has local representatives in each oblast, called Territorial Departments. They manage the conversion of land from State forests for other uses, such as traffic corridors, including valuation of the land, determination of compensation payments and measures for converted forests, the exact delineation of the area which may be cleared and the supervision of the clearance activities.
- 10.5. Agency on Land Resources (ALR) participates in land management, land use planning and zoning issues through local representatives at oblast/Rayon levels. The conversion of land from one type of use to another is controlled chiefly by local governments with the Ministry for Land Use having coordination and advisory role and other line Ministries giving their recommendations and approval, including the MoEP.

#### **Capacity Building, Monitoring and Supervision**

10.6. The Kazakh institutions will have to be proactively integrated into all decision processes. Strengthening and training will be required for all above institutions to achieve World Bank standards and international good practice regarding project preparation and supervision, particularly: site and field supervision; environmental auditing of construction; compliance monitoring; sourcing, assembly and communication of environmentally relevant information; and formulating clear mitigation goals and activities. The Project will support capacity building efforts through Components 3 (the PMC will deliver training mainly on the level of local authorities) and Component 4 (Institutional Development).

10.7. The above government agencies will be supported by both the PMC and the Bank's team in Project supervision and monitoring. The PMC will assist in the close technical supervision of Project implementation, including engineering, environmental and social aspects as well as workplace health and safety and general quality assurance. The Bank team will facilitate the PMC's work, assess the performance and needs of the Kazakh authorities and provide implementation assistance through appropriate instruments such as training and targeted consultancies for technical assistance. The Bank team will also monitor compliance with World Bank policies and international environmental conventions during Project implementation. Capacity building efforts will ensure that the national and local safeguards authorities are trained to assume a more effective and proactive role of monitoring and enforcement of safeguards implementation.

## **Environmental and Physical Conditions in the Project Area**

10.8. The description of Project road sections below is based on logical geographical divisions along the overall road alignment supplemented with climatic, topographical and biological information. The road sections are described traveling north to south and the information provided is based on existing environmental and social studies prepared for the Project, supplemented by field observations by Bank environmental and social specialists.

10.9. Section I: Aktobe/Kyzylorda oblast border to Zhosaly (approximately 375 km within Component 1 of the Project). This road section, constructed in 1970, has received no investment since 1990. Pavement conditions are very poor, with average traffic of around 500 vehicles per day (vpd). A railway line that runs parallel to the road for most of its length could provide a solution for hauling materials during construction. At least six bridges need reconstruction; most are short (20 to 30 meters), one (over Syr Daria) is about 120 meters. In some areas, the road crosses moving sand dunes and the reconstruction design will have to take this into consideration. The landscape has a soft profile with wide valleys and basins, separated by slightly elevated plateaus. Land use is restricted to low intensity animal grazing in the natural environment, mainly camels. Permanent settlements are extremely sparse, with population density below 1 person/sq.km. The environmental conditions are characterized by arid, almost desert climate, sparse vegetation, hardly any year-round surface water courses and large areas with (naturally) hyper-saline soils. The landscape is barren and prone to wind erosion, dust generation and moving sand dunes. Surface drainage is mainly seasonal; flash floods can occur and run-off waters can have a high erosion potential. Saksaul forests,<sup>32</sup> which are adapted to dry, saline conditions with extreme temperature differences, play an important role in soil stabilization and erosion control, but are not expected to be negatively affected by the civil works.

10.10. *Section II: Zhosaly to Turkestan* (approximately 490 km, mainly Component 1). This road section is in fair condition. Average traffic varies significantly along the alignment, from less than 500 vpd north of Kyzylorda to about 3,000-4,000 vpd on the 240 km stretch south of Kyzylorda, and about 5,000-6,000 vpd close to Kyzylorda. Most of the road

<sup>&</sup>lt;sup>32</sup> Saksaul is a low, bushy tree which has a high tolerance of heat, dryness and salt and can grow in highly sandy soils. It is an important "keystone" species in SW Kazakhstan, providing shade and shelter to wildlife and grasses while also preventing erosion by stabilizing the sand with its root systems.

pavement is constructed of "macadam" with a weak bearing capacity. A very large number of traffic accidents have been reported (more than 50 deaths in 2005 along the 240 km south of Kyzylorda). This section is characterized by an arid climate, resulting in sparse vegetation, few year-round surface water courses and large areas with (naturally) hyper-saline soils. The landscape can be described as semi-desert, with grasses and few, low bushes loosely covering the soil. In this zone, patches of Saksaul forests can be found at irregular intervals. Despite the flat landscape, erosion is an issue due to frequent flash floods in spring (caused by snowmelt combined with spring rains) and wind erosion in the dry summer period. Land use is restricted to animal grazing in the natural environment with livestock including camels, horses, cattle and goats. Crops such as rice are grown in irrigated fields close to the Syr Darya several kilometers north of Kyzylorda. Despite the arid climate, groundwater is very close to the surface in this section, often less than one meter, resulting in hyper-salinity of soils in some areas. In the irrigated land zone, villages along the road are sparse (every 10 to 20 km). Further north, there are not many human settlements.

10.11. Section III: Turkestan to Shymkent (approximately 170 km, within Component 2). The average condition of this road section is fair. Traffic ranges between 3,000 to 4,000 vpd northwest of Turkestan, increasing to 6,000 – 8,000 vpd between Shymkent and Turkestan. There are numerous small towns along the alignment between Shymkent and Turkestan. Traffic safety is a primary concern when traveling along this section. The reported fatality rate is extremely high, with 61 deaths along the 215 km stretch in 2005. The first 160 km from Shymkent to Turkestan are planned to be "Category I" design, comprising widening from 2 to 4 lanes. Four lanes would allow slow vehicles related to agricultural activities (e.g., tractors, animal drawn carts, cattle driving, etc.) to be accommodated. The Committee is also planning to construct a bypass around the town of Turkestan. The climate in this southeastern section is strongly continental and arid, characterized by a very high temperature range, hot summers and cold winters, with precipitation concentrated over relatively short time periods in spring and fall/autumn. The highway is set in a wide, flat basin in a geologically highly mature environment with few features. It consists of gently rolling hills, growing progressively flat towards the north. The natural vegetation is steppe, dominated by grassland with small clusters of forest near rivers and in valleys. The highway alignment runs roughly parallel to the Syr Darya, which it approaches near Turkestan and crosses several times further north. The land is extensively used for agriculture and horticulture between Shymkent and Turkestan. North of Turkestan as the climate becomes progressively more arid, agricultural types of land use disappear and animal husbandry dominates.

## Safeguards Policies Triggered and Underlying Rationale

10.12. *Component 1* of the project covers road sections within Kyzylorda oblast excluding the bypass to Kyzylorda city of about 20 km. This 834 km road section includes Shagan, Aksharma, Zhosaly, Kazhaly and Aral. The planned road works comprises rehabilitation / reconstruction of the existing road (with no widening), as well as construction of some new bypasses around towns and settlements, which will not pass through environmentally sensitive or urbanized areas. The major part of construction works will be confined to the existing right-of-way, which is generously dimensioned. The sites for the proposed new bypasses were investigated in detail by Bank environment specialists during several field visits to appraise environmental conditions based on the available design details.

- 10.13. The conclusions from the field visits were that all bypasses under Component 1 would have minimal potential adverse environmental impacts on human populations or environmentally important areas, including wetlands, forests, grasslands, and other natural habitats. Impacts are expected to be site-specific and localized few if any of them would be irreversible, and mitigating measures can be designed readily, involving the use of established methods and techniques. Some of the investments will have significant positive impacts on the residential population in the bypassed settlements, reducing local traffic hazards, noise, and air pollution. Moreover, the overall road alignment will in some cases be shortened and the bypassed highway sections will be reclaimed, which will additionally compensate for land conversion and negative impacts resulting from the new bypasses.
- 10.14. At the same time, it is acknowledged that these bypasses represent civil works projects with considerably large dimensions, which will have to be diligently planned, prepared and executed. Thus a full environmental impact assessment report together with resettlement action plans covering these sections, including the analysis of alternatives, have been prepared in parallel with the detailed design prior to the start of construction works. Site specific EMPs have been prepared for all road sections, containing detailed, implementation-oriented instructions for the mitigation of all expected negative impacts during construction and operation of the new road sections. The EMPs will be further detailed for each specific construction site by the winning bidders as part of their works contracts.
- 10.15. *Component 2* will entail widening road sections within South Kazakhstan oblast from two lanes to four lanes, including the construction of two long bypasses around Kyzylorda and Shymkent, and new structures such as intersections and bridges. The Kyzylorda bypass will cross locations and areas which may be environmentally sensitive, as the alignment will run close to wetlands (already impacted by urban development) and includes a new bridge over Syr Daria River. Impacts were partly avoided / minimized by the design (routing alignment mainly on a corridor with pre-existing infrastructure and anthropogenic impacts), and will be further mitigated by construction and traffic management measures (especially runoff management, speed control, noise barriers, trees and brush plantations along the road). The Shymkent bypass will be constructed over a "greenfield" area well removed from urban settlements and without environmentally sensitive habitats.
- 10.16. For the entire Project, environmental conditions along the bulk of the alignment are generally non-sensitive and impacts are manageable. The impact of the works on soils and vegetation is expected to be moderate, if diligently managed, as the vegetation is sparse and resilient to adverse conditions, and apparently quickly returns after any disturbances. Sites where earthworks have taken place show natural re-vegetation within 2-3 years after the works have been completed, despite the harsh climatic conditions.
- 10.17. The Project will require some land acquisition under both Components 1 and 2, primarily for the bypasses and for service centers, with the resettlement of some households and the demolition of some non-residential structures, for which affected persons will be compensated by cash payment, replacement of structures or land swaps. The Feasibility Study prepared for the Committee estimated that the bypasses would require the demolition of 7 residences and 31 other structures in South Kazakhstan and Kyzylorda oblasts, as well as requiring over 3,000 ha for permanent use, mostly for the bypasses. In contrast, if the

construction was to be contained entirely within the existing alignment, the result would be the demolition of 425 residences and 96 other structures, and the acquisition of 2,400 ha. Preliminary data from the detailed designs indicate that displacement will be greater than anticipated in the feasibility study, with 152 structures (including 55 residences and 65 commercial units) in South Kazakhstan oblast and 20 structures in Kyzylorda oblast (including 6 residences and 14 commercial units) earmarked for demolition. The detailed design studies also show that no informal land users were identified in South Kazakhstan oblast. In Kyzylorda oblast, a total of 7 informal land users were identified, who either lack ownership titles or building permits / licenses for their structures. An estimated total of 105 households in Kzylorda oblast and 750 households in South Kazakhstan will lose part or all of the land they use as private owners or long-term renters. Most of the losses are a very small portion of an affected plot.

10.18. A socio-economic survey of affected persons will be undertaken once final design data are available, making it possible to ascertain the impact of the losses and determine whether or not additional mitigation initiatives are needed. Local governments generally have reserve land and the Land Code in Kazakhstan gives preference to land swapping and replacement of buildings, rather than cash compensation. Nonetheless, private owners can select their preferred option. Discussions with local officials suggest that private landowners are increasingly aware of their rights and often do exercise them. For example, highway construction in the north of Kazakhstan was held up in 2007 when owners refused to agree to the government's compensation offer and the government was reluctant to expropriate the land forcefully.

10.19. Near some cities (e.g., Turkestan) physical cultural resources (PCR) are present and are an issue for general awareness. Evaluations were conducted by the archaeological university institute from Almaty, which concluded that there were potential impacts in two locations (Turkestan mausoleum, Sauran ancient city) where the road alignment passes within 2-3 km of the sites. While no immediate impacts are expected, preventive studies aimed at preservation activities during and after construction will be conducted under the Project. The cultural heritage authorities in the oblasts were consulted by the environmental consultant hired by the Committee, to obtain information about and avoid disturbance of any PCR sites, especially in sections where new alignments, e.g., bypasses, are planned. The likelihood of PCR becoming a significant issue is considered low, as is the likelihood of chance finds, since the majority of the works will be carried out on the existing right-of-way, even where the road will be widened. The execution of a PCR survey over the complete alignment was thus considered unnecessary.

10.20. No other safeguard policies are triggered by this project. Neither special areas protected under Kazakh laws, nor national parks, are located near the road alignment. According to the Ramsar Convention Secretariat website, no sites protected under this convention are situated anywhere close to the corridor. No information was received and no indications exist regarding any other natural areas protected under national law or international conventions or any areas of high biodiversity or ecological significance. The Saksaul forest, which is protected under Kazakh environmental code in general terms, requires special permits and a strong commitment to post-construction recultivation measures if such forests are affected by construction activities. However, it was verified during the

field visits that such forests are not in the immediate vicinity of the road alignment and will not be impacted by construction of the bypasses. There will be no pest management issues in the project. Currently no pesticides/herbicides are used in road maintenance; neither will they be after rehabilitation. No Indigenous Peoples live in the project area or will be directly or indirectly affected by the project. No dam safety issues in the sense of OP4.37 were found during the site appraisal. The only dams near the project area are low dykes for the containment of irrigation channels. International waterways, such as the Syr Darya, will not be impacted by the road works. Existing bridges will only be rehabilitated—no changes of the river flow regimes are envisaged.

# **Existing Safeguards Documentation**

- 10.21. To ascertain that the identified impacts will be adequately addressed by safeguards instruments, the ADB, EBRD and the World Bank worked closely with the Borrower and authorities in Kazakhstan to support compliance of the proposed road investment program with national requirements as well as the environmental and social safeguard policies of the IFIs. The restructuring of the Project financing instrument from an APL to a SIL at appraisal, and the subsequent safeguards reclassification from environment category "B" to "A", led to delays in producing the required environmental assessment and resettlement plans satisfactory to the Bank. Thus a waiver of the Bank's operational policies OP 4.01 and OP 4.12, which require that environmental assessments and resettlement plans must be completed, disclosed and consulted upon, prior to Appraisal is sought from the Board concurrently with the approval of this Project. The ESIA resport incorporating site-specific EMPs and an updated RPF were subsequently completed, reviewed by Bank safeguards specialists, found acceptable to the Bank, and were duly disclosed.
- 10.22. Preparation of the Project has resulted in the following safeguards documents, covering environmental and social issues along the road alignment: (a) a preliminary Environmental Assessment prepared for the Committee by the Kazakh Design Institute; (b) an Environmental Assessment Review Framework applicable to the entire Corridor; (c) an initial Resettlement Policy Framework applicable to the entire Corridor; (d) an updated Resettlement Policy Framework for the Project road sections; and (e) an Environmental and Social Impact Assessment report. These documents have been subject to public consultation and were all disclosed Kazakhstan, and some at the World Bank InfoShop.
- 10.23. *Preliminary Environmental Assessment.* This EA report was prepared by consultants (KazDorProjekt) hired by the Committee in late 2007, and is based on a Feasibility Study level design. This extensive document contains the physical, biological, environmental, socio-economic and infrastructural baseline conditions over the entire WE-WC Corridor alignment. It summarizes the Project activities, the main anticipated impacts and proposed mitigation measures. The document also describes generic environmental and social management measures, however, most of these without specific geographical references.
- 10.24. *Environmental Assessment Review Framework*. The EARF was developed in 2008 by consultants supervised by the ADB and covers the whole length of the Corridor alignment. The EARF consolidates and harmonizes the overall safeguards approaches of the ADB, EBRD and the World Bank. It reviews the environmental and social conditions and

identifies the main potential environmental and social impacts for each road section to be cofinanced by individual IFIs. The core of this document is a detailed analysis of the various rules and guidelines governing environmental and social policy applied by the Borrower and the IFIs, and a consolidated, harmonized safeguards approach proposing common standard procedures to be followed.

10.25. **Resettlement Policy Framework.** The first RPF was developed in 2008 by consultants supervised by the World Bank. It identifies potential impacts of the improved WE-WC Corridor, describes anticipated groups of affected people, clarifies land acquisition and resettlement principles, assesses the legal framework for land acquisition and resettlement in Kazakhstan, describes standard procedures and methods of redress, and outlines steps that will be taken to plan, obtain concurrence from IFIs, and to implement and monitor the impact of land acquisition and resettlement along the Corridor.

10.26. *Updated Resettlement Policy Framework*. The updated RPF was completed in March 2009 by a local Kazakh Consultant hired by the Committee and supervised by the Bank. It provides a general overview that establishes the legal framework for expropriation, describes procedures and processing formats, identifies categories of affected persons and their respective entitlements. Based on the final designs and data available by the end of February 2009 for 11 of the 12 road sections, the updated RPF quantitatively describes the expected social impacts resulting from the Project. It outlines the overall need for land to be acquired or used temporarily during construction, and the number and types of structures to be demolished and other affected above ground assets. It contains specific information and directions on valuation methodologies and compensation mechanisms for involuntary resettlement impacts with the detail necessary to prepare the required budget and to implement compensation activities in due time before the start of construction works. The updated RPF describes the different sections of the project, providing location-specific information about the kinds of works, land requirements, and dislocation that will occur at 11 of the 12 road sections. It also includes the most current (March 2009) estimates of proposed compensation for land and structures. Annexes include summary tables of land requirements, private and public, compensation amounts, and lists of affected persons and structures. The updated RPF will be turned into a full RAP once the census and social assessments are completed and all design and valuation data are available. The draft RAP and sectionspecific RAPs will be disclosed locally and discussed in local public consultations prior to being made final and submitted to the World Bank for review and acceptance. Each of the relevant documents must be accepted by the World Bank before construction can begin.

10.27. *Environmental and Social Impact Assessment report.* The ESIA report was prepared during 2008-2009 by a local consultant hired by the committee, supported through technical assistance from an international consultant financed by the Bank. The ESIA report was developed in parallel with the detailed engineering designs for the road corridor, updating and detailing the more generic information contained in the preliminary EA report. The ESIA comprehensively presents all key information necessary to mainstream good environmental practice and due diligence into project implementation required to comply with the World Bank environmental safeguards policies. The ESIA covers: (a) the environmental baseline conditions in detail for the entire corridor and the wider project area; (b) all expected impacts in quality and magnitude, with a very low residual risk of encountering unexpected impacts

during implementation; (c) the interaction of impacts and environment, modeled with good precision; (d) well defined and described mitigation measures and actions and realistic, "ground-truthed" EMPs; (e) effective mainstreaming of environmental due diligence into construction and engineering activities for the entire Project alignment. During the construction phase, the EMPs will be adopted by the Contractors responsible for individual construction sites, as part of the implementation planning by the Contractor. Thus, while the ESIA report does not describe all environmental mitigation, management and monitoring measures with implementation ready detail, it comprehensively addresses all required actions for environmental due diligence in the Project and provides clear technical and procedural guidance on how to achieve good environmental practice and performance.

10.28. The ESIA includes site-specific EMPs from which subsequent detailed EMPs will be developed by the contractors selected for each individual construction site. Contractors will be required to produce detailed EMPs for their individual construction sites, based on the final designs to be prepared by the supervising engineers as part of the bidding documents for construction contracts. The site-specific EMPs will be part of the bidding package and every bidder will be required to include the production and implementation of detailed EMPs with monitoring activities into executive designs and price quotations. The Loan Agreement for the Project requires that EMPs acceptable to the Bank shall be prepared prior to the commencement of civil works on any road section financed under the Project.

10.29. Based on a detailed review of these and several field visits by the Bank's environment specialists, it was determined that the combination of the preliminary EA report, the EARF and ESIA report (incorporating site-specific EMPs), meet the Bank's standards for a Category A project. The Department for Environmental Assessments within the Ministry for Environment, has received the ESIA report and will ensure that the implementation of the EMPs is supported by the Kazakh environmental authorities.

#### **Summary of Main Impacts**

10.30. The main environmental impacts identified during the environmental and social studies are characterized in detail in the ESIA report and are summarized in Table 10.1. In addition to the direct or immediate impacts of the Project, there will also be indirect, induced and cumulative impacts. These will take effect over a longer period and over a larger area than affected by the Project. These include increases in traffic, economic activities, better connectivity and further development along the roads corridor. However, as the project deals with rehabilitation of a road, which during the Soviet Era used to be a technically sound, functioning transport corridor, no radical, rapid development is likely to occur. Instead long term, gradual processes are expected (e.g. growth of agricultural activities due to better connectivity and market accessibility), which will allow the synchronous development of appropriate institutional and regulatory instruments for monitoring and control.

Table 10.1 – Main Environmental Impacts of the Project

<b>Project Phase</b>	Environmental Impacts
	Removal and disposal of existing road surface (waste generation)
	Demolition works for bridges and other structures (dust, noise, construction rubble
Construction	to be deposited or recycled)
	Removal of habitat/land take for widening and bypasses
	Working over rivers and wetlands (accidental pollution risk, turbidity generation)
	Pedestrian and community safety
	Sourcing and delivery of construction materials (indirect impacts by quarries and
	borrow areas)
	Access to and from the highway under improvement
	Traffic movement through the Project Area
	Use, maintenance and repair of equipment and machinery (workshop management, refueling)
	Potential polluted run-off from work sites and maintenance areas with impacts on
	surface water and groundwater
	Air pollution and noise from preparation of construction materials such as bitumen,
	asphalt and concrete.
	Extraction of sands and gravels for embankments and road bases
	Construction camps (waste, sewage, habitat protection)
	Waste and hazardous materials management
	Service disruption (electricity, telecoms, water, gas)
	Disruption to irrigation and drainage infrastructure
Operation	Air quality and noise emissions
	Traffic movement and driver safety
	Community traffic safety
	Induced development, such as improved access, accelerated economic
	development and increased traffic and transport volumes
	Highway run-off management
	Livestock safety
	Use of maintenance machinery and equipment
	Inappropriate waste disposal and littering
Accidental	Spills and leaks
Events	Major accidents

## **Consultations and Disclosure**

10.31. A public information, consultation and disclosure campaign as required under OP 4.01 and OP 4.12 was prepared, organized and carried out by the MoTC. The consultants hired by the Committee advertised the start of consultations and assembled appropriate materials, disclosed them in the form of an information brochure prior to consultation. These were published in Russian and Kazakh languages in order to be understandable to the affected population and in locations accessible with reasonable effort by the groups being consulted. The preliminary designs, maps and other documents were made available at Rayon headquarters for the relevant road sections. Several venues were organized enabling the affected population to participate without excessive effort.

10.32. The draft and final ESIA reports, and the updated RPF were published on the websites of the MoTC, at the website of the World Bank country office in Kazakhstan, and at the World Bank InfoShop. In addition, hardcopies are available at the Rayon headquarters along the highway corridor as well as in the offices of the Committee in Astana.

10.33. The materials and information disclosed covered the following aspects of the Project: (a) general Project design and layout, emphasizing areas directly impacted by permanent or temporary works and structures, access and service roads, and areas indirectly impacted by construction or operation (noise, dust, borrow pits, landscape aesthetics, etc.); (b) summary of major environmental impacts generally associated with large scale civil construction works and road operations; (c) overview of relevant World Bank environmental and social safeguards policies applicable to the Project (OP 4.01, OP 4.12) and the approaches and instruments for mitigation of environmental and social impacts, which are commonly applied in road projects; (d) TOR for the ESIA; and (e) the draft ESIA (incorporating draft site-specific EMPs).

10.34. As of February 2009 two stages of public consultations had been carried out in communities along the alignment. In October 2008 consultations on the general project concept as well as the TOR for the environmental assessment were conducted in Turkestan and Kyzylorda. The second round of consultations were held in January 2009, in which the substance of the draft ESIA report as well as the draft Resettlement Report were presented in a series of consultations in about 10 communities along the alignment. At the consultations, both the safeguards consultants and the road design engineers familiar with all Project details. Representatives from the Committee and the local administrations (Akimats) attended as well. Presentations and discussions were conducted in Russian and Kazakh languages. Bank staff observed the consultations at 3 locations in February 2009 and found these to be open, transparent and effective in fostering free and unencumbered expression of opinion by the affected stakeholders.

#### **Temirlanovka Alternatives**

10.35. Significant concerns were raised about the proposed design of an elevated bridge of about 2.3km over Temirlanovka village. Many constructive proposals were received from the local population on the proposed designs and the expected environmental and social impacts. Such proposals included solutions for traffic safety (especially pedestrian safety), animal crossings, noise protection and community cohesion. The proceedings and results were summarized in a Consultation outcome report, which was used as basis for communicating required design changes from the Committee to the design engineers responsible for the individual road sections. The Bank team subsequently wrote to the Committee requiring that in view of the outcome of the consultations, alternative designs must be prepared for Temirlanovka that will allow the alignment to bypass the city and avoid the construction of the overpass.

10.36. Further consultations were subsequently held at Temirlanovka village on April 2, 2009. In addition to the completed detailed design for the overpass bridge, three other alternatives were presented to the public:

- (i) Alternative 1: Eastern bypass, with a total length of about 6 kilometers, including 20 structures subject to demolition in the neighboring Lenintu settlement. Construction of one major bridge, one interchange and three small bridges will be required. The land that would be acquired is estimated at 92.4 ha. This alternative could cost around US\$ 6 million more than the overpass.
- (ii) Alternative 2: Western bypass, with a total length of 12-13 km. About 19 structures would be subject to demolition in the neighboring settlement of Kommunizm. Construction will be required for one major bridge, two interchanges and four minor bridges, and would have to cope with difficult terrain. The land that would be acquired is estimated at 91.7 ha. This alternative could cost around US\$ 12 million more than the overpass.
- (iii) Alternative 3: Upgrade of the existing alignment through Temirlanovka settlement without an overpass. This would require 125 structures to be demolished, lwading to a significant increase in cost of compensations. Traffic signals would be required on intersections within Temirlanovka. The land that would be acquired is estimated at 61 ha. This alternative could cost around US\$ 4 million more than the overpass.

Eastern bypass	Western bypass	On-line widening	Elevated structure
6.1	13.0	2.5	2.3
1	1		1
4	3	1	
4	1	1	2
		3 km	
91.7	92.4	61	
20	19	125	13
97.6	103.9	95.5	91.5*
	91.7 20 97.6	bypass         bypass           6.1         13.0           1         1           4         3           4         1           91.7         92.4           20         19	bypass         bypass         widening           6.1         13.0         2.5           1         1         4           4         3         1           4         1         1           3 km         91.7         92.4         61           20         19         125           97.6         103.9         95.5

Data presented by Design Engineer & the Committee in April 2009.

\* figure previously reported as higher value

10.37. Following the conclusion of the consultations, it is understood that the eastern bypass alternative was selected by the public. Formal confirmation of this is expected from the Committee in April 2009.

### **Annex 11. Governance and Anti-Corruption Action Plan**

### **Kazakhstan: SOUTH WEST ROADS PROJECT**

### **Kazakhstan Country Context**

- 11.1. The key development challenges for Kazakhstan go beyond maintaining prudent macro/fiscal policies and coping with the "resource curse". Kazakhstan also needs to further improve its business environment and quality of governance. In the past four years, Kazakhstan has maintained its reputation as one of the steady reformers among transition countries, but there is still a substantial unfinished structural reform agenda. Surveys undertaken in Kazakhstan conclude that weak governance and systemic corruption pose a serious development challenge.
- 11.2. Kazakhstan entered the World Economic Forum's competitiveness index for the first time in 2005, occupying 61<sup>st</sup> place. In 2006 it rose to 50<sup>th</sup> in the ranking, but in 2007-2008 slipped back to the 61<sup>st</sup> place, largely on account of poor performance on human capital measures, where it ranks 94<sup>th</sup>. In the 2008-2009 ranking, Kazakhstan slipped further to 66<sup>th</sup> place (out of 134 economies ranked). The importance of the decline in this particular ranking should not be over-stated, as volatility in rankings such as these may primarily reflect problems in data quality.
- 11.3. The results of the fourth round of the EBRD/World Bank Business Environment and Enterprise Performance Survey (BEEPS), planned to be available in 2009, will provide additional information. Based on the results of the third round of the BEEPS survey in 2005, Kazakhstan's record was mixed on some measures: perception by firms of problems in doing business in Kazakhstan improved compared to 2002 survey data (contract discipline, anti-corruption, regulatory policies, macroeconomic stability, tax administration, and tax burden); on other measures the perceptions deteriorated compared to 2002 (increase in anti-competitive practices, more obstacles in obtaining business licenses and permits, worsening performance of the judiciary, more problems in titling of and access to land).
- 11.4. Likewise, the latest edition of Doing Business (2009) ranks Kazakhstan 70<sup>th</sup> out of 181 economies (compared to seventy-first in 2008), while Transparency International has ranked Kazakhstan 140<sup>th</sup> (alongside Timor-Leste) in its corruption index for 2008. Some of these ranking shifts may be explained by peculiarities of ranking methodologies but, overall, a sizeable body of evidence indicates that Kazakhstan's business environment and governance ratings remain inferior to what its dynamic economy requires. In view of the above, the World Bank CPS Progress Report of May 2008 recommends analytical work to assess the governance environment and its impact on development effectiveness.

### **Project Governance and Anti-Corruption Action Plan**

11.5. To mitigate fiduciary risks, the Project will strengthen fiduciary standards by enforcing Bank procurement rules for all contracts, by supporting the Committee through reputable consultants, by instituting capacity building measures, and enhanced supervision by

the Bank of both the fiduciary and technical aspects of the Project. The GAC action plan to be implemented under the Project is built around the following framework:

- (i) The fiduciary responsibility for all contracts will remain with the Committee who will be the Client. The Committee will hire and maintain a reputable international firm to act as the PMC throughout the duration of the Project. The PMC will process all technical aspects of procurement transactions to guarantee transparency and integrity of the procurement processes. The PMC will focus on ensuring the reliability of contract cost estimates, detect over-pricing through bid analysis, and will enhance supervision control over contract variations and review of complaints mechanism.
- (ii) Project implementation will utilize Bank Guidelines for Procurement, which includes enhanced provisions for combating fraud and corruption. The Loan Agreement for the Project requires the Committee to ensure that the Project is carried out in accordance with the provisions of the Anti-Corruption Guidelines embodied in this Annex.
- (iii) Internal controls will be strengthened and internal audit capacity will be provided by the PMC who will train the Committee staff to address any deficiencies revealed by financial and technical audits. The PMC financial management specialist will monitor internal audit mechanisms and internal control systems and will identify any deficiencies in the Quarterly reports to the Bank and to other IFIs.
- (iv) The PMC will assist the Committee and the MoTC to adopt enhanced business processes based on increased use of computerized systems and enhanced processes for procurement and financial management.
- (v) The Project will rely on enhanced oversight by civil society. An information campaign will be established to facilitate local communities to strengthen their voice and thereby influence the decision process regarding the use of public funds for roads. The Committee, through the PMC and local Committee offices in the oblasts, will be required to improve its communications network, through an expanded website. Costs, deadlines and the main characteristic of each contract for works will be published and major deviations from the original terms of contracts will also be disclosed. Procurement and supervision reports will also be published or made available to the public. User satisfaction surveys will be encouraged and their frequency will be taken into account when assessing the performance of the PMC.
- (vi) The PMC will implement and maintain a system of effective complaint handling, with records kept of each complaint and the actions taken to investigate the circumstances.
- 11.6. In the context of the Project, specific governance and anticorruption measures will focus on improving government capacity to effectively use its own resources and Bank resource transfers, thereby ensuring compliance with Bank fiduciary requirements. In-depth assessments of procurement capacity and financial management capacity (carried out by the Bank team as part of Project preparation) have rated risks to be "high" with mitigation

measures to be implemented. As a result, the following actions were identified as the most appropriate to ensure full compliance with World Bank fiduciary policy and strengthen the governance of the road sector:

- (i) Hiring of Project Management Consultants: Due to limited experience in the implementation of very large projects, the Committee will be supported by the PMC. The tasks to be carried out by the PMC will include; preparation of procurement notices, bidding documents, bid evaluation reports, oversight of quality control of works, preparation of progress reports, etc. This should lead to better control of the implementation schedule and will provide quality assurance for the executed works. In addition the PMC will ensure transfer of knowledge to the Committee staff through training and day-to-day operations.
- (ii) Procurement Evaluation Process. The PMC will assist the Committee during the procurement evaluation processes to ensure transparency and independence of the process. Based on the information provided by the Committee and the PMC, procurement processes will be reviewed in detail during project supervision by the Bank and will be the subject of detailed reporting. The reports will include clear recommendations, including potential investigations, to government authorities.

### Transparency of Procurement Processes

- 11.7. To ensure competition, equal access, probity and accountability in the Project, the following measures will be implemented:
  - Enhanced disclosure;
  - Improved procurement and implementation oversight;
  - Independence of the evaluation committee;
  - Mitigation of collusion risks;
  - Mitigation of forgery and fraud risks;
  - Adoption of sanctions and remedies.
- 11.8. *Enhanced disclosure:* In order to secure transparency, all procurement processes under the Project will be systematically published in the UNDB and dgMarket starting with GPN, SPN and EOI for large consulting services. This will include publication of contract award details to all bidders with a summary of the evaluation result. Key documentation related to the project procurement will be made available to the public electronically as well as on paper, including, but not limited to: (i) calls for expression of interest; (ii) requests for proposals; (iii) minutes of bid-opening meetings; (iv) decision of contract award; (v) process of evaluations; and (vi) decisions taken post award, e.g. time extension, price revision, etc. A manual system for obtaining bid documents will run in parallel for those who wish to use it. Prequalification documents, bidding documents and requests for proposals will be available through the internet.
- 11.9. *Improved procurement and implementation oversight:* The Committee and MoTC will inform the public through their website that representatives of civil society groups are permitted to attend public bid openings and contract signings as observers. In addition, technical observers will be invited from local universities or other independent institutions.

Observers will be authorized to sign the attendance list for the procurement and selection processes. Through this, the Committee and MoTC will have established a mechanism whereby the media and civil society can become involved in monitoring the progress of the Project during implementation. This mechanism will include regular press releases concerning implementation of the entire WE-WC Corridor.

- 11.10. Independence of Evaluation Committees: Clear selection criteria and processes for the nomination of procurement committees will be agreed and formally adopted by the Government. The members will be required to declare actual or potential conflict of interest to the Committee prior to serving on the evaluation committee. Independent evaluators will be included, for example from design institutes, technical universities, etc. Each person serving as a member of a selection committee, or who is otherwise involved in a procurement process, shall disclose to the head of the MoTC and PMC if they, or any of their immediate family members, are related or otherwise connected to any of the members of the boards of directors or commissioners of the bidders and/or consultants participating in any of the procurement packages ("Interested Member"). Any Interested Member shall not participate in the evaluation process; and any Interested Member who is an Official shall not participate in decisions relating to the evaluation process or contract award. The MoTC and the Committee will adopt an institutional code of professional ethics, with clear guidelines and consequences for non-compliance, acceptable to the World Bank. The code will establish the remedial actions and sanctions for cases of fraud and corruption that are reported and for which evidence is found. This will include sanctions for staff proven to be involved in such cases.
- 11.11. *Mitigation of collusion risk:* Among the PMC tasks will be to monitor and support the Committee staff to undertake the procurement of all contracts for the Project. The PMC, will, among other responsibilities:
  - Ensure that the documents are on-line prior to the issuance of the Invitation to Bid/Request for Proposals and remain available throughout the procurement process
  - Monitor the bidding process and be an observer of bid opening
  - Check the financial bids/proposals for any signs of collusion (using tracking software or other means). The results of this analysis will be included in the bid evaluation report.
- 11.12. In all contracts, evidence of fraud, corruption, collusion and coercive practices will result in the termination of the relevant contract, possibly with additional penalties imposed (such as fines, blacklisting, etc.), in accordance with Bank and/or Government regulations.
- 11.13. The following standard procurement monitoring will take place:
  - All procurement above the thresholds determined in the Loan Agreement will be subject to prior review by the World Bank.
  - As a general rule, no pre-bid meetings shall be conducted. All specifications shall be defined clearly in the bidding documents or Requests for Proposals. Clarifications can be sought by bidders through written correspondence and replies will be sent to all bidders. Appropriate guidelines providing for this will be prepared in the Program Operations Manual.

- All contracts must be awarded within the original bid validity period. Any extension of bid validity period shall require the no objection of the World Bank.
- Works contracts are to be supervised by independent supervision consultants.
- In the case of consulting services, the Committee and the MoTC will ensure that the technical evaluation report is completed within four weeks of proposal submission, and the proposal for the award of contract made available, along with the draft contract, within four weeks after completion of the technical evaluation report or following the Bank's no-objection on the technical evaluation report, whichever occurs later.

11.14. *Mitigation of forgery and fraud risks:* The Committee and MoTC will maintain proper project and procurement records including filing of advertisements, bidding documents, evaluation reports, contract award and final contract documents. The PMC will be required to keep electronic copies of all important documents through an appropriate efiling system. Timelines for procurement decisions will be agreed between the MoTC and the Bank to establish service standards, avoid procurement delays, and reduce opportunities for corruption. These will be clearly stated and defined in the Project Operation Manual. Timelines for disbursements for interim payment certificates and invoices will be agreed between the MoTC and the World Bank to establish service standards.

### Financial and Technical Audits

- 11.15. The MoTC will be required to facilitate:
  - Annual financial audits by independent auditors, following accepted international standards.
  - An independent international consultant will be hired by the Bank to conduct a review of procurement processes and procurement results, verification of payments, comparison between contract prices and market price, etc., for randomly selected contracts. The procurement audit will examine if there are any evidences of collusion, fraud, or other corrupt behavior in those contracts.
  - The PMC will review the results of technical inspections carried out by the oblast roads laboratories, who are normally responsible for verifying compliance of physical samples with technical specifications. The annual procurement review will verify the efficacy of the technical audits.
  - Specific forensic audits will be required if major allegations of corruption surface during project implementation.

### **Enhanced Bank Supervision**

11.16. World Bank supervision will be frequent and will include technical staff, Financial Management Specialists (FMS) and Procurement Accredited Staff (PAS). In addition to monitoring overall progress, World Bank supervision will include reviews of all procurement processes and financial transactions in order to identify any possible risks of fraud or corruption at an early stage, and to alert the Bank and Government institutions for further action if necessary. Given the planned size of the procurement packages, additional internal Bank review through its Regional Procurement Manager (RPM) and Operations Policy Review Committee (OPRC) will be required. Technical supervision by the Bank will include

physical site visits on both a periodic and random basis as an additional check over the PMC function.

11.17. It is acknowledged that the main risk of corruption occurs during implementation, particularly if there is collusion between the contractor and supervising engineers. Particular attention will be given to shortcomings in quality of work during implementation that would trigger detailed review by the Bank on an ex-post basis. The role of the World Bank staff based in Kazakhstan will be critical to ensure adequate quality control procedures are implemented during and between regular Bank supervision missions.

# Complaint Handling System

- 11.18. A complaint-handling mechanism, which will include a project complaint log and filing system, will be put in place to record and monitor the follow up of each complaint. All complaints shall be responded to by the Committee within seven days of receipt, and all correspondence copied to the World Bank. Relevant information will be made public on the MoTC website and updated monthly. Strict procedures to ensure anonymity of informants will be enforced. Tracking of the status of investigations and measures taken will be reported monthly to the Committee and to the World Bank.
- 11.19. Contractors, suppliers, consultants or civil society organizations can lodge complaints directly to the World Bank Investigation Unit (INT) through the following channels:
  - By email to <u>investigationshotline@worldbank.org</u>
  - Through the Bank website: <a href="http://www.worldbank.org/integrity">http://www.worldbank.org/integrity</a>
  - Through the Fraud and Corruption Hotline available at all times with translation services. Toll-free: +1-800-831-0463, or Collect Calls/Reverse charge: +1-704-556-7046.

# **Annex 12. Project Preparation and Supervision**

### KAZAKHSTAN: SOUTH WEST ROADS PROJECT

	Planned	Actual
Project Concept Note (PCN) review		09/11/2007
Initial Project Information Document (PID)		02/13/2008
Initial Integrated Safeguards Data Sheet (ISDS)		02/13/2008
Appraisal	07/30/2008	07/26/2008
Negotiations	10/15/2008	01/30/2009
Board approval	04/21/2009	
Planned date of effectiveness	07/01/2009	
Planned date of mid-term review	Annual Reviews	
Planned closing date	12/31/2013	

Key institutions responsible for preparation of the project: Committee for Roads, MoTC, Astana, Kazakhstan.

Bank staff and consultants who worked on the project included:

Name	Title	Unit
Henry G. Kerali	Lead Transport Specialist (Team Leader)	ECSSD
Jacques Bure	Sr. Highway Engineer (co-Team Leader)	ECSSD
Aliya Mukay	Operations Officer	ECSSD
Gurcharan Singh	Sr. Procurement Specialist	ECSPS
John Otieno Ogallo	Sr. Financial Management Specialist	ECSPS
Galina Alagardova	Financial Management Specialist	ECSPS
Wolfhart Pohl	Sr. Environmental Specialist	ECSSD
Bulat Utkelov	Operations Officer	ECSSD
Cordula Rastogi	Transport Economist	ECSSD
Jung Eun Oh	Transport Specialist	ECSSD
Danielle Malek	Counsel	LEGEM
Hannah Koilpillai	Sr. Finance Officer	LOAFC
John Litwack	Lead Economist	ECSPE
Norval Stan Peabody	Consultant Social Scientist	ECSSD
Christophe Bosch	Country Sector Coordinator (CSC)	ECSSD
Ilyas Sarsenov	Economist	ECSPE
Ziad Salim El Nakat	Transport Specialist	ECSSD
Lorraine McCann Kosinski	Team Assistant	ECSSD
Aksulu Kushanova	Team Assistant	ECCKZ

Bank funds expended to date on project preparation:

1. Bank resources:	US\$512,000
2. Trust funds:	0
3. Total:	US\$512,000
Estimated Approval and Supervision costs:	
4. Remaining costs to approval:	US\$60,000
5. Estimated annual supervision cost:	US\$200,000 - 250,000

### **Annex 13. Documents in the Project File**

### KAZAKHSTAN: SOUTH WEST ROADS PROJECT

- 1. Transport Strategy for the Republic of Kazakhstan until 2015.
- 2. Road Sector Development Program for the Republic of Kazakhstan 2006-2012.
- 3. Feasibility Study KazDorProekt, December 2007.
- 4. Facilitation and Institutional Support Project for Armenia, Azerbaijan, Bulgaria, Georgia, Kazakhstan, Kyrgyz Republic, Moldova, Romania, Tajikistan, Turkey, Turkmenistan, Ukraine, Uzbekistan, Progress Report III, February 2006.
- 5. The Cost of Being Landlocked: Logistics Costs and Supply Chain Reliability, Jean-François Arvis, Gael Raballand, Jean-François Marteau, The World Bank, June 2007.
- 6. Kazakhstan Country Partnership Strategy Update, 2008.
- 7. Central Asia AIDS Control Project, Appraisal Document, The World Bank, February 2005.

# **Annex 14. Statement of Loans and Credits**

## **KAZAKHSTAN: SOUTH WEST ROADS**

		Original Amount in US\$ Millions						Difference between expected and actual disbursements		
Project ID	FY	Purpose	IBRD	IDA	SF	GEF	Cancel.	Undisb.	Orig.	Frm. Rev'd
P101928	2008	HLTH SEC TECH (JERP)	117.70	0.00	0.00	0.00	0.00	117.70	0.00	0.00
P096998	2008	CUSTOMS DEVT (JERP)	18.50	0.00	0.00	0.00	0.00	18.50	0.45	0.00
P090695	2008	TECHNOLOGY COMMERCIALIZATION PROJECT	13.40	0.00	0.00	0.00	0.00	13.40	0.00	0.00
P078342	2007	UST-KAMENOGORSK ENV REMED	24.29	0.00	0.00	0.00	0.00	24.29	0.00	0.00
P095155	2006	N-S ELEC TRANSM	100.00	0.00	0.00	0.00	0.00	39.40	33.40	0.00
P078301	2006	FORESTRY	30.00	0.00	0.00	0.00	0.00	28.50	2.50	0.00
P058015	2005	AG POST PRIV ASSIST (APL #2)	35.00	0.00	0.00	0.00	0.00	34.83	26.83	0.00
P049721	2005	AGRIC COMPETITIVENESS	24.00	0.00	0.00	0.00	0.00	20.31	13.11	0.00
P059803	2003	NURA RIVER CLEAN-UP	40.39	0.00	0.00	0.00	0.00	15.11	9.62	0.00
P046045	2001	SYR DARYA CONTROL N. ARAL SEA	64.50	0.00	0.00	0.00	0.00	4.92	4.92	4.92
P065414	2000	ELEC TRANS REHAB	140.00	0.00	0.00	0.00	0.00	2.45	2.45	-0.05
		Total:	607.78	0.00	0.00	0.00	0.00	319.41	93.28	4.87

# KAZAKHSTAN STATEMENT OF IFC's Held and Disbursed Portfolio In Millions of US Dollars

			Committed				Disbursed			
				IFC IFC						
FY Approval	Company		Loan	Equity	Quasi	Partic.	Loan	Equity	Quasi	Partic.
		Total portfolio:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

		rovals Pendi	ng Commit	ment	
FY Approval	Company	Loan	Equity	Quasi	Partic.
2001	Kazkommertsbk 2	0.02	0.00	0.00	0.00
	Total pending commitment:	0.02	0.00	0.00	0.00

# Annex 15. Country at a Glance

### **KAZAKHSTAN: SOUTH-WEST ROADS**

POVERTY and SOCIAL	Kaz	zakhstan	Europe & Central Asia	Upper- middle- income	Development diamond*
2007					
Population, mid-year (millions)		15.5	445	823	Life expectancy
GNI per capita (Atlas method, US\$)		5,060	6,052	6,987	Life expectancy
GNI (Atlas method, US\$ billions)		78.3	2,694	5,750	т
Average annual growth, 2001-07					
Population (%)		0.7	0.0	0.7	
Laborforce (%)		13	0.5	1.3	GNI Gross
M ost recent estimate (latest year ava	ilable, 20	01-07)			capita enrollmen
Poverty (% of population below national pover	ty line)	15			Y
Urban population (% of total population)		58	64	75	
Life expectancy at birth (years)		66	69	71	
Infant mortality (per 1,000 live births)		26	23	22	
Child malnutrition (% of children under 5)					Access to improved water source
Access to an improved water source (% of pop	oulation)	96	95	95	,
Literacy (% of population age 15+)			97	93	
Gross primary enrollment (% of school-age po	pulation)	105	97	111	Kazakhstan
Male	. ,	105	98	112	—— Upper-middle-income group
Female		105	96	109	—— орры-тпаше-тпотте group
KEY ECONOMIC RATIOS and LONG-T	ERM TR	ENDS			
	1987	1997	2006	2007	Economic ratios*
GDP (US\$ billions)		22.2	81.0	103.8	Economic ratios
-		15.6	32.8	31.0	
Gross capital formation/GDP	-				Trade
Exports of goods and services/GDP		34.9	51.1	47.6	
Gross domestic savings/GDP		13.1	43.5	40.3	т
Gross national savings/GDP	-	12.0	30.5	28.4	
Current account balance/GDP		-3.6	-2.2	-3.0	Domestic Capital
Interest payments/GDP		8.0	2.4		savings formation
Total debt/GDP		18.4	91.5		savings
Total debt service/exports		6.2	33.7		
Present value of debt/GDP			89.1		¥
Present value of debt/exports			167.4		
					Indebtedness
1987-97	1997-07	2006	2007	2007-11	
(average annual gro wth)					
(average annual gro wth) GDP -7.1	9.0	10.7	8.5	5.9	Kazakhstan
(average annual growth) GDP -7.1 GDP per capita -6.1	9.0 8.8	10.7 9.5	8.5 7.3	5.9 5.6	Kazakhstan Upper-middle-income group
(average annual gro wth) GDP -7.1	9.0	10.7	8.5	5.9	
(average annual growth) GDP -7.1 GDP per capita -6.1 Exports of goods and services -4.6	9.0 8.8	10.7 9.5	8.5 7.3	5.9 5.6	
(average annual growth) GDP -7.1 GDP per capita -6.1 Exports of goods and services -4.6	9.0 8.8	10.7 9.5	8.5 7.3	5.9 5.6	—— Upper-middle-income group
(average annual growth)         GDP       -7.1         GDP per capita       -6.1         Exports of goods and services       -4.6     STRUCTURE of the ECONOMY  (% of GDP)	9.0 8.8 7.7	10.7 9.5 6.9	8.5 7.3 9.3	5.9 5.6 8.1 2007	Upper-middle-income group  Growth of capital and GDP (%)
(average annual growth)         GDP       -7.1         GDP per capita       -6.1         Exports of goods and services       -4.6     STRUCTURE of the ECONOMY  (% of GDP)	9.0 8.8 7.7	10.7 9.5 6.9	8.5 7.3 9.3	5.9 5.6 8.1	—— Upper-middle-income group
(average annual growth) GDP -7.1 GDP per capita -6.1	9.0 8.8 7.7	10.7 9.5 6.9	8.5 7.3 9.3	5.9 5.6 8.1 2007	Upper-middle-income group  Growth of capital and GDP (%)
(average annual growth) GDP -7.1 GDP per capita -6.1 Exports of goods and services -4.6  STRUCTURE of the ECONOM Y  (% of GDP) Agriculture	9.0 8.8 7.7 1987	10.7 9.5 6.9 1997	8.5 7.3 9.3 2006 5.9	5.9 5.6 8.1 <b>2007</b> 6.6	Growth of capital and GDP (%)
(average annual growth) GDP -7.1 GDP per capita -6.1 Exports of goods and services -4.6  STRUCTURE of the ECONOMY  (% of GDP) Agriculture Industry	9.0 8.8 7.7 1987	10.7 9.5 6.9 1997 12.0 27.3	8.5 7.3 9.3 <b>2006</b> 5.9 42.1	5.9 5.6 8.1 <b>2007</b> 6.6	Growth of capital and GDP (%)
(average annual growth) GDP -7.1 GDP per capita -6.1 Exports of goods and services -4.6  STRUCTURE of the ECONOMY  (% of GDP) Agriculture Industry Manufacturing Services	9.0 8.8 7.7 <b>1987</b> 	10.7 9.5 6.9 1997 12.0 27.3 14.0 60.7	8.5 7.3 9.3 <b>2006</b> 5.9 42.1 12.4 52.0	5.9 5.6 8.1 2007 6.6 44.3  49.1	Growth of capital and GDP (%)
(average annual growth) GDP -7.1 GDP per capita -6.1 Exports of goods and services -4.6  STRUCTURE of the ECONOMY  (% of GDP) A griculture industry Manufacturing Services  Household final consumption expenditure	9.0 8.8 7.7 1987 	10.7 9.5 6.9 1997 12.0 27.3 14.0 60.7 74.5	8.5 7.3 9.3 2006 5.9 42.1 12.4 52.0 46.3	5.9 5.6 8.1 <b>2007</b> 6.6 44.3  49.1	Growth of capital and GDP (%)
(average annual growth) GDP -7.1 GDP per capita -6.1 Exports of goods and services -4.6  STRUCTURE of the ECONOMY  (% of GDP) Agriculture Industry Manufacturing Services Household final consumption expenditure General gov't final consumption expenditure	9.0 8.8 7.7 1987	10.7 9.5 6.9 1997 12.0 27.3 14.0 60.7 74.5 12.4	8.5 7.3 9.3 2006 5.9 42.1 12.4 52.0 46.3 10.2	5.9 5.6 8.1 2007 6.6 44.3  49.1 48.5 112	Growth of capital and GDP (%)
(average annual growth) GDP -7.1 GDP per capita -6.1 Exports of goods and services -4.6  STRUCTURE of the ECONOMY  (% of GDP) Agriculture Industry Manufacturing Services Household final consumption expenditure General gov't final consumption expenditure	9.0 8.8 7.7 1987 	10.7 9.5 6.9 1997 12.0 27.3 14.0 60.7 74.5	8.5 7.3 9.3 2006 5.9 42.1 12.4 52.0 46.3	5.9 5.6 8.1 <b>2007</b> 6.6 44.3  49.1	Growth of capital and GDP (%)
(average annual growth) GDP -7.1 GDP per capita -6.1 Exports of goods and services -4.6  STRUCTURE of the ECONOMY  (% of GDP) Agriculture Industry Manufacturing Services Household final consumption expenditure General gov't final consumption expenditure	9.0 8.8 7.7	10.7 9.5 6.9 1997 12.0 27.3 14.0 60.7 74.5 12.4	8.5 7.3 9.3 2006 5.9 42.1 12.4 52.0 46.3 10.2	5.9 5.6 8.1 2007 6.6 44.3  49.1 48.5 112	Growth of capital and GDP (%)  02 03 04 05 06 07 06 07
(average annual growth) GDP - 7.1 GDP pcrapita -6.1 Exports of goods and services -4.6  STRUCTURE of the ECONOMY  (% of GDP) Agriculture Industry Manufacturing Services  Household final consumption expenditure General gov't final consumption expenditure Imports of goods and services  (average annual growth)	9.0 8.8 7.7 1987   	10.7 9.5 6.9 1997 12.0 27.3 14.0 60.7 74.5 12.4 37.4	8.5 7.3 9.3 2006 5.9 42.1 12.4 52.0 46.3 10.2 40.4	5.9 5.6 8.1 2007 6.6 44.3  49.1 48.5 112 38.3	Growth of capital and GDP (%)  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
(average annual growth) GDP - 7.1 GDP pcrapita -6.1 Exports of goods and services -4.6  STRUCTURE of the ECONOMY  (% of GDP) Agriculture Industry Manufacturing Services  Household final consumption expenditure General gov't final consumption expenditure Imports of goods and services  (average annual growth)	9.0 8.8 7.7	10.7 9.5 6.9 1997 12.0 27.3 14.0 60.7 74.5 12.4 37.4	2006 5.9 42.1 12.4 52.0 46.3 10.2 40.4	5.9 5.6 8.1 2007 6.6 44.3  49.1 48.5 112 38.3	Growth of capital and GDP (%)  02 03 04 05 06 07 06 07
(average annual growth) GDP -7.1 GDP -6.1 Exports of goods and services -4.6  STRUCTURE of the ECONOMY  (% of GDP) Agriculture Industry Manufacturing Services Household final consumption expenditure General gov't final consumption expenditure Imports of goods and services  (average annual growth) Agriculture	9.0 8.8 7.7 1987   	10.7 9.5 6.9 1997 12.0 27.3 14.0 60.7 74.5 12.4 37.4	8.5 7.3 9.3 2006 5.9 42.1 12.4 52.0 46.3 10.2 40.4	5.9 5.6 8.1 2007 6.6 44.3  49.1 48.5 112 38.3	Growth of capital and GDP (%)  02 03 04 05 06 07 08 Growth of exports and imports (%)
(average annual growth) GDP -7.1 GDP per capita -6.1 Exports of goods and services -4.6  STRUCTURE of the ECONOMY  (% of GDP) Agriculture Industry Manufacturing Services  Household final consumption expenditure General gov't final consumption expenditure Imports of goods and services	9.0 8.8 7.7 1987 	10.7 9.5 6.9 1997 12.0 27.3 14.0 60.7 74.5 12.4 37.4	8.5 7.3 9.3 2006 5.9 42.1 12.4 52.0 46.3 10.2 40.4 2006	5.9 5.6 8.1 2007 6.6 44.3  49.1 112 38.3 2007 5.0	Growth of capital and GDP (%)  Output  Growth of capital and GDP (%)  Growth of capital and GDP (%)  Growth of capital and GDP (%)  Growth of capital and GDP (%)

Note: 2007 data are preliminary estimates.

Household final consumption expenditure General gov't final consumption expenditure Gross capital formation Imports of goods and services

This table was produced from the Development Economics LDB database.

\*The diamonds show four key indicators in the country (in bold) compared with its income-group average. If data are missing, the diamond will be incomplete.

7.7 7.3 17.4

-11.7 -8.0 -26.7 13.8

6.2 28.8

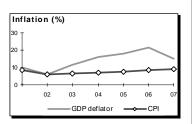
10.0

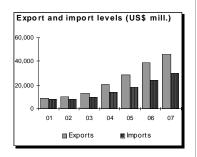
10.0 10.0

Exports

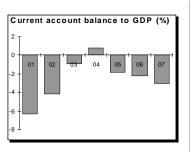
-Imports

PRICES and GOVERNMENT FINANCE	1987	1997	2006	2007
Domestic prices (%change)	1907	1997	2000	2007
Consumer prices		17.4	8.6	8.8
Implicit GDP deflator		16.1	21.6	14.8
Government finance (%of GDP, includes current grants)				
Current revenue		20.7	27.1	27.0
Current budget balance		-3.8	12.9	10.8
Overall surplus/deficit		-7.1	7.6	4.7
TRADE	1987	1997	2006	2007
(US\$ millions)				
Total exports (fob)		6,899	38,762	46,329
Fuel and oil products		2,216	26,279	30,303
Ferrous metals		951	2,411	2,555
M anufactures		1,491	3,978	6,797
Total imports (cif)		7,176	24,120	30,289
Food		474	1,174	1,374
Fuel and energy		628	3,051	4,051
Capital goods		1,462	10,722	14,222
Export price index (2000=100)		85	283	309
Import price index (2000=100)		120	249	286
Terms of trade (2000=100)		71	113	108

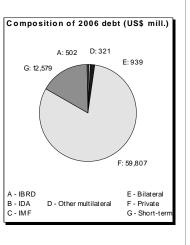




BALANCE of PAYMENTS				
	1987	1997	2006	2007
(US\$ millions)				
Exports of goods and services		7,741	41,570	49,437
Imports of goods and services		8,300	32,840	39,731
Resource balance		-559	8,730	9,705
Net income		-315	-9,317	-11,321
Net current transfers		75	-1,207	-1,500
Current account balance		-799	-1,795	-3,117
Financing items (net)		1,279	12,869	3,117
Changes in net reserves		-480	-11,075	0
Memo:				
Reserves including gold (US\$ millions)		2,291	19,127	19,127
Conversion rate (DEC, local/US\$)	2.40E-3	75.4	126.1	122.6



Conversion rate (DEC, local/US\$)	2.40E-3	75.4	126.1	122.6
EXTERNAL DEBT and RESOURCE FL	ows			
	1987	1997	2006	2007
(US\$ millions)				
Total debt outstanding and disbursed		4,078	74,148	
IBRD		648	502	427
IDA		0	0	0
Total debt service		483	14,532	
IBRD		34	161	172
IDA		0	0	0
Composition of net resource flows				
Official grants		54	51	
Official creditors		444	-23	
Private creditors		777	25,768	
Foreign direct investment (net inflows)		1,321	6,143	
Portfolio equity (net inflows)		0	2,797	
World Bank program				
Commitments		247	30	0
Disbursements		202	29	67
Principal repayments		0	130	143
Net flows		202	-101	-76
Interest payments		34	31	29
Net transfers	**	167	-132	-105



Note: This table was produced from the Development Economics LDB database.

9/24/08

# Annex 16. Maps - IBRD 36239 and 36538

# KAZAKHSTAN: SOUTH WEST ROADS PROJECT



